

Race and Early-Life Family Instability as a Risk for Depression in College: The Role of
Optimism as a Protective Factor

Sky A. Triage

Oklahoma State University

Abstract

Family instability, conceptualized as abrupt, involuntary, and/or negative change in family circumstances, has broad implications for children's long-term health (Sandstrom, 2013). Growing evidence suggests that family instability during childhood is associated with maladjustment in adulthood, including depression (Craigie, Brooks-Gunn, & Waldfogel 2012). Optimism, defined as a dispositional tendency to hold favorable expectations about the future, has been associated with psychological well-being and the use of adaptive coping strategies in the face of adversity. Additionally, optimism may be especially protective for youth who face structural barriers to success, including barriers related to socioeconomic status, race/ethnicity (Meece & Kurtz-Costes, 2001). Undergraduate students (N=698) were recruited through the online research system at Oklahoma State University completed an anonymous survey that assessed family instability (ACE-SF; Felitti et al., 1998), levels of optimism (LOT-R; Carver, 2013), and depressive symptoms (PHQ-9; Spitzer, Williams, and Kroenke, 1999). The findings suggest that early-life family instability may increase the risk for depressive symptoms in the transition to adulthood. However, high levels of optimism were found to be protective against depression generally, with no differences found between racial groups. Findings have implications for identifying students who are at risk for depression due to experiences of family instability during childhood and providing them with support or interventions aimed to increase optimism (Meevissen, Peters, & Alberts, 2011).

The purpose of this study is to examine the relationship between early-life family instability and depressive symptoms in early adulthood, and investigating how optimism may be a protective factor that reduces the risk for depression. Unfortunately, family instability is a common occurrence that has been shown to have negative impacts on human development, and there is strong evidence to suggest exposure to early-life instability is associated with increased risk for depression (Sandstrom, 2013). Being able to identify and strengthen protective factors and inform interventions is imperative to offsetting some of the more negative outcomes for those who experience family instability during childhood. Additionally, little is known about how optimism may function across racial groups, or how the associations between family instability and depression may vary according to racial identity. As such, this study investigates associations between early-life family instability, depression, and optimism among white students and students of color (SOC).

Family Instability

Family instability, conceptualized as abrupt, involuntary, and/or negative change in family circumstances, has broad implications for children's long-term health and development (Sandstrom, 2013). This can include family members not being present or not providing a consistent routine for children. Adverse experiences within families, such as divorce, household mental illness, household incarceration, and household substance use, disrupt the family system in ways that tax families' ability to cope. Cavanagh and Huston (2008) estimate that over one-third of children experience a change in familial structure (e.g. a marriage, a remarriage, a separation, a start of a cohabiting union, or an end of a cohabiting union) by the 4th grade.

Notably, Craigies, Brooks-Gunn, and Waldfogel (2012) suggest that changes in living situations, including the absence of a parent, can lead to limited financial resources, reduced

quality of parental caregiving, and/or an increase in stress and depression in a parent. Difficulty with coping can increase the risk for toxic levels of stress that further impairs children, parents, and overall family functioning (Hamman, 1992).

Family instability and the associated outcomes have been linked with disruptions in overall child development, including disruptions in children's social-emotional development, cognitive development, physical health, and academic achievement (Amato & Keith, 1991; Craigie et al., 2012; Sandstrom, 2013). Moreover, there is growing evidence that family instability during childhood is associated with long-term maladjustment that extends to adulthood (Craigie et al., 2012). Past research suggests that children who experience family instability are at a greater risk for a variety of later difficulties, including depression (Sandstrom, 2013).

It is important to recognize that no two individuals will share 100% of the same life experiences, and this means that individuals will have different risks factors and societal pressures that impact their family. Race is a characteristic that every person holds, and the impact of an individual's race has on their well-being depends on their environment. The factor of race cannot be ignored when examining discrepancies in rates and risks to children. Research suggests that children of color experience family instability at a higher rate than White children (Brown, Stykes, & Manning, 2016), which can be explained by systemic inequalities in society, including the justice system, employment, housing, education, and healthcare (Acevedo-Garcia, Rosenfeld, Hardy, McArdle, & Osypuk, 2013; Pager, Bonikowski, & Western, 2009; Ross & Turner, 2005; Rugh & Massey, 2010; Wakefield & Uggen, 2010; Williams, 2012; Williams, Mohammed, Leavell, & Collins, 2010).

