Changes in Family Cohesion and Links to Depression during the College Transition

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Overview
Depression & the College Transition
- Late adolescence is a time when substantial increases in depression occur, peaking around age 18, rising 500% from childhood to adolescence and 400% by young adulthood (Thapar, Collishaw, Pine, & Thapar, 2012).
- The transition from high school to college has been associated with increases in depressive symptoms in late adolescents (Brisette, Scheier, & Carver, 2002; Lee, Dickson, Conley, & Holmbeck, 2014).

Family Cohesion and Late Adolescence
- Late adolescence and emerging adulthood are often thought of as stages in which individuals drift apart from their parents (Arnett, 2007).
- However, adolescents still possess a desire to maintain cohesive relationships with their parents (Noller & Callan, 1986; Fuligni, 1999) and such relationships have been implicated in their psychological well-being (Mattanah, Lopez, & Govern, 2011; Benson, McWey, & Ross 2006).

Gender Differences
- Because girls are more likely to use social relationships as an avenue for self-disclosure, emotional intimacy, and support, family relationships may be more important for them (Cyrano et al. 2000; Rudolph, 2002).

Research Questions
Prior research has looked at how pre-college levels of family cohesion affect psychological adjustment during the transition, treating it as a static construct. Yet little work has examined how adolescent-parent relationships change across the college transition and what implications such changes may have for adolescents’ well-being with respect to psychological adjustment.

In the current study, we investigated how changes in family cohesion during the college transition are associated with adolescents’ depressive symptoms.

We sought to examine three key research questions:
(1) Does family cohesion change significantly across the transition from high school to college?
(2) Do changes in family cohesion predict changes in depressive symptoms, and is this explained by changes in other variables such as self-esteem and optimism?
(3) Is the association between changes in family cohesion and changes in depressive symptoms different for males and females?

Method
Participants & Procedure
- Participants were 338 (64% female; M = 18.40, SD = 3.61) first year college students at a large, public university in the Midwestern United States.
- Incoming freshman students completed an online questionnaire survey several weeks before moving to the university.
- Participants completed a similar follow-up questionnaire approximately two months later.
- 764 students participated at time 1 and 515 participated at time 2. A subsample of 338 participants provided data at both time points.

Measures
- Depressive Symptoms: Center for Epidemiologic Studies Depression Scale (CES-D; 20 items, α = .89, β = .91)
- Family Cohesion: Inventory of Parent and Peer Attachment (IPPA; 20 items, α = .95, β = .95)
- Self-Esteem: Rosenberg Self Esteem Inventory (10 items, α = .90, β = .92)
- Optimism: Life Orientation Test Revised (LOT-R; 6 items, α = .81, β = .86)

Controls:
- Socioeconomic status, state residency, international student status, gender, and ethnicity.

Analysis Plan
- Change scores were computed between Time 1 and Time 2 variables of interest.
- Change in family cohesion score was entered into a regression model along with controls to predict changes in depression.
- To test for mediation, changes in self-esteem and optimism were entered into the second level of the regression model along with changes in family cohesion and controls.
- To test for moderation by gender, changes in family cohesion were centered and multiplied by gender (dummy coded) to create an interaction term. This term was entered into a regression model along with family cohesion and controls.

Results
Depression, Family Cohesion, Optimism and Self-Esteem Across the College Transition
- Participants reported significant increases in depressive symptoms (M=2.54) and family cohesion (M=1.77) during the college transition in addition to decreases self-esteem (M=0.07) and optimism (M=0.08).
- Mean depressive symptoms in the overall sample at Time 2 exceed clinical cutoffs (CES-D score of 16) for moderate depression (M=16.94)

Family Cohesion and Depression
- Increases in family cohesion predicted decreases in depressive symptoms (β=-.25, SE=.01, β=-.17, p=.01).

Mediation by Changes in Self-Esteem and Optimism
- Changes in self-esteem and optimism mediated the relationship between family cohesion and depressive symptoms, accounting for 78.21% of the variance of the original effect (Note: **p<.01, ***p<.001, *p<.05, Δ = change). 

Discussion
- Adolescent-parent relationships remain important through adolescence and into emerging adulthood as indicated by increases in family cohesion across the college transition.
- For females, family cohesion may buffer against depressive symptoms that could arise from adjustment challenges during the transition to college.
- Family cohesion appears to influence psychological adjustment by affecting constructs that are intimately related to mental well being (e.g., self-esteem, optimism).

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