

Post-Secondary Student Resilience: An Annotated Bibliography

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Resilience and Academic Outcomes

Allan, J. F., McKenna, J., & Dominey, S. (2014). Degrees of resilience: profiling psychological resilience and prospective academic achievement in university inductees. *British Journal of Guidance & Counselling*, 42(1), 9-25. doi: 10.1080/03069885.2013.793784

This article examined the relationship between resilience and end of year academic outcomes in full-time, first degree university inductees from the UK. Through the use of bivariate correlations, binary logistic regression, two-step cluster analysis, multivariate analysis of variance, and cross-tabulation of emergent clusters on data from questionnaires, the authors found that higher resilience was associated with higher academic outcomes in female inductees, while higher resilience in males was associated with poorer academic performance in male attendees. Twice as many females with high resilience achieved the two highest grade classification outcomes as males with high resilience.

Johnson, M. L., Taasobshirazi, G., Kestler, J. L., & Cordova, J. R. (2015). Models and messengers of resilience: A theoretical model of college students' resilience, regulatory strategy use, and academic achievement. *Educational Psychology*, 35(7), 869-885. doi: [10.1080/01443410.2014.893560](https://doi.org/10.1080/01443410.2014.893560)

This article examined the relationship between resilience, perceived resilience, regulatory strategy use, and achievement in undergraduate students from the United States. Through the use of correlations and path analysis on data from questionnaires, the authors found that students' influential models had a stronger direct influence on perceived resilience than the mentors who were perceived more as messengers of resilience. Messengers and models of resilience significantly and directly affected students' regulatory strategy use and indirect effects on academic achievement, while models of resilience had stronger effects. Students' resilience directly affected regulatory strategy use, while indirectly affecting academic achievement. Regulatory strategy use was found to have a direct effect on academic achievement, thus supporting the hypothesis that resilient students use adaptive regulatory strategies to achieve academically.

Mathis, M., & Lecci, L. (1999). Hardiness and college adjustment: Identifying students in need of services. *Journal of College Student Development*, 40(3), 305-309.

This article examined the relationship between hardiness and college adjustment on GPA in first semester undergraduate students from the United States. Through the use of correlations on data from questionnaires, the authors found that hardiness was associated with better adjustment to university, and was also a better predictor of mental health than physical health. Self-reported stress was negatively correlated with student adaptation and personal view survey. After controlling for negative affectivity, the authors found significant positive correlations between the personal view survey and official health center visits shifted to significant negative correlations, showing that participants with high hardiness are healthier. Positive affect and negative affect correlates significantly with hardiness and college adjustment. Statistically controlling for negative affect and positive affect had no effect on the relationship between the student adaptation to college questionnaire and personal view survey.

Resilience and Individual Differences

Bardi, M., Koone, T., Mewaldt, S., & O'Connor, K. (2011). Behavioral and physiological correlates of stress related to examination performance in college chemistry students. *Stress*, 14(5), 557-566. doi: [10.3109/10253890.2011.571322](https://doi.org/10.3109/10253890.2011.571322)

This article examined the relationship of physiological and behavioral responses of academic stress of during a college course in organic chemistry in the United States. Mixed repeated-measured ANOVAs, correlations, stepwise regression, and binary logit regression were used to analyze data from saliva samples, GPA, ACT scores, final grades, and observational video tapes of students' test taking behavior. The authors found that individual differences in physiological response to long-term stress are a factor in predicting a students' ability to pass a challenging course.

Burt, K. B., & Paysnick, A. A. (2012). Resilience in the transition to adulthood. *Development and Psychopathology*, 24, 493-505. doi: [10.1017/s0954579412000119](https://doi.org/10.1017/s0954579412000119)

The authors examined the current literature on resilience in the transition to adulthood. Through their review, the authors found that cognitive skills, the ability to plan ahead and effectively modulate attention, personality traits of low neuroticism/high emotional stability, receiving positive and effective parenting, having adequate economic resources, self-efficacy and a drive for mastery, and close relationships are crucial factors in resilience through the transition to adulthood. Current research on resilience in the transition to adulthood highlights particular factors, but may not be generalizable due to the selection of certain populations. The authors found that there are many different manifestations of the emerging adults with similar commonalities. More research is needed to address the neuropsychological, psychobiological, and genetic factors of resilience. Most research can be grouped into the two categories of

reflecting studies examining long-term youth development, and narrower time interval studies with a particular population.

El Ansari, W., Oskrochi, R., & Haghgoo, G. (2014). Are students' symptoms and health complaints associated with perceived stress at university? Perspectives from the United Kingdom and Egypt. *International Journal of Environmental Research and Public Health*, *11*(10), 9981-10002. doi: [10.3390/ijerph111009981](https://doi.org/10.3390/ijerph111009981)

This article examined the relationship between self-reported symptoms health complaints and perceived stress in undergraduate students from the United Kingdom and Egypt. Through the use of factor analysis, the authors found four-factors of self-reported symptoms: psychological, circulatory/breathing, gastrointestinal, and pains/aches. Through principle component analysis, correlations, and multiple linear regression on data from questionnaires, the authors found that the Egyptian sample reported significantly higher frequencies of all symptoms compared to the UK sample. Perceived stress was significantly positively associated with the four symptom groups without controlling for variables, while controlling for other symptom groups, age and sex, gastrointestinal symptoms lost its association with stress for both sample groups, and pains/aches lost its association with stress in the Egypt sample. Overall, students in the UK were significantly less stressed than Egypt, but within each country as an interaction effect, women were significantly more prone to stress. Younger students were more likely to suffer from stress.

Kilbert, J., Lamis, D. A., Collins, W., Smalley, K. B., Warren J. C., Yancey, C. T., & Winterowd, C. (2014). Resilience Mediates the Relations Between Perfectionism and College Student Distress. *Journal of Counseling & Development*, *92*(1), 75-82. doi: [10.1002/j.1556-6676.2014.00132.x](https://doi.org/10.1002/j.1556-6676.2014.00132.x)

This article examined the relationship between the dimensions of perfectionism, resilience, and distress among undergraduate students in the United States. Through the use of correlations on questionnaires, the authors found that self-oriented perfectionism and socially prescribed perfectionism were significantly associated with higher reports of depression and anxiety, with socially prescribed perfectionism having the strongest relation and other-oriented perfectionism being modestly associated with greater reports of depression and anxiety. Self-oriented perfectionism was not significantly related to resilience, while socially prescribed perfectionism was negatively associated with resilience. Resilience partially mediated between socially prescribed perfectionism and emotional distress symptoms.