In America, racial minorities are poorer and do not reap the same benefits as White children do from household income (Farmer and Ferraro., 2005). Findings from Pager et al. (2009) show that minorities who are equally qualified are more likely to be passed over by employers for a job offer. In terms of housing, People of Color have been subjected to poorer quality housing, have a harder time receiving assistance for housing, and are at an increased risk of being foreclosed on (Ross & Turner, 2005; Rugh & Massey, 2010). White children appear to have a more negative outcome than children of color when they grow up in a household with only one parent. This can be explained by the tendency for White families to have more resources than families of color, such that when parents separate, those resources and familial structure diminish (McLanahan & Sandefur, 1994). Minorities appear to be at a higher risk of incarceration and tend to be viewed in a more negative light in the justice system (Travis, Western, & Redburn, 2014; Wakefield & Uggen, 2010). Research also suggests that White children are the least likely to experience a parental figure being incarcerated (Western, Pattillo, & Weiman, 2004).

Interestingly, Costello and Keeler (2001) found that there was no significant difference in children of color and White children's rates of experiencing mental illness in the household, but they did find that the experience did have an overall impact on children's well-being. Specifically, having a familial history of mental illness contributed to genetic predisposition to certain disorders and stress from having a family member with a mental illness. In particular, household substance abuse, appears to show no difference in terms of risk for depression in White and People of Color (Roxburgh & MacArthur, 2014).

Depression

Depression is one of the most prevalent psychological disorders in young adults, contributing to significant personal morbidity and societal costs (Voelker, 2003; Lewinsohn, Rohde, & Seeley, 1998). Amongst numerous risks for depression, childhood family instability has been identified as a major risk factor that is often chronic and affects many different domains of development in ways that increase risk for depression (Sandstrom, 2013).

In addition to family instability, college students are also met with a plethora of other factors that increase the likelihood of depression. These factors can include financial problems, academic achievement, social stressors, and the adjustment to college itself (DeRoma, Leach, & Leverett, 2009). Vrendenburg, O'Brien, and Krames (1988) found that college students who are depressed experience certain stressors that are college-specific and report that their depression symptoms increased once they started college. In turn, this can create a cycle of depression and academic pressures intensifying one another (Heiligenstein & Guenther, 1996). DeRoma et al. (2009) found that an increase in depressive symptoms resulted in a decrease in academic achievement. This finding suggests that decreasing levels of depression in college students could alleviate the struggles that already come with being a college student and increase achievement in college.

Additionally, levels of depressive symptoms can vary depending on an individual's race. Oliver and Burkham (1979) found that students of color have a higher risk for depression than White students. More recent studies seem to have a mix of results when looking at the relationship of race and depression. Rodriguez et al. (2018) suggests that minorities are at a greater risk for depression in adulthood than non-minorities. However, another study found that Black individuals had a lower risk for depression and explained this phenomenon by noting the adjustment of Black individuals adapting to some social stressors that previously put minorities

at risk for depression later in life (LaVeist, Thorpe Jr., Pierre, & Williams, 2015). This finding can be considered surprising because minorities in America typically face elevated levels of discrimination and racism which are also risks for depression (Alvarez-Galvez & Rojas-Garcia, 2019).

Optimism

Importantly, there are factors that can buffer or help protect against the impact of family instability and reduce the risk of depression. Optimism, considered here as a dispositional tendency to hold favorable expectations about the future, is a personal characteristic that has been associated with psychological well-being and the use of adaptive coping strategies in the face of adversity (Carver et al., 2010; Rim, 1985). Notably, individuals higher in optimism tend to have lower risk for depression (Black & Reynolds, 2013; Garner et al., 2015), and there is evidence that optimism may be a protective factor that buffers against the negative effects of stress (Wyman, Cowen, Work, & Kerley, 1993).

Regarding race, Hirsch, Britton, & Conner (2010) found that individuals from marginalized backgrounds tend to have differing rates of optimism than their White counterparts. Interestingly, minority groups, as a whole, tend to have higher rates of optimism and higher life-satisfaction (Graham & Pinto, 2019; Webber & Smokowski, 2018). According to Webber & Smokowski (2018), optimism may be especially protective for youth who face structural barriers to success, including barriers related to socioeconomics, race/ethnicity (Meece & Kurtz-Costes, 2001), and even historical trauma (Denham, 2008). Notably, optimism has been identified as a predictor of posttraumatic growth, suggesting that optimism may be important for surviving traumatic experiences and gaining perspective over time (Prati & Pietrantonio, 2009). One explanation for higher optimism among racial/ethnic minorities is the influence of community

and cultural socializing agents (e.g., parents, extended kin, churches, elders) who foster optimism as a way to cope with adversity (Denham, 2008; Webber & Smokowski, 2018). This socialization may be tied to religious/spiritual and cultural traditions, as well as communicated through community cohesion and support (Mattis et al., 2017). Notably, social support, a sense of spirituality, and the perception that one has a supportive and loving relationship with God were found to be key predictors of optimism (Mattis, Fontenot, & Hatcher-Kay, 2003), suggesting that optimism socialization may be tied to religious/spiritual and cultural traditions, as well as communicated through community cohesion and support (Mattis et al., 2017).

