



Published in final edited form as:

*Emotion*. 2017 February ; 17(1): 1–5. doi:10.1037/emo0000235.

## Homesickness and Adjustment Across the First Year of College: A Longitudinal Study

**Tammy English,**

Department of Psychological and Brain Sciences, Washington University in St. Louis

**Jordan Davis,**

Department of Psychology, Temple University

**Melissa Wei,** and

Department of Psychology, Harvard University

**James J. Gross**

Department of Psychology, Stanford University

### Abstract

Homesickness can put individuals at risk for a host of adjustment difficulties. The millions of students that leave home for college each year may be particularly susceptible to experiencing homesickness. There is little work, however, examining individual variation in homesickness over time and how these changes predict different outcomes in college. The present study examines weekly levels of homesickness during the first term of college and tests the associations between homesickness and various aspects of adjustment. Results showed that, on average, homesickness decreased slightly across the first semester of college, but there were individual differences in homesickness trajectories. Freshman who reported higher levels of homesickness showed worse overall adjustment to college, even when controlling for negative emotional experience and prior adjustment. Homesickness was associated with poorer social outcomes, but these social difficulties were limited to interactions with others in the college environment. Academic outcomes were not adversely impacted by homesickness. Findings suggest that homesickness is a common experience for freshman and, despite its relatively transient nature, homesickness has important implications for college adjustment.

### Keywords

homesickness; emotion; college experience; adjustment; social functioning

---

Homesickness—“the distress or impairment caused by an actual or anticipated separation from home” (Thurber & Walton, 2012, p. 1)—can be experienced by anyone. However, college students may be particularly susceptible to homesickness given that the move to college is often their first extended time away from home. Homesickness may place individuals at risk for poor adjustment outcomes, such as emotional and social difficulties

(for review, see Stroebe, Schut, & Nauta, 2015). In the present study, we take a longitudinal approach to examine weekly levels of homesickness experienced by students across their first term at college, and test the effects of homesickness on various aspects of adjustment.

## Prevalence of Homesickness and Change Over Time

Current estimates of the prevalence of homesickness vary greatly. Nineteen to 70% of university students have been found to experience homesickness, depending on how homesickness is measured and the specific populations of interest (e.g., Brewin, Furnham, & Howes, 1989; Carden & Feicht, 1991; Fisher & Hood, 1987; Fisher, Murray, & Frazer, 1985). Longitudinal approaches can provide a better understanding of how homesickness may change as individuals adapt to their new environment. For instance, in a sample of college students, Bell and Bromnick (1998) found that homesickness declined from the first week to the sixth week of the semester. In addition, in a longitudinal study of children at a two-week overnight summer camp, 95% felt homesick for at least one day of their stay and those who felt intensely homesick at the start of camp were more likely to have increasing levels of homesickness (Thurber, 1999).

Overall, homesickness seems to be relatively common, but individuals differ in the intensity and duration of their homesickness (Stroebe et al., 2015). Understanding how homesickness changes over time is especially important given its potential impact on adjustment.

## Homesickness and Adjustment in College

Homesickness may negatively affect individuals' ability to adjust to their new social environment. Past work has documented various psychological and physical health consequences of homesickness (Stroebe, et al., 2015). Students that become homesick upon entering college may have difficulty adjusting to the college setting, leading to social and academic difficulties.

Homesickness has been linked to certain social factors, such as social anxiety and social support (Urani et al., 2003), as well as levels of belonging (Watt & Badger, 2009). However, homesickness has typically not been tested as a risk factor for later social problems. When examining these potential social effects, it may be important to distinguish between relationships with people at home versus people in the new environment. Fewer positive interactions with peers and not fitting in may lead homesick students to seek contact and support from family and friends at home, strengthening these outside relationships but interfering with the development of new relationships (Tochkov, Levine, & Sanaka, 2010).

The potential for homesickness to also interfere with academics is noteworthy given the important long-term consequences (e.g., employment prospects, graduate admissions). Fisher (1989) proposed that the ruminative aspect of homesickness could create attentional demands that would lead to absent-mindedness and reduce students' academic abilities. While some have found no evidence that homesickness is related to academic performance (Van Vliet, 2001), others have found homesickness predicts lower concentration abilities (Burt, 1993) and dropout (Thurber & Walton, 2012).

## Present Research

The present research addresses two main questions. First, how do levels of homesickness change across the first term of college? Second, is homesickness a risk factor for poor adjustment in college? We expect homesickness will predict poorer overall, social, and academic adjustment. Social difficulties, however, are expected only for interactions in college, not for relationships with close friends and family from home.

The current study extends previous work in several ways. We examine individual homesickness trajectories using weekly assessments across the first ten weeks of college. Adjustment is also tracked across this same period, allowing us to test the temporal relations between homesickness and different aspects of adjustment. Additionally, when examining social adjustment, we distinguish newly formed relationships with others at college from pre-existing relationships with people outside of college. Finally, we disentangle homesickness from global negative affect in order to ascertain the unique effects of homesickness.

## Method

### Participants

Participants were 174 undergraduates (59% female) who had moved away from home for college and completed at least four weekly reports during the first term of their freshman year of college. They were diverse in terms of ethnicity: 6% African-American, 29% Asian-American, 64% European-American, 13% Hispanic/Latino, 3% Native American/Indian.