Lü, W., Wang, Z., Liu, Y., & Zhang, H. (2014). Resilience as a mediator between extraversion, neuroticism and happiness, PA and NA. *Personality and Individual Differences*, *63*, 128-133. doi: [10.1016/j.paid.2014.01.015](https://doi.org/10.1016/j.paid.2014.01.015)

This article examined the impact of extraversion and neuroticism on happiness, positive affect, and negative affect, as well as the role of resilience in mediating these factors. Through the use of path analysis on data from questionnaires, the authors found that resilience partially mediated the relationship between extraversion, happiness, and positive affect, as well as

neuroticism, happiness and negative affect. Resilience fully mediated the relationship between extraversion and negative affect, as well as neuroticism and positive affect.

Shiner, R. L., & Masten, A. (2012). Childhood personality as a harbinger of competence and resilience in adulthood. *Development and Psychopathology*, 24(2012), 507-528. doi: [10.1016/j.paid.2014.01.015](https://doi.org/10.1016/j.paid.2014.01.015)

This article examined the effects of the Big Five personality traits in childhood on competence and resilience in emerging adulthood longitudinally among children developing from age 10 to 30. Through the use of correlation, hierarchical regression analysis, and one way ANOVAs, the authors found that children who successfully transitioned into adulthood, despite facing low or high adversity, had capacities for emotional regulation, empathy and connection, dedication to schoolwork, and mastery and exploration. There was a significant main effect of childhood personality in predicting adult outcomes while controlling adversity, with few interaction effects. Resilient individuals in emerging adulthood and young adulthood had higher childhood conscientiousness, agreeable, and openness with lower neuroticism compared to the maladaptive group (as characterized by low competence, high adversity). Resilient and competent groups shared similar childhood traits. Individuals who changed from the maladaptive group in emerging adulthood to the resilient group in young adulthood showed higher childhood conscientiousness than their maladaptive peers.

Tross, S.A., Harper, J.P., Osher, L.W., & Kneidinger, L.M. (2000). Not just the usual cast of characteristics: Using personality to predict college performance and retention. *Journal of College Student Development*, 41(3), 323-334. doi: [10.1037/e413812005-590](https://doi.org/10.1037/e413812005-590)

This article examined personality characteristics, high school GPA, and SAT scores predictability on cumulative college GPA and retention in university students from the United States. Through the use of stepwise multiple regression with forward variable entry on data from questionnaires, the authors found that conscientiousness predicted high school GPA, SAT scores, and college retention. Conscientiousness impacted college retention directly and indirectly through post-secondary GPA. Students who were more diligent, disciplined, careful, organized, and planned had higher GPAs compared to students who were unreliable, imprecise, disorganized and impetuous in the sample.

Resilience and Self-efficacy, Mindfulness, and Optimism

Chemers, M. M., Hu, L. T., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55. doi: [10.1037/0022-0663.93.1.55](https://doi.org/10.1037/0022-0663.93.1.55)

This article examined the relationship between academic self-efficacy and optimism on students' academic performance, stress, health, and commitment to stay in school in first year

university students from the United States. Through the use of structural equation modeling and correlations on data from questionnaires, the authors found that self-efficacy was significantly related to positively academic performance, personal adjustment, and academic expectations. Optimism was also related to success and adjustment and high school GPA. The authors also found that challenge-threat affected positive academic expectations and was crucial in forming perceptions of stress in the sample. Successful students showed higher challenge-threat evaluations, academic expectations, and academic performance.

Cole, N. N., Nonterah, C. W., Utsey, S. O., Hook, J. N., Hubbard, R. R., Opare-Henaku, A., & Fischer, N. L. (2014). Predictor and moderator effects of ego resilience and mindfulness on the relationship between academic stress and psychological well-being in a sample of Ghanaian college students. *Journal of Black Psychology*, *41*(4), 340-357. doi: [10.1177/0095798414537939](https://doi.org/10.1177/0095798414537939)

This article examined the effects of ego resilience and mindfulness on the relationship between academic stress and psychological well-being in Ghanaian undergraduate students. Through the use of hierarchical regression analyses on data from questionnaires, the authors found that academic stress had a significant positive association with both depression and anxiety, while ego resilience and mindfulness had negative associations with both depression and anxiety. Both ego resilience and mindfulness acted as a protective factors between academic stress and mental health: ego resilience buffered between academic stress and anxiety, whereas mindfulness buffered between academic stress and depression.

Dawson, M., & Pooley, J. A. (2013). Resilience: the role of optimism, perceived parental autonomy support and perceived social support in first year university students. *Journal of Education and Training Studies*, *1*(2), 38-49. doi: [10.11114/jets.v1i2.137](https://doi.org/10.11114/jets.v1i2.137)

This article examined the relationship between optimism, promotion of independent functioning, promotion of volitional function, perceived social support resilience in first year university students from Australia. Through the use of correlations and multiple regression analysis on data from questionnaires, the authors found that students with higher levels of optimism, promotion of independent functioning, promotion of volitional functioning, and perceived social support experienced higher levels of resilience, while only optimism and perceived social support predicted resilience.

del Mar Ferradás, M., Freire, C., Valle, A., Núñez, J.C., Regueiro, B., & Vallejo, G. (2016). The relationship between self-esteem and self-worth protection strategies in university students. *Personality and Individual Differences*, *88*, 236-241. doi: [10.1016/j.paid.2015.09.029](https://doi.org/10.1016/j.paid.2015.09.029)

This article examined the relationship between self-esteem, behavioral and claimed self-handicapping, defensive pessimism, and gender in university students studying educational sciences and health sciences in Spain. Through the use of correlations and polynomial regression analysis on data from questionnaires, the authors found a negative linear relationship between

self-esteem and self-handicapping and a negative relationship between self-esteem and defensive pessimism in men. In women, the relationship between self-esteem and defensive pessimism followed a quadratic model. The authors also found that students with low-self esteem were significantly more likely to use self-handicapping.