Current Study

Little research has been done on the role of optimism as a protective factor against depression in relation to the risks of family instability. The current study will examine the association between family instability in childhood and depressive symptoms in a college-aged sample to determine whether optimism moderates this association. For this study, it is hypothesized that family instability will increase the risk for depression and that people who are higher in optimism will be less likely to be depressed despite family instability (Hypothesis 1). This study will also investigate these associations separately among Students of Color and White students, to determine whether there may be differences in the associations given differing levels of risk and optimism. It is hypothesized that there will be a difference between the two models comparing White students and Students of Color, with optimism having a more protective role against depression in Students of Color (Hypothesis 2).

Methods

Participants

Participants included 698 undergraduate students at Oklahoma State University recruited through an online research system. The average age of participants was 19.82 years, $SD= 2.62$. Of the sample, 54.7% reported their race as White; 6.0% as Black or African American; 4.0% as Native American or Alaska Native; 2.1% as Asian; 0.2% as Hispanic or Latino; 3.7% as Biracial; 0.3% as Multiracial; and 2.2% as “Other”. The majority of the participants were female (70.8%) and identified as heterosexual (92.0%). The sample comprised of 44.3 % freshmen, 22.2% sophomores, 15.5% juniors, and 16.2% seniors. 1.3% of student classified their year in college as “Other”.

Study Procedures

Participants were recruited from the Psychology Department Research Participation System SONA to participate in an anonymous survey. Participants had to meet the following criteria: they had to be 18 year or older, they had to be a fluent English speaker, had to have experienced at least one adverse family event in their lifetime. All participants provided electronic consent. Then, they completed the survey, which took approximately 60 to 120 minutes. After completing the survey, participants were compensated with two course credits. All measurements were collected at one time using self-report.

Throughout the present study, adverse family events will be categorized into family instability, specifically four groups (e.g., household mental illness, alcoholism, incarceration, and divorce). Given the focus on outcomes associated with trauma(s), those who do not report a history of family instability were excluded from the study to control for depressive symptoms of

those who did not experience early-life family instability. Based on the criteria for the study, the current study's sample included 698 participants.

Measures

Family Instability. For this study family instability was defined as any event in an individual's life that involved their household member(s) either being divorced, diagnosed with a mental illness, being incarcerated, or exhibiting alcoholism and other forms of substance abuse. Specifically, items from the Adverse Childhood Experience Short Form (Felitti et al., 1998) were taken to directly ask if participants had experienced household mental illness, incarceration, alcoholism, or divorce. These measures were individually endorsed within the questionnaire by participants selecting "yes" or "no" to indicate that they experienced the measure.

Optimism. The Revised Life Orientation (LOT-R; Carver, 2013) was used to assess levels of optimism. This is a ten-point measure that assesses an individual's beliefs of the future and overall optimism. Three items measure optimism, three items measure pessimism, and four items serve as fillers. All items are rated on a four-point Likert scale ranging from 0 (Strongly Disagree) to 4 (Strongly Agree). The responses are summed together. Higher scores indicate higher levels of optimism.

Depression. The Patient Health Questionnaire (PHQ-9; Spitzer, Williams, and Kroenke, 1999) was used to assess depressive symptoms. This is a self-report measure that consists of nine items. On each item respondents indicate the frequency (0 = *not at all*, 1 = *several days*, 2 = *more than half the days*, and 3 = *nearly every day*) they have been bothered by symptoms. The responses are summed (possible range of 0-27), with higher scores indicating greater depressive symptoms. Specifically, depression severity depended on the score that individuals had (0-4

being “none,” 5-9 being “mild,” 10-14 being “moderate,” 15-19 being “moderately severe,” and 20-27 being “severe”) after the responses were summed.

Race. While filling out the survey, participants were asked to report their identified race. Participants were given the race options of White, Black or African American, Native American or Alaskan Native, Asian, Hispanic, or “Other”. Participants were also given the option to select more than one race option if they identified as biracial or multiracial. However, for the current study, participants were grouped as identifying as White (n = 528; 75.64%) or a Person of Color (n = 170; 24.36%). If a participant identified as White, they were part of the White group in the study. If a participant identified as Black or African American, Native American or Alaskan Native, Asian, Hispanic, Biracial, Multiracial, or “Other”, there were part of the People of Color Group.