Hanley, A. W., Palejwala, M. H., Hanley, R. T., Canto, A. I., & Garland, E. L. (2015). A failure in mind: Dispositional mindfulness and positive reappraisal as predictors of academic self-efficacy following failure. *Personality and Individual Differences*, 86, 332-337. doi: [10.1016/j.paid.2015.06.033](https://doi.org/10.1016/j.paid.2015.06.033)

This article examined the relationship between dispositional mindfulness, positive appraisal and self-efficacy following perceived testing failure in undergraduate students from the United States. The authors gave participants a 15-item multiple choice test on general knowledge, and provided results of 53% for each participants regardless of performance. After receiving this result, participants completed free response space to explain their performance, and questionnaires on academic self-efficacy and affect. The authors found that students with greater dispositional mindfulness were more resilient while facing academic adversity, as these students had were more likely to engage in positive appraisal, possibly accounting for their higher academic self-efficacy after perceived failure. There was a significant positive relationship between mindfulness and positive reappraisal after perceived failure. Positive reappraisal was a significant mediator between mindfulness and academic self-efficacy.

Lin, G. (2016). Self-efficacy beliefs and their sources in undergraduate computing disciplines: An examination of gender and persistence. *Journal of Educational Computing Research*, 53(4), 540-561. doi: [10.1177/0735633115608440](https://doi.org/10.1177/0735633115608440)

This article examined the role of gender in undergraduate computing majors' learning self-efficacy, computer self-efficacy, and programming self-efficacy in undergraduate computing students from Taiwan. Through the use of ANCOVAs on data from questionnaires, the authors found no significant gender differences for learning self-efficacy, computer self-efficacy, and programming self-efficacy. However, the authors found significant learning self-efficacy and higher programming self-efficacy differences in students with high persistence.

Maddi, S. R., Harvey, R. H., Khoshaba, D. M., Fazel, M., & Resurreccion, N. The relationship of hardiness and some other relevant variables to college performance. *Journal of Humanistic Psychology*, 52(2), 190-205. doi: [10.1177/0022167811422497](https://doi.org/10.1177/0022167811422497)

This article examined the relationship of hardiness, optimism, religiosity, and grade point average. Through the use of correlations, and multiple regression analysis on data from questionnaires, the authors found a positive relationship with hardiness and GPA, while perfectionism, competitive attitudes, existential well-being and life regard were not related to GPA. School attitudes and satisfaction were significantly related, but not at a weaker degree compared to hardiness.

Naude, L., Nel, L., van der Watt, R., & Tadi, F. (2016). If it's going to be, it's up to me: first-year psychology students' experiences regarding academic success. *Teaching in Higher Education, 21*(1), 37-48. doi: [10.1080/13562517.2015.1110788](https://doi.org/10.1080/13562517.2015.1110788)

This article examined experiences of first year psychology students from South Africa through the self-determination theory. Through content and thematic analyses on answers via email of two open ended questions, the authors found that participants with a high locus of control and took interest in psychology felt competent, autonomous, and related. Participants valued well-structured, but warm and responsive educational context.

Resilience in Individuals with Additional Challenges

Chen, E., Miller, G., Brody, G., Lei, M. (2015). Neighborhood poverty, college attendance, and diverging profiles of substance use and allostatic load in rural African American youth. *Clinical Psychological Science, 3*(5), 675-685. doi: [10.1177/2167702614546639](https://doi.org/10.1177/2167702614546639)

This article examined resilience and college attendance in a subset of African American older adolescents from impoverished neighborhoods. Through the use of ordinary least squares regression and zero-inflated negative binomial regression on data from the Strong American Families Healthy Adult Panel, the authors found that their sample displayed skin-deep resilience, lower rates of substance use, and higher levels of allostatic load compared to their counterparts who did not attend college and youth from low-poverty neighborhoods who did attend college.

Connolly, J. (2014). Outcomes in emerging adulthood for maltreated youth: A clinical-developmental approach. *Child Maltreatment, 19*(3-4), 270-274. doi: [10.1177/1077559514557932](https://doi.org/10.1177/1077559514557932)

This article examined the current literature of outcomes in emerging adulthood for maltreated youth through the clinical-developmental approach. The author commented that the majority of research in resilience is centered around normative youth, with little emphasis on resilience among youth at high risk for negative outcomes. However, clinical studies have emerged in studying longitudinal data sets of at-risk youth. The author highlighted the need for longitudinal studies with young adults in college settings and clinical studies with youth in child protective services or out-of-home-care.

Goldstein, A. L., Faulkner, B., & Wekerle, C. (2013). The relationship among internal resilience, smoking, alcohol use, and depression symptoms in emerging adults transitioning out of child welfare. *Child Abuse & Neglect, 37*(1), 22-32. doi: [10.1177/1077559514557932](https://doi.org/10.1177/1077559514557932)

This article examined the relationship between internal resilience, smoking, alcohol use, and depression symptoms in emerging adults transitioning out of child welfare. Through the use of bivariate correlations and hierarchical regression analysis on data from questionnaires, the authors found that internal resilience was significantly associated in religious and community involvement, and monitoring by caregivers. Internal resilience was negatively associated with frequency of cigarette smoking over the past year, nicotine dependency, and depression symptoms, with no significant relationship between alcohol use or problems. Depression symptoms was the only variable studied that was associated with maltreatment history; a significant increase in explained variance for depression symptoms and resilience was found when resilience was added to the model containing gender and maltreatment scores. There was a significant interaction affect in depression symptoms with sexual abuse and resilience, with similar depression scores for those with low sexual abuse, regardless of resilience. For those with high sexual abuse, individuals with high resilience demonstrated significantly fewer depression symptoms, while those with low resilience had more depression symptoms.

Hartley, M. T. (2013). Investigating the relationship of resilience to academic persistence in college students with mental health issues. *Rehabilitation Counseling Bulletin*, 56(4), 240-250. doi: [10.1177/0034355213480527](https://doi.org/10.1177/0034355213480527)

This article examined the relationships between interpersonal resilience, intrapersonal resilience and academic persistence in undergraduate students with mental health issues in the United States. Through the use of hierarchical regression analysis on data from questionnaires, the author found that high school GPA accounted for variance of cumulative university GPA, while intrapersonal and interpersonal resilience variables did not. Higher standardized test scores were not associated with higher cumulative GPA, but students with higher standardized test scores were able to effectively manage higher credit loads. There was no significant relationship between psychological distress and cumulative GPA. However, there was a significant relationship between level of psychological distress and time to complete credits. Social support was not found to be significant. There was a significant interaction between mental health and interpersonal resilience, suggesting that intrapersonal resilience was more valuable and worked differently in students with the highest levels of psychological distress.

Helgeson, V. S., Reynolds, K. A., Siminerio, L. M., Becker, D. J., & Escobar, O. (2014). Relationships and health among emerging adults with and without Type 1 diabetes. *Journal of Psychosomatic Research*, 77, 484-491. doi: [10.1037/a0033511](https://doi.org/10.1037/a0033511)

This article examined whether resilience as defined by cognitive adaptation theory predicted emerging adulthood outcomes among youth with and without type 1 diabetes in this longitudinal study. Through the use of repeated measures ANCOVA, multiple regression analysis, and logistic regression analysis on data from questionnaires, the authors found that the cognitive adaptation theory predicted reduced psychological distress, enhanced psychological well-being, increased friend support, reduced friend conflict, the presence of romantic relationships, reduced likelihood of romantic breakups, higher GPA, higher work satisfaction, and lower work stress during the transition of emerging adulthood. Youth in their senior year of high school with the cognitive adaptation indicators of high self-esteem, high levels of mastery, and high levels of optimism adjusted more positively in the transition to emerging adulthood one

and two years later when compared to their low-scoring counterparts in these variables. Psychological outcome findings were stronger for the first year after high school than the second year. The cognitive adaptation index predicted lower levels of bulimic symptoms, lower levels of friend conflict, lower rates of romantic relationship breakup, and lower levels of alcohol use for those with type 1 diabetes. In addition, the cognitive adaptation index predicted diabetes-specific outcomes, as emerging adults with diabetes who scored higher on the index enacted better self-care both one year and two years after high school graduation.

Hernandez-Martinez, P., & Williams, J. (2011). Against the odds: resilience in mathematics students in transition. *British Educational Research Journal*, 39(1), 45-59. doi: [10.1080/01411926.2011.623153](https://doi.org/10.1080/01411926.2011.623153)

This article examined resilience from a sociocultural perspective of two mathematics students in transition to post-secondary education. Through the use of narrative analysis on interviews, the authors found that the background risk factors of poorer socioeconomic status and disadvantaged schools assisted in forming resilience by providing autonomy that is valued in post-secondary education. The students' reflexivity was crucial in their success.

Hines, A .M., Merdinger, J., & Wyatt, P. (2005). Former foster youth attending college: Resilience and the transition to young adulthood. *American Journal of Orthopsychiatry*, 75(3), 381-394. doi: [10.1037/0002-9432.75.3.381](https://doi.org/10.1037/0002-9432.75.3.381)

This article examined risk and resilience with academic success among former foster youth. Through grounded theory and the extended case method on in-depth qualitative interviews, the authors found that individual attributes such as assertiveness, independence, goal orientation, persistence, the determination to be different from abusive adults, the ability to accept help, a flexible and adaptable self-image, and the ability to make conscious changes showed an internal locus of control, which has been identified as being crucial to resilient behavior. In terms of family-level attributes, participants expressed how the previously mentioned individual attributes assisted the youth in forming healthy relationships with competent, caring adults in their lives.

Hinton, V., & Meyer, J. (2014). Emerging adulthood: resilience and support. *Rehabilitation Research, Policy, and Education*, 24(3), 143-157. doi: [10.1891/2168-6653.28.3.143](https://doi.org/10.1891/2168-6653.28.3.143)

This article examined articles from 1990 to 2013 to provide an overview of emerging adulthood and resilience of youth with disabilities. The authors found that social supports, self-determination, agency, adaptation, and coping are linked to resilience and an emerging adult's ability to re-center themselves.

Howell, K.H., & Miller-Graff, L.E. (2014). Protective factors associated with resilient functioning in young adulthood after childhood exposure to violence. *Child Abuse & Neglect*, 38, 1985-1994. doi: [10.1016/j.chiabu.2014.10.010](https://doi.org/10.1016/j.chiabu.2014.10.010)

This article examined the protected factors associated with resilience in American college students who were exposed to childhood violence. Through the use of hierarchical regression analysis on data from questionnaires, the authors found that depressed mood was the only significant predictor of symptoms of psychopathology in the sample. Childhood violence, life-time traumatic stress exposure and symptoms of anxiety and depression were no longer significantly associated with resilience after taking spirituality, emotional intelligence, and social support into account. Spirituality, emotional intelligence, and social support were all independently linked to resilience.

Keith, P. M., Byerly, C., Floerchinger, H., Pence, E., & Thornberg, E. (2006). Deficit and resilience perspectives on performance and campus comfort of adult students. *College Student Journal*, 40(3), 546-556.

This article examined the relationship between age, age stress, academic performance, and campus comfort in undergraduate students over 25 from the United States. Through the use of correlations and multiple regression on data from questionnaires, the authors found that comfort of adult students was independent of earlier educational experiences and performance. Age stress was the strongest predictor of campus comfort, although family support, age, and age stress were all significantly related to comfort. Support from professors increased comfort in the sample. Comfort was independent of chronological age, suggesting that younger students and older students feel comfort on campus similarly to each other.

Kirsch, A. C., Conley, C. S., & Riley, T. J. (2015). Comparing psychosocial adjustment across the college transition in a matched heterosexual and lesbian, gay, and bisexual sample. *Journal of College Student Development*, 56(2), 155-169. doi: [10.1353/csd.2015.0017](https://doi.org/10.1353/csd.2015.0017)

This article examined psychosocial adjustment in adjusting to college among LGB students to heterosexual students from the United States. Through the use of repeated measures ANOVAs on data from questionnaires, the authors found that LGB students experienced greater psychological distress, greater cognitive affective vulnerabilities, and less social well-being compared to heterosexual students. With a lack of interactions between time and sexual orientation, the authors concluded that LGB students and heterosexual students demonstrate similar psychosocial trajectories over time, but LGB students have greater psychosocial challenges in the transition to post-secondary education. Although both groups experienced increased psychological distress in the transition, LGB students experienced more stress in addition to the previously established elevated levels of distress compared to their heterosexual peers. LGB students who entered with lower social well-being experienced little change, while heterosexual students experienced a general decrease in support throughout the transition. While

LGB students experienced greater struggles of psychological distress and cognitive-affective vulnerabilities, they do not demonstrate less psychological well-being or fewer cognitive-affective strengths compared to heterosexual students.

Lee H., Rojewski J., Gregg N., Jeong S. (2015). Postsecondary education persistence of adolescents with specific learning disabilities or emotional/behavioral disorders. *The Journal of Special Education*, 49(2), 77-88. doi: [10.1177/0022466914524826](https://doi.org/10.1177/0022466914524826)

This article examined the differences in transition to post-secondary education of students with and without disabilities in predicting academic outcomes and educational persistence. Through the use of a logistic regression model using a forced entry approach on data from the Educational Longitudinal Study of 2002, the authors found that grade point average, socioeconomic status, and number of friends planning to attend a 4-year college were significant predictors of educational persistence for students with disabilities. With all participants regardless of disability status, all risk-resilience factors except for occupational aspirations and reading achievement were significantly associated with the likelihood of persisting in postsecondary education. In the sample, adolescents with disabilities, low GPAs, low socioeconomic status, and fewer friends planning to attend college were significantly associated with less persistence in postsecondary education.