Data Analysis Plan

Descriptive statistics and Pearson’s correlations were conducted to examine the relations amongst family instability, optimism, depression, and POC status. Hypothesis 1 postulated that optimism moderates the relationship between family instability and depression in college students. Moderation analyses with bootstrapping procedures (Hayes, 2017; Preacher & Hayes, 2004, 2008) was used to examine these relationships. Hypothesis 2 analyzes the same model as in Hypothesis 1, but examines racial differences between white participants and People of Color. Moderation analyses with bootstrapping procedures (Hayes, 2017; Preacher & Hayes, 2004, 2008) was used to examine these relationships in each group separately, using split file procedures in SPSS.

Results

Descriptive Statistics and Correlations. Approximately 50% of white participants in the sample endorsed no indicators of family instability. The remaining 50% endorsed at least one instance of family instability (range: 0-5), with 21% endorsing one indicator of family instability and 1% endorsing all five indications of family instability. Similarly, 40% of People of Color in the sample endorsed no indicators of family instability. The remaining 60% endorsed at least one instance of family instability (range: 0-5), with 25% endorsing one indicator of family instability and 3% endorsing all five indicators of family instability. Parental separation or divorce was the most common occurrence of family instability in both racial groups, and the second most common indicator of family instability was living with someone who abused substances, such as alcohol or street drugs. Pearson's Correlations were conducted to examine relationships between family instability, optimism, and depression, separately by racial group (See Table 1 and Table 2). Preliminary analyses suggest that optimism was negatively associated with family instability for white students ($r = -.18, p < .001$) but not students of color ($r = -.14, p = .08$). However, optimism was negatively associated with depression for both white students ($r = -.41, p < .001$) and students of color ($r = -.48, p < .001$).

Moderation Analyses

Hypothesis 1. We hypothesized that early-life family instability would be associated with higher levels of depressive symptoms in college students. We also hypothesized that higher levels of optimism would be associated with lower levels of depressive symptoms in college students when they experience early-life family instability. Multiple linear regression analysis was conducted to examine the moderating role of optimism on the association between family instability and depressive symptoms in the complete sample. The model included the main effect

of family instability and optimism as well as the two-way interaction between family instability and optimism regressing on depression, the outcome variable (See Table 3). Results indicated there were significant main effects of family instability and optimism predicting depression, but that optimism was not a significant moderator. Although students high in optimism were less likely to report depressive symptoms across the range of family instability, family instability was positively associated with depressive symptoms at all levels of optimism (see Figure 1).

Hypothesis 2: Similar to hypothesis 1, we hypothesized that early-life family instability would be associated with high levels of depressive symptoms in college students, and that higher levels of optimism would be associated with lower levels of depressive symptoms in college students, in both racial groups. However, we hypothesized that optimism would be more protective for POC students compared to White students. To test this hypothesis, multiple linear regression analysis was conducted to examine the moderating role of optimism on the association between family instability and depressive symptoms, with separate models for each racial group. Models included the main effect of family instability and optimism as well as the two-way interaction with family instability and optimism regressing on depression, the outcome variable.

Table 4 reports the linear multiple regression models by racial group. For White students, there were significant main effects of family instability and optimism predicting depression. More specifically, as White college students' family instability increases, their depression symptoms increase and as their optimism increases, their depression symptoms decrease. The two-way interaction of family instability by optimism in this group was not statistically significant (See Figure 2). For People of Color, there were also significant main effects for family instability and optimism on depression. As students of color's family

instability increases, their depression symptoms increase and as their optimism increases, their depression symptoms decrease. However, the two-way interaction between family instability and optimism was not statistically significant, unlike what was hypothesized (See Figure 3).

Discussion

There is very little literature that looks at the role of optimism as protective factor for depression with the risk of family instability in early life. This study sought to assess the role of optimism in relation to childhood family instability and depressive symptoms in young adulthood. By assessing different instances of family instability and examining the role of optimism this line of research provides information on a protective factor against depression that is currently lacking in the literature.

The results of this study suggest that although young adults with a history of family instability tend to have higher levels of depressive symptoms, high levels of optimism reduce the risk of depression overall. This finding aligns with previous work that suggests that optimism may promote a better outlook for the future and therefore serve a protective factor (Carver & Scheier, 2014). Additionally, optimism seems to be a trait that promotes positive functioning no matter what the race of an individual, and optimism was not found to be more protective among Students of Color, contrary to hypotheses.

Notably, the current sample was comprised entirely of college students, which is inherently a low-risk sample. Typically, those who go on to attend college experience less family instability than those who do not attend college (Fomby, 2013). Thus, there was little variability in family instability in this sample, and there were no differences in study variables by racial group. Further, the current study did not measure levels of religious/spiritual beliefs or

connection to cultural traditions, which has been associated with optimism socialization, and may be a key factor explaining differences among racial groups in previous research (Mattis et al., 2017). It is possible that in the current sample of college students, there were little differences in the level of engagement in spiritual/religious traditions and cultural practices among the race groups, and in fact, Oklahoma is in the top 10 most religious states in the US (Pew Research Center, 2014), which may play a role in the levels of optimism in the sample.