Morgan Consoli, M. L., Llamas, J., Consoli, A. J. (2016). What's values got to do with it? Thriving among Mexican/Mexican American college students. *Journal of Multicultural Counseling and Development*, 44(1), 49-64. doi: [10.1002/jmcd.12036](https://doi.org/10.1002/jmcd.12036)

This article examined cultural values and thriving among Mexican/Mexican American college students. Through the use of correlations and regression on data from questionnaires, the authors found that thriving was positively correlated with resilience, family support, respect, and religion, while thriving was negatively correlated with age. The traditional Mexican/Mexican American cultural values, family support, religion and perceived U.S. mainstream cultural values predicted thriving, while traditional gender roles did not predict thriving. Respect was found to be a significant negative predictor of thriving.

Wilson-Sadberry, K. R. (1991). Resilience and persistence of African-American males in postsecondary enrollment. *Education and Urban Society*, 24(1), 87-102. doi: [10.1177/0013124591024001007](https://doi.org/10.1177/0013124591024001007)

This article examined influencing factors predictability on educational attainment in African-American males' in post-secondary education. Through the use of t-tests on data from questionnaires, the authors found that family socioeconomic status, educational plans, father's influence, and peer influence were important predictors that can enhance student resilience and persistence.

Resilience and Coping With Stress

Deasy, C., Coughlan, B., Pironom, J., Jourdan, D., & Mcnamara, P.M. (2015). Psychological distress and lifestyle of students: implications for health promotion. *Health Promotion International*, 30(1), 77-87. doi: [10.1093/heapro/dau086](https://doi.org/10.1093/heapro/dau086)

This article examined risk behaviors' influence on psychological distress and coping in undergraduate nursing/midwifery and teacher education students from Ireland. Risk behaviors were defined by poor diet, physical inactivity, tobacco smoking, and alcohol consumption. Through chi square tests, t-tests, analysis of variance, and logistic regression, the authors found that students with risk behaviors had high psychological distress and most commonly used passive coping strategies.

Deatherage, S., Servaty-Seib, H. L., & Aksoz, I. (2014). Stress, coping and internet use of college students. *Journal of American College Health*, 62(1), 40-46. doi: [10.1080/07448481.2013.843536](https://doi.org/10.1080/07448481.2013.843536)

This article examined the relationship between stress, coping, and internet use in senior undergraduate students from the United States. Through t-tests, correlations and hierarchical regression analysis, the authors found that being female, number of aversive life events, and number of months since the most stressful aversive life event were significantly predictors of perceived stress. Being female and avoidant-emotional coping were positive predictors of stress and months since the most stressful aversive life event. The online motive to enhance positive affect was a negative predictor of perceived stress, while the online motive to cope was a positive predictor of perceived stress.

DeRosier, M.E., Frank, E., Schwartz, V., & Leary, K.A. (2013). The potential role of resilience education for preventing mental health problems for college students. *Psychiatric Annals*, 43(12), 538-544. doi: [10.3928/00485713-20131206-05](https://doi.org/10.3928/00485713-20131206-05)

The article examined the stressors experienced by college students, the relationship between stress, resilience and mental health, and how resilience education can improve mental health in college students. Through the use of correlations and hierarchical regression on data from questionnaires, the authors found that students with greater resilience were better to cope with stressors associated with the transition to college, had higher self-esteem, and engaged in more behaviors that promoted mental and emotional well-being. Regardless of the level of stress being experienced or the degree to which stress-related behavioral responses were maladaptive, resilience promoted positive mental and emotional well-being for students during the transition to college.

Doron, J., Trouillet, R., Maneveau, A., Ninot, G., & Neveu, D. (2015). Coping profiles, perceived stress and health-related behaviors: a cluster analysis approach. *Health Promotion International*, 20(1), 88-100. doi: [10.1093/heapro/dav017](https://doi.org/10.1093/heapro/dav017)

This article examined the relationship between coping style, perceived stress, and health related behavior in French college students. Through the use two-phased cluster analysis on data from questionnaires, the authors found four distinct coping styles: high copers, adaptive copers, avoidant copers, and low copers. Correlation, univariate ANOVA, MANOVA, and chi-squared tests were used to further analyze differences among these coping styles. The authors found that women were more likely to be high copers, while males were more likely to be low copers. Individuals who were high copers reported the highest levels of perceived stress and engaged in more unhealthy behaviors, followed by avoidant copers. Males and females were distributed equally in the active coping group.

Galatzer-Levy, I. R., Burton, C.L., & Bonanno, G. A. (2012). Coping flexibility, potentially traumatic life events, and resilience: A prospective study of college student adjustment. *Journal of Social and Clinical Psychology, 31*(6), 542-567. doi: [10.1521/jscp.2012.31.6.542](https://doi.org/10.1521/jscp.2012.31.6.542)

This article examined trajectories of distress in flexible coping assists in adaptation to the post-secondary environment. Through the use of several self-report questionnaires, the authors found that trajectories were not influenced by exposure to a potentially traumatic life event. Flexible coping was highly associated with a resilient outcome in the sample. High-distress individuals were significantly less likely to use forward focused coping when compared to individuals with Low-Distress. Coping flexibility was found to outweigh specific coping types in adaptation to potentially traumatic life events and general life stressors. Social network characteristics were found to be important in adaptation in school among distressed students, but had little importance among those who adapt well over time.

Gibbons, C., Dempster, M., & Moutray, M. (2011). Stress, coping and satisfaction in nursing students. *Journal of Advanced Nursing, 67*(3), 621-632. doi: [10.1111/j.1365-2648.2010.05495.x](https://doi.org/10.1111/j.1365-2648.2010.05495.x)

This article examined the relationship between sources of stress and psychological well-being in final year nursing students in the United Kingdom. Through the use of separate regressions and hierarchical regression analysis on data from questionnaires, the authors found that self-efficacy, dispositional control, and support were predictors of stress. Avoidance coping was found to be the strongest predictor of adverse well-being, whereas approach coping was not a predictor. Stress sources that are likely to lead to distress were more likely to be predictors of well-being compared to stress sources that were more likely to lead to positive stress.