Although these findings add to the literature, it is important to consider them as exploratory and in need of further replication. Several limitations exist within the current study. Most importantly, the current study used a cross-sectional design. Future longitudinal work is needed to assess if optimism has protective effects over time. Additionally, findings are not generalizable to the general population, as they are limited to college students. This sample is also not representative in term of the percentages of Students of Color. Future studies would benefit from examining additional outcomes of distress, such as anxiety. Recruiting a larger, more representative sample of individuals is something to be explored by future studies.

The current study has several implications that may inform efforts to support the well-being of college students. It is important to intervene early to prevent negative consequences associated with family instability. Being able to screen college students for family instability could help identify students who would benefit from additional support or additional screening for depression. Also, knowing that optimism can serve as a protective factor suggests that by teaching individuals how to be more optimistic could also serve as a method to decrease the risk for depression (Meevissen, Peters, & Alberts, 2011).

References

- Acevedo-Garcia, D., Rosenfeld, L. E., Hardy, E., McArdle, N., & Osypuk, T. L. (2013). Future directions in research on institutional and interpersonal discrimination and children's health. *American journal of public health, 103*(10), 1754-1763.
- Alvarez-Galvez, J., & Rojas-Garcia, A. (2019). Measuring the impact of multiple discrimination on depression in Europe. *BMC public health, 19*(1), 435.
- Amato, P. R., and Keith, B. 1991. Parental divorce and the well-being of children: A meta-analysis. *Psychological Bulletin 110*(1): 26–46.
- Black, J., & Reynolds, W. M. (2013). Examining the relationship of perfectionism, depression, and optimism: Testing for mediation and moderation. *Personality and Individual Differences, 54*(3), 426-431.
- Brown, S. L., Stykes, J. B., & Manning, W. D. (2016). Trends in children's family instability, 1995–2010. *Journal of Marriage and Family, 78*(5), 1173-1183.
- Carver, C. S. (2013). Life Orientation Test-Revised (LOT-R). *Measurement Instrument Database for the Social Science*
- Carver, C. S., & Scheier, M. F. (2014). Dispositional optimism. *Trends in cognitive sciences, 18*(6), 293-299.
- Carver, S. C., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review, 30*, 879-889.
- Cavanagh, S. E., and Huston, A. C. (2008). The timing of family instability and children's social development. *Journal of Marriage and Family 70*:1258–69.

- Cherlin, A., & Furstenberg Jr, F. F. (1992). *The new American grandparent*. Harvard University Press.
- Costello, E. J., Keeler, G. P., & Angold, A. (2001). Poverty, race/ethnicity, and psychiatric disorder: A study of rural children. *American Journal of Public Health, 91*(9), 1494-1498.
- Craigie, T. L., Brooks-Gunn, J., and Waldfogel, J. (2012). Family structure, family stability and outcomes of five-year-old children. *Families, Relationships, and Societies 1*(1): 43–61.
- Denham, A. R. (2008). Rethinking historical trauma: Narratives of resilience. *Transcultural Psychiatry, 45*, 391–414
- DeRoma, V. M., Leach, J. B., & Leverett, J. P. (2009). The relationship between depression and college academic performance. *College Student Journal, 43*(2), 325-335.
- Farmer, M. M., & Ferraro, K. F. (2005). Are racial disparities in health conditional on socioeconomic status?. *Social science & medicine, 60*(1), 191-204.
- Felitti, V., Anda, M., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., ... Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventative Medicine, 14*, 245–258
- Fomby, P. (2013). Family instability and college enrollment and completion. *Population Research and Policy Review, 32*(4), 469-494.
- Garner, M. J., McGregor, B. A., Murphy, K. M., Koenig, A. L., Dolan, E. D., & Albano, D. (2015). Optimism and depression: a new look at social support as a mediator among women at risk for breast cancer. *Psycho-Oncology, 24*(12), 1708-1713.

- Graham, C., & Pinto, S. (2019). Unequal hopes and lives in the USA: Optimism, race, place, and premature mortality. *Journal of Population Economics*, 32(2), 665-733.
- Hammen, C. (1992). Cognitive, life stress, and interpersonal approaches to a developmental psychopathology model of depression. *Development and Psychopathology*, 4(1), 189-206.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. *Guilford Publications*.
- Hirsch, J. K., Britton, P. C., & Conner, K. R. (2010). Psychometric evaluation of the Life Orientation Test—Revised in treated opiate dependent individuals. *International Journal of Mental Health and Addiction*, 8(3), 423-431.
- LaVeist, T. A., Thorpe Jr, R. J., Pierre, G., Mance, G. A., & Williams, D. R. (2014). The relationships among vigilant coping style, race, and depression. *Journal of Social Issues*, 70(2), 241-255.
- Lewinsohn, P.M., Rohde, P., & Seeley, J.R. (1998). Major depressive disorder in older adolescents: Prevalence, risk factors, and clinical implications. *Clinical Review*, 18(7), 765-794
- Mattis, J.S., Fontenot, D., & Hatcher-Kay, C. (2003). Religiosity, racism, and dispositional optimism among African Americans. *Personality and Individual Differences*, 34, 1025-1038.
- Mattis, J.S., Powell, W., Grayman, N.A. *et al.* What would I know about mercy? Faith and optimistic expectancies among african americans. *Race and Social Problems*, 9, 42–52.

- McLanahan, S., & Sandefur, G. (1994). *Growing Up with a Single Parent. What Hurts, What Helps*. Harvard University Press, 79 Garden Street, Cambridge, MA 02138.
- Meevissen, Y. M., Peters, M. L., & Alberts, H. J. (2011). Become more optimistic by imagining a best possible self: Effects of a two week intervention. *Journal of Behavior Therapy and Experimental Psychiatry*, *42*(3), 371-378
- Meece, J. L., & Kurtz-Costes, B. (2001). Introduction: The schooling of ethnic minority children and youth. *Educational Psychologist*, *36*(1), 1–7
- Oliver, J. M., & Burkham, R. (1979). Depression in university students: Duration, relation to calendar time, prevalence, and demographic correlates. *Journal of Abnormal Psychology*, *88*(6), 667
- Pager, D., Bonikowski, B., & Western, B. (2009). Discrimination in a low-wage labor market: A field experiment. *American sociological review*, *74*(5), 777-799.
- Pattillo, M., Western, B., & Weiman, D. (Eds.). (2004). *Imprisoning America: The social effects of mass incarceration*. Russell Sage Foundation.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation. *Prati, G., & Pietrantoni, L. (2009). Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. Journal of Loss and Trauma, 14:5, 364-388*
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879-891.

- Rim, Y. (1990). Optimism and coping styles. *Personality and Individual Differences, 11*(1), 89-90.
- Rodriguez, E. J., Livaudais-Toman, J., Gregorich, S. E., Jackson, J. S., Nápoles, A. M., & Pérez-Stable, E. J. (2018). Relationships between allostatic load, unhealthy behaviors, and depressive disorder in US adults, 2005–2012 NHANES. *Preventive medicine, 110*, 9-15.
- Ross, S. L., & Turner, M. A. (2005). Housing discrimination in metropolitan America: Explaining changes between 1989 and 2000. *Social Problems, 52*(2), 152-180.
- Roxburgh, S., & MacArthur, K. R. (2014). Childhood adversity and adult depression among the incarcerated: Differential exposure and vulnerability by race/ethnicity and gender. *Child Abuse & Neglect, 38*(8), 1409-1420.
- Sandstrom, H., & Huerta, S. (2013). *The Negative effects of instability on child development: A research synthesis*. Washington, DC: Urban Institute.
- Rugh, J. S., & Massey, D. S. (2010). Racial segregation and the American foreclosure crisis. *American sociological review, 75*(5), 629-651.
- Slopen, N., Shonkoff, J. P., Albert, M. A., Yoshikawa, H., Jacobs, A., Stoltz, R., & Williams, D. R. (2016). Racial disparities in child adversity in the US: Interactions with family immigration history and income. *American Journal of Preventive Medicine, 50*(1), 47-56.
- Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). the Patient Health Questionnaire Primary Care Study Group: Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. *Jama, 282*(18), 1737-1744.

- Travis, J., Western, B., & Redburn, F. S. (2014). The growth of incarceration in the United States: Exploring causes and consequences.
- Voelker, R. (2003). Mounting student depression taxing campus mental health services. *The Journal of the American Medical Association*, 289(16), 2055-2056.
- Wakefield, S., & Uggen, C. (2010). Incarceration and stratification. *Annual review of sociology*, 36, 387-406.
- Webber, K.C., & Smokowski, P.R. (2018). Assessment of adolescent optimism: Measurement invariance across gender and race/ethnicity. *Journal of Adolescence*, 68, 78-86.
- Williams, D. R. (2012). Miles to go before we sleep: Racial inequities in health. *Journal of health and social behavior*, 53(3), 279-295.
- Williams, D. R., Mohammed, S. A., Leavell, J., & Collins, C. (2010). Race, socioeconomic status and health: Complexities, ongoing challenges and research opportunities. *Annals of the New York Academy of Sciences*, 1186, 69.
- Wyman, P. A., Cowen, E. L., Work, W. C., & Kerley, J. H. (1993). The role of children's future expectations in self-esteem functioning and adjustment to life stress: A prospective study of urban at-risk children. *Development and Psychopathology*, 5(4), 649–661

Table 1.
Correlations: White college student group

	<i>M (SD)</i>	1.	2.	3.
White				
1. Family Instability	.98 (1.2)	1.00		
2. Optimism	15.5 (4.1)	-0.18**	1.00	
9. Depression	6.6 (6.3)	0.25**	-0.41**	1.00

Notes. * $p < .05$, ** $p < .001$.