Johnson, N., Dinsmore, J. A., & Hof, D. D. (2011). The relationship between college students' resilience level and type of alcohol use. *International Journal of Psychology: A Biopsychosocial Approaches, 8*, 67-82. doi: [10.1016/j.addbeh.2013.07.011](https://doi.org/10.1016/j.addbeh.2013.07.011)

This article examined the relationship between resilience and type of alcohol use among undergraduate students from the United States. Through the use of correlations and independent t-tests, the authors found that resilience and alcohol consumption were significantly negatively correlated. Females in the sample had significantly lower resilience scores compared to males.

Juth, V., Dickerson, S. S., Zoccola, P. M., & Lam, S. (2015). Understanding the utility of emotional approach coping: evidence from a laboratory stressor and daily life. *Anxiety, Stress, and Coping*, 28(1), 50-70. doi: 10.1080/10615806.2014.921912

This article examined the relationship of dispositional emotional approach coping and adaptive tendency in processing and expressing emotions in undergraduate students from the United States. Through the use of separate ordinary least squares regression with covariates, generalized estimation equations, and forced autoregressive correlation on data from questionnaires and laboratory assessment, the authors found that emotional approach coping acted independently of intra-individual and inter-individual characteristics and was influenced by gender in the area of affect. Males with high emotional adaptive tendency benefited through higher positive affect, whereas women benefited from lower negative affect. Emotional approach coping was significantly related to both more positive affect and less negative affect; there was a strong relationship between emotional approach coping and positive affect when compared to negative affect. Individuals who used emotional approach coping were more resilient and positive.

Kato, T. (2015). The impact of coping flexibility on the risk of depressive symptoms. *PLoS One*, 10(5), e0128307. doi: [10.1371/journal.pone.0128307](https://doi.org/10.1371/journal.pone.0128307)

This article examined how effective the coping flexibility hypothesis' is on the dual-process theory in Japanese college students. Through the use of multivariate logistic regression analysis on data from questionnaires, the author found that the coping flexibility hypothesis is effective with the dual-process theory in their sample. Evaluation coping and adaptive coping were significantly related to a lower risk of depressive symptoms, after adjusting for gender. Women reported higher risks of depressive symptoms when compared with males

Leontopoulou, S. (2006). Resilience of Greek youth at an educational transition point: The role of locus of control and coping strategies as resources. *Social Indicators Research*, 76(1), 95-126. doi: [10.1007/s11205-005-4858-3](https://doi.org/10.1007/s11205-005-4858-3)

This article examined the relationship between variable and person-focused coping on resilient outcomes in Greek 1st year university students. Through the use of correlation, hierarchical regression analysis, and ANOVAs, the authors found that resilience was related to both cognitive and behavioral psychosocial resources, satisfactory cognitive and behavioral resources were less common among adolescence facing adversity than those not, adaptation was positive when satisfactory resources were present despite multiple sources of stress, and the maladaptive group of students suffered significantly higher levels of adversity, used fewer

resources, and showed lower levels of adaptation compared to resilient students. Studying away from home predicted adversity by affecting the individual's negative perception of life, which may be culturally determined by connectedness among families in Greek society. However, resilient individuals overcame these increased difficulties of staying away from home by using the resources available to them. Locus of control and coping strategies significantly predicted adaptation in adolescence for both variable and person-focused analyses, with resilient individuals possessing a wider range of behavioral resources compared to their maladaptive peers. Resilient individuals tended to use more active and avoidance coping strategies, but the availability of strategies for youth to use in appropriate situations appeared more critical than the distinction between coping strategies. Academic achievement was not important as a resource between adversity and adaptation. Resilient individuals had higher levels of control, active and avoidance coping, and more resources to adapt to success. Males reported more negative events compared to females. Resilient males experienced more mental health problems than resilient females, while maladaptive females reported more mental health problems than maladaptive males. Upper class maladaptive individuals had less self-esteem and well-being compared to individuals from different socioeconomic backgrounds.

Li, M. (2008). Relationships among stress coping, secure attachment, and the trait of resilience among Taiwanese college students. *College Student Journal*, 42(2), 312-325. doi: [10.15703/kjc.16.1.201502.147](https://doi.org/10.15703/kjc.16.1.201502.147)

This article examined the relationship between stress, secure attachment, and resilience in predicting active coping in stressful situations of varying intensity. Through the use of multiple regression and a two-way ANOVA on data from questionnaires, the authors found that stress was not significantly correlated with active coping, whereas resilience was the most effective predictor among all stressful situations. Secure attachment was found to be effective in predicting active coping in general situations, but not in high or low stressful situations. The authors found no interaction effect between stress and active coping.

Li, M., & Nishikawa, T. (2012). The relationship between active coping and trait resilience across U.S. And Taiwanese college student samples. *Journal of College Counseling*, 15(2), 157-171. doi: 10.1002/j.2161-1882.2012.00013.x

This article examined the predictors of active coping in college students from the United States and Taiwan. Through the use of one way ANOVAs, MANOVAs, and multiple regression analysis on data from questionnaires, the authors found that students from the United States showed a lower level of active coping than Taiwanese students, as well as significantly lower levels of social support seeking and counter-avoidance. There were no significant differences in problem solving between the two samples. Active coping was the only effective predictor of active coping in the U.S. sample was resilience, whereas resilience and secure attachment were found to be predictive in the Taiwanese sample.

Luyckx, K., Klimstra, T. A., Duriez, B., Schwartz, S. J., & Vanhalst, J. (2012). Identity processes and coping strategies in college students: Short-term. *Journal of Youth and Adolescence*, 41(9), 1226-1239. doi: [10.1007/s10964-012-9753-z](https://doi.org/10.1007/s10964-012-9753-z)

This article examined identity processes and coping strategies predicted each other over time in this three-wave longitudinal study through a sample of primarily Caucasian, middle-class college students. Through the use of cross-lagged analysis, structural equation modeling, mean-level analyses, MANOVAs, cross-lagged path analyses, and ancillary analyses on data from questionnaires, the authors found that identity exploration is closely related to coping strategies over time, suggesting that identity exploration may resemble problem-solving behavior. Women in the study scored consistently higher than men on social support seeking over time. Commitment processes were also found to be influenced positively by problem solving and social support seeking, and negatively by avoidance.