Table 2.
Correlations: People of color college student group

	<i>M (SD)</i>	1.	2.	3.
People of Color				
1. Family Instability	1.06 (1.3)	1.00		
2. Optimism	15.3 (3.8)	-0.14	1.00	
9. Depression	7.7 (6.9)	0.25**	-0.48**	1.00

Notes. * $p < .05$, ** $p < .001$.

Table 3.

Multiple Regression Model Results Involving Family Instability, Optimism and Depression

Variables	<i>B</i>	<i>SE</i>	<i>df</i>	<i>F</i>	<i>R</i> ²
College Students (n=698)			3	64.34**	0.22
Family Instability	0.91**	0.18			
Optimism	-0.63**	0.06			
Family Instability X Optimism	-0.04	0.04			

Notes. * $p < .05$, ** $p < .001$.

Table 4.

Multiple Regression Model Results Involving Family Instability, Optimism and Depression for Separate Race Groups

Variables	<i>B</i>	<i>SE</i>	<i>df</i>	<i>F</i>	<i>R</i> ²
White (n=528)			3	44.48**	0.20
Family Instability	0.91**	0.20			
Optimism	-0.58**	0.06			
Family Instability X Optimism	-0.02	0.04			
People of Color (n=170)			3	20.11**	0.25
Family Instability	0.92*	0.39			
Optimism	-0.79**	0.13			
Family Instability X Optimism	-0.07	0.08			

Notes. * $p < .05$, ** $p < .001$.

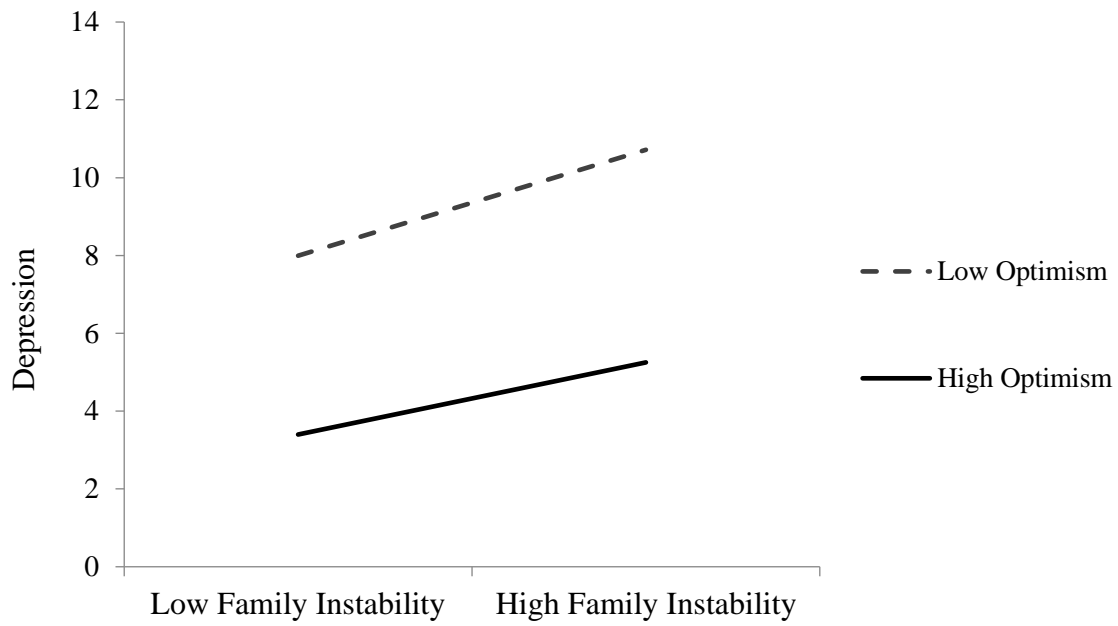


Figure 1. Relationship of family instability and optimism on depression in college students