Mahmoud, J.S.R., Staten, R. T., Lennie, T. A., & Hall, L. A. (2015). The relationships of coping, negative thinking, life satisfaction, social support, and selected demographics with anxiety of young adult college students. *Journal of Child and Adolescent Psychiatric Nursing: Official Publication of the Association of Child and Adolescent Psychiatric Nurses, Inc*, 28(2), 97-108. doi: [10.1111/jcap.12109](https://doi.org/10.1111/jcap.12109)

This article examined the relationship between coping, negative thinking, life satisfaction, social support, and anxiety in undergraduate students from the United States. Through the use of t-tests, ANOVAs, correlations, path analysis, and regression on data from questionnaires, the authors found that negative thinking and maladaptive coping were directly related to anxiety, with negative thinking as the strongest predictor of both maladaptive coping and anxiety. Older students reported higher levels of anxiety, with anxiety being inversely related with social support, life satisfaction, positive thinking, and adaptive coping. Life satisfaction and being female were significant predictors of negative thinking, while living alone was a significant predictor of maladaptive coping. Life satisfaction, being female, and living alone were the only significant predictors of anxiety, although negative thinking and maladaptive coping were significantly associated with anxiety.

Masten, A.S., Burt, K.B., Roisman, G.I., Obradović, J., Long, J.D., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology*, 16, 1071-1094. doi: [10.1017/s0954579404040143](https://doi.org/10.1017/s0954579404040143)

The authors examined the relationship of competence, resilience, adversity and psychosocial resources with a focus on adaptive resources in children aging through emerging adulthood to young adulthood over the course of 20 years. Through the use of correlation and regression analysis on data from questionnaires, the authors found that success in developmental tasks in emerging adulthood and young adulthood was strongly associated with a history of success in earlier tasks, core resources from childhood including IQ, parenting quality and socioeconomic status, and adaptive resources in emerging adulthood including planfulness, autonomy, adulthood support, and coping skills. Competence in the developmental tasks of

emerging adulthood predicted successful outcomes for the transition to adulthood on academic, social, conduct, work, and romantic domains. Emerging adulthood adaptive resources had unique predictive significance for successful transitions into adulthood for both overall and for a small group of individuals whose pattern of adaptation changed from maladaptive to resilient in the transition to adulthood. Planfulness/future motivation, autonomy, and adult support outside the family were indicators that predicted the resilience over the transition to adulthood among young people who were maladaptive at the beginning of the transition.

Morales, E.E. (2008). The resilient mind: The psychology of academic resilience. *Educational Forum*, 72(2), 152-167. doi: [10.1080/00131720701805017](https://doi.org/10.1080/00131720701805017)

This article examined the experiences of academically resilient college students. Through the use of three open ended qualitative interviews with each student, the authors found several arching themes, including students' response to stress caused by cultural mismatches, classist and racist baggage, and the erosion of individuality and self-esteem. Emotional intelligence was a crucial common theme among students and was a core attribute of resilient individuals. The resilient students relied on trial and error and are able to manage the frustration with the strategy. Skilled management and use of dispositional, environment, and familial protective factors helped the students succeed.

Niknami, M., Dehghani, F., Bouraki, S., Kazemnejad, E., & Soleimani, R. (2015). An assessment of the stressors and ways of coping in Iranian medical sciences students. *Iranian Journal of Nursing and Midwifery Research*, 20(4), 521-525. doi: [10.4103/1735-9066.161009](https://doi.org/10.4103/1735-9066.161009)

This article examined coping strategies and sources of stress sought to medical sciences students from Iran. Through the use of chi squares, Fischer's exact tests, Kruskal-Wallis and Mann-Whitney U tests, and logistical regression analysis on data from questionnaires, the authors found interpersonal factors were the students' predominant stressor, with most students using problem-focused ways of coping to deal with their stress. Female students used emotion focused ways of coping more frequently, while males used primarily problem-focused ways of coping. Gender predicted the use of emotion-focused ways of coping.

Ovradović, J., Burt, K. B., & Masten, A. S. (2006). Pathways of adaptation from adolescence to young adulthood. *Annals of the New York Academy of Sciences*, 1094, 340-344. doi: [10.4135/9781452240565](https://doi.org/10.4135/9781452240565)

This article examined the various pathways of adaptation to emerging adulthood longitudinally from children to young adulthood in the United States. Through the use of semiparametric mixture modeling, Bayesian Information Criterion (BIC), ANOVA, and Mann-Whitney tests, the authors found five distinct pathways of adaptations: low-declining, low-improving, middle-improving, middle-declining, and consistently high. The consistently high adaptation group had high competence and resources, as well as significantly higher academic

and social competence than other groups in emerging adulthood. However, the middle-improving group caught up with the consistently high group by young adulthood in all aspects of competence except for cumulative academic achievement. The most dramatic change in pathways of adaptation occurred during emerging adulthood. Children who were exposed to risks and lack of resources, as well as inability to plan and achieve new tasks of young adulthood had undermined adaptation over time. The low-improving and high-improving groups had higher percentages of females, while the middle-declining group had the highest percentage of males.

Patel, R., Tarrant, C., Bonas, S., Yates, J., & Sandars, J. (2015). The struggling student: a thematic analysis from the self-regulated learning perspective. *Medical Education*, 49(4), 417-426. doi: [10.1111/medu.12651](https://doi.org/10.1111/medu.12651)

This article examined how poor self-regulated learning affects the response to failure of an assessment in students who failed a final assessment in two medical schools in the United Kingdom. Through the use of a thematic analysis approach on semi-structured interviews, the authors found that struggling students did not use self-regulated learning processes, which hindered their ability to learn and to use maladaptive strategies in coping with failure. Four main themes of inappropriate selection of learning goals and strategies, responding to failure by normalizing it and attributing it to external causes, not seeking or accepting support, and protecting self-worth emerged among the sample.

Por, J., Barriball, L., Fitzpatrick, J., & Roberts, J. (2011). Emotional intelligence: Its relationship to stress, coping, well-being and professional performance in nursing students. *Nurse Education Today*, 31(8), 855-860. doi: [10.1016/j.nedt.2010.12.023](https://doi.org/10.1016/j.nedt.2010.12.023)

This article examined the relationship of emotional intelligence, stress, coping, well-being and professional performance in nursing students from the United Kingdom. Through the use of stepwise regressions, a modified version of Miles and Huberman's and Woods et al.'s analysis framework, and deductive analysis on data from questionnaires, the authors found that emotional intelligence was positively related to well-being, problem-focused coping, perceived nursing competency, and negatively related to perceived stress. Increased feelings of control and emotional competence assisted nursing students to adopt active and effective coping strategies when dealing with stress, which enhanced their subjective well-being.

Taylor, Z. E., Doane, L. D., & Eisenberg, N. (2014). Transitioning From High School to College: Relations of Social Support, Ego-Resiliency, and Maladjustment During Emerging Adulthood. *Emerging Adulthood*, 2(2), 105-115. doi: [10.1177/2167696813506885](https://doi.org/10.1177/2167696813506885)

This article examined the relationships between internalization of symptoms, perceived social support, and the personality trait of ego-resiliency in individuals transitioning from high school to university in the United States. Through the use of structural equation modeling on data from questionnaires, the authors found that internalizing symptoms and ego resiliency were negatively correlated with perceived social support from friends and family, while ego-resiliency was positively correlated with perceived social support from friends. Across time, internalizing

symptoms was negatively associated with perceived social support from friends, whereas, ego-resiliency was positively associated with perceived social support from family.

Watson, R., Deary, I., Thompson, D., & Li, G. (2008). A study of stress and burnout in nursing students in Hong Kong: A questionnaire survey. *International Journal of Nursing Studies*, 45(10), 1534-1542. doi: [10.1016/j.ijnurstu.2007.11.003](https://doi.org/10.1016/j.ijnurstu.2007.11.003)

This article examined the relationship between personality, stress, coping, burnout and attrition in nursing students from Hong Kong. Through the use of t-tests, correlations, and stepwise multiple regression on data from questionnaires, the authors found that higher trait neuroticism and emotion-oriented coping were strongly correlated and predictive of psychological morbidity and emotional exhaustion, while lower neuroticism predicted higher personal accomplishment. The relationship between stress and emotional exhaustion strengthened over time in the sample. Higher stress, negative aspects of burnout, and negative effects of emotion-oriented coping predicted further stress and negative emotion-oriented coping.

Yoon, J. H., Lee, J. H., Lee, C. Y., Cho, M., & Lee, S.M. (2014). Suppressor effects of coping strategies on resilience. *Asia Pacific Education Review*, 15(4), 537-545. doi: [10.1007/s12564-014-9343-8](https://doi.org/10.1007/s12564-014-9343-8)

This article examined the suppressor effects of coping strategies on resilience in middle school and university students from Korea. Through the use of correlations and structural equation modeling, the authors found that active coping, problem focused coping, social support seeking coping, passive coping, emotion-focused coping, wishful thinking coping and resilience were positively and significantly significant. Active coping and passive coping were significantly positively related in both samples. Active coping alone and passive coping alone predicted resilience. Overall in the full model, active coping was a more significant predictor of resilience. This indicates a suppressor effect for passive coping, where passive coping increases the effect of active coping on resilience. The direct effect of active coping on resilience was positive and statistically significant, whereas the indirect effect of passive coping was negative and statistically significant.

Zanardelli, G., Sim, W., Borges, N., & Roman, B. (2015). Well-being in first year medical students. *Academic Psychiatry: The Journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry*, 39(1), 31-36. doi: [10.1007/s40596-014-0189-5](https://doi.org/10.1007/s40596-014-0189-5)

This article examined the relationships between well-being, attitudes toward counselling, willingness to seek counselling, and coping strategies of first year medical students in the United States while taking gender differences, attitudes toward and willingness to seek counselling. Through the use of hierarchical regression analysis and MANCOVAs, the authors found that female medical students were less willing to seek counselling and had more negative attitudes

toward counselling compared to males. Unhealthy coping strategies including denial, self-blame, and substance use were negatively associated with wellbeing, while health coping strategies including active coping, emotional support, and instrumental support were not correlated with well-being.

Resilience and Psychological Health

Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2014). The concept of mental toughness: Tests of dimensionality, nomological network, and traitness. *Journal of Personality*, 83(1), 26-44. doi: 10.1111/jopy.12079

This article examined the concept of mental toughness to find its dimensionality, nomological network, and traitness in five separate studies. On the fourth study focusing on mental toughness in education, the authors used multilevel structural equation modeling on data from questionnaires completed by undergraduate sport science students in Australia. The authors found that mental toughness served as a predictor of psychological health, thriving, and goal progress in the sample.

Hartley, M. T. (2010). Increasing resilience: Strategies for reducing dropout rates for college students with psychiatric disabilities. *American Journal of Psychiatric Rehabilitation*, 13(4), 295-315. doi: 10.1080/15487768.2010.523372

This article examined strategies for increasing resilience to improve retention of students with psychiatric disabilities. Through a literature review, the author found that supportive education service providers can assist by integrating the protective factors of active coping, peer support, counseling and psychosocial support, academic support, and academic accommodations to improve retention.

Hartley, M. T. (2011). Examining the relationships between resilience, mental health, and academic persistence in undergraduate college students. *Journal of American College Health*, 59(5), 596-604. doi: [10.1080/07448481.2010.515632](https://doi.org/10.1080/07448481.2010.515632)

This article examined the relationships between interpersonal resilience, intrapersonal resilience, and mental health compared to academic and social integration, and academic persistence in undergraduate students from the United States. Through the use of hierarchical regression analysis on data from questionnaires, the author found that intrapersonal resilience factors of tenacity, stress tolerance, and spirituality contributed to explaining variance in cumulative GPA in aptitude and achievement. The resilience factors of tenacity, tolerance, acceptance, control, and spirituality were all significantly related to each other. Interpersonal and intrapersonal resilience factors and mental health were significantly related.

Malkoç, A., & Yalçın, I. (2015). Relationships among resilience, social support, coping, and psychological well-being among university students. *Turkish Psychological Counseling & Guidance Journal*, 5(43), 35-43.

This article examined the relationships between resilience, social support, coping and psychological wellbeing in university students from Turkey. Through the use of correlations, standard multiple regression, and hierarchical regression analyses on data from questionnaires, the authors found significant relationships among all variables. Psychological well-being was predicted by resilience, coping, and social support, while social support and coping skills partially mediated the relationship between resilience and psychological well-being.

Ryan, R. M., LaGuardia, J. H., & Rawsthorne, L.J. (2005). Self-Complexity and the authenticity of self-aspects: Effects on well being and resilience to stressful events. *North American Journal of Psychology*, 7(3), 431-447.

This article examined the relationship between self-complexity, authenticity of self-aspects, and well-being in undergraduate students. Through the use correlations on data from Linville's self-description task and questionnaires, the authors found that self-complexity was largely unrelated to well-being, whereas the authenticity of self-aspects was associated with greater well-being. Complexity was either not related or negatively related to well-being.