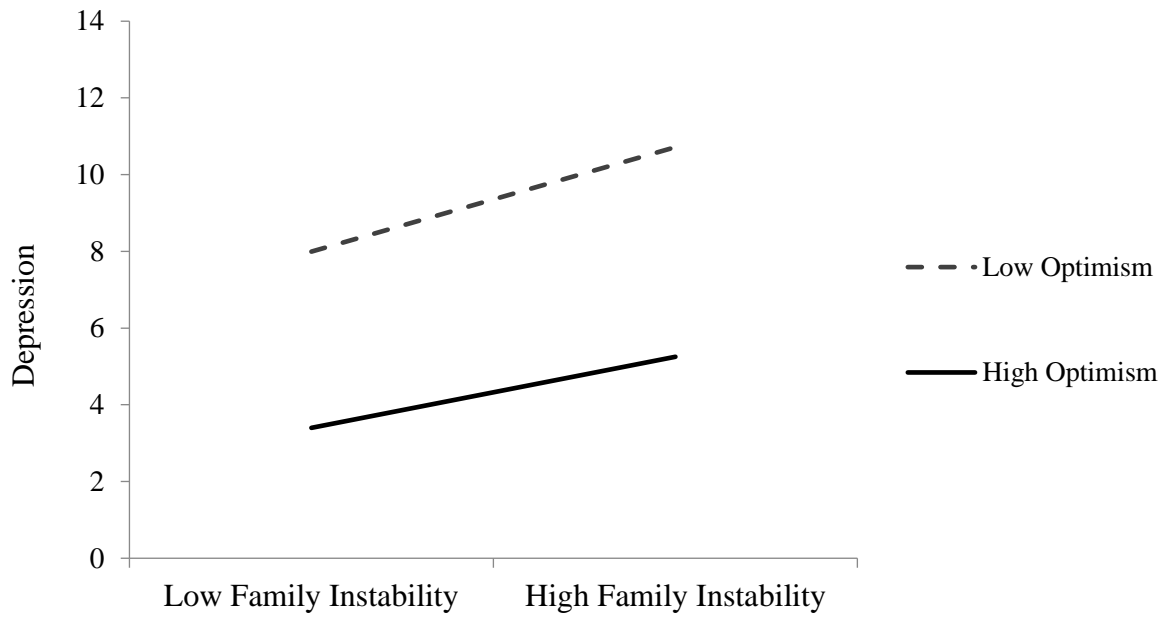


Figure 2. Relationship of family instability and optimism on depression in white college students

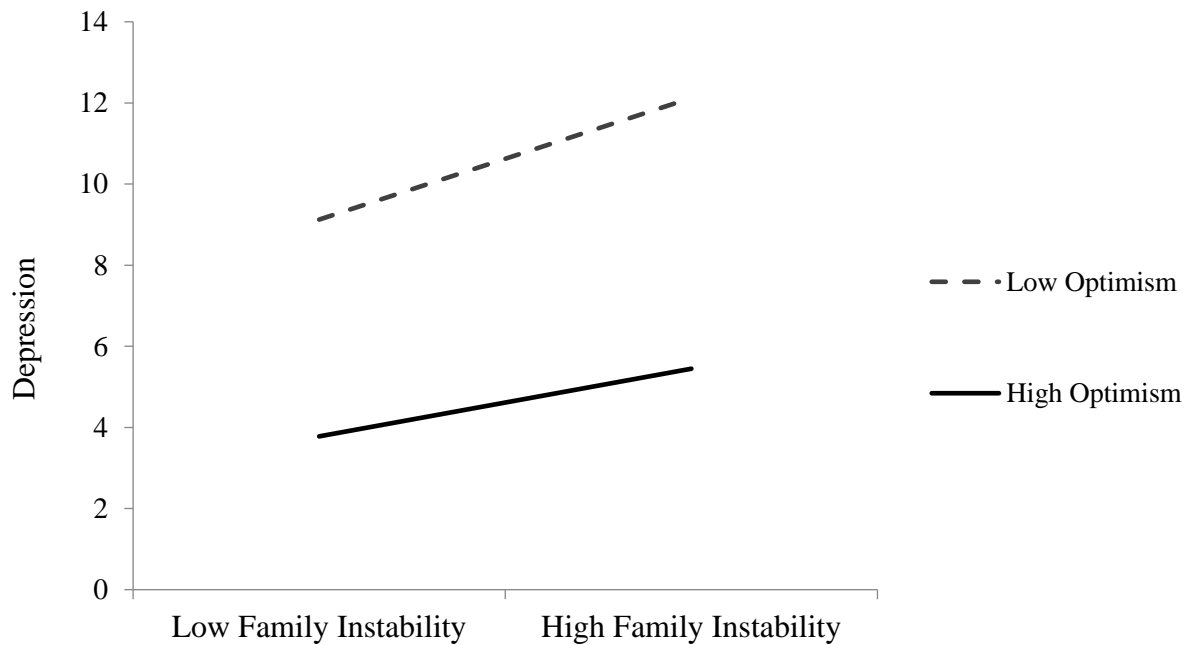


Figure 3. Relationship of family instability and optimism on depression in college students of color