### Procedure

Homesickness, emotional experience, and adjustment were assessed from questionnaires emailed to participants once a week during the first ten weeks of freshman year. Adjustment was assessed again in a questionnaire emailed at the end of the first term of freshman year. The data reported here were collected as part of a larger study of personality and emotion during college (Srivastava et al., 2009) but none of the current findings have been reported elsewhere.

### Measures

**Weekly homesickness**—Each week participants reported how much they felt “*Homesick, missing my old life*” over the past week, on a scale from 0 (*not at all*) to 4 (*extremely*).

**Weekly emotional experience**—Each week participants reported how much they felt a list of emotions over the past week, on scale of 0 (*not at all*) to 4 (*extremely*). The negative emotion composite consisted of 5 items: “*anxious, nervous,*” “*angry, irritated,*” “*tired, fatigued,*” “*put down, hurt, rejected by others,*” and “*sad, depressed, down*” ( $\alpha=.80$ ).

**Weekly adjustment to college**—Each week participants reported on their overall adjustment to college (“How settled in (comfortable, at home) do you feel at [college] right now?”; 1 = not at all, 7 = very), as well as their academic adjustment (“How satisfied did

you feel with your academic life?”), and social adjustment (“How satisfied did you feel with your social life?”; 1 = not at all, 7 = extremely).

We examined different types of social network members in order to compare new, college relationships (roommate and friends) to pre-college, home relationships (parents and non-college affiliated friends). For each of these four relationships, participants reported their frequency of contact (“*total number of hours that you talked with each person (or group) this week by phone, in person, by computer.*”), enjoyment (1=*no enjoyment*, 7=*great enjoyment*), difficulty (1=*no difficulty*, 7=*great difficulty*), and emotional support (1=*no support*, 7=*great support*). We averaged across items for the college relationships and home relationships to create indices for frequency of contact (college contact:  $\alpha=.68$ , home contact:  $\alpha=.53$ ) and relationship quality (enjoyment, support, and reverse-scored difficulty; college quality:  $\alpha=.62$ , home quality:  $\alpha=.68$ ). Intraclass correlations ranged from .21 to .78 ( $M=.52$ ).

**End-term adjustment to college**—Global adjustment to college was assessed with three items ( $\alpha=.76$ ): “*How satisfied are you with this quarter?*” (1=*not at all*, 7=*extremely*), “*How well do you think you’ve adjusted to (this university)*” (1=*not very well*, 7=*very well*), “*Did you ever have thoughts of transferring to another school or quitting school? How often?*” (1=*never*, 7=*very often*; reverse-scored). Social adjustment was assessed with two items ( $\alpha=.67$ ): self-reported satisfaction in this domain (“*How satisfied were you with social life at [this university]?*”; 1=*not at all*, 7=*extremely*) and perceived belongingness (“*I fit in really well here at [this university]?*”; 1=*strongly disagree*, 7=*strongly agree*). Academic adjustment was assessed with two items: self-reported satisfaction in this domain (“*How satisfied were you with your own academic performance at [this university]?*”; 1=*not at all*, 7=*extremely*) and grade point average (GPA); these two items were z-scored then combined ( $\alpha=.72$ ).

To control for baseline levels of adjustment, we included measures taken from the summer before college. Global adjustment was assessed with the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985;  $\alpha=.85$ ). Social and academic adjustment were assessed with the items “I am satisfied with my social life” and “I am satisfied with my academic performance”, respectively; 1=*disagree strongly*, 5=*agree strongly*.

## Data Analysis

We conducted multilevel modeling to examine trajectories of homesickness (with time centered at week 1) and within-person associations between homesickness and adjustment. We ran two-level models, with weeks nested within persons, using maximum likelihood estimation to account for missing data. We examined lagged effects to test whether homesickness predicted subsequent changes in adjustment (e.g., T2 adjustment predicted from T1 homesickness controlling for T1 adjustment) and vice versa (e.g., T2 homesickness predicted from T1 adjustment controlling for T1 homesickness). All predictors were person-mean centered and negative emotional experience was included as a covariate. Semi-partial  $R^2$  values were computed as estimates of effect size (Edwards, et al., 2008). Results are reported in Table 1.

To test whether homesickness predicts later adjustment, the individual homesickness slope and intercept estimates, as well as their interaction, were used as predictors in regression analyses. Negative emotion (averaged across all available weekly reports), sex (1=female, 0=male), race (1=European-American, 0=not European-American), and the baseline adjustment indicator of the criterion variable were included as covariates. Results are reported in Table 2.

**Missing data**—Of the 174 participants, 9% ( $n = 16$ ) did not complete the end-term assessment of adjustment so they were excluded from those regression analyses.

## Results

### Prevalence of Homesickness

During the first 10 weeks of college, 94% of students reported experiencing homesickness at some point (i.e., only 6% rated homesickness as zero every week). On average homesickness decreased slightly across the first term of freshman year ( $\gamma = -0.023$ ,  $SE = .011$ ,  $p = .041$ , 95% CI  $[-0.05, -0.001]$ ; semi-partial  $R^2 = 0.025$ ). This rate of change ( $-0.023$  per week) reflects a quarter-point decrease on the homesickness scale across the term. There was significant variability in the rate of change, however ( $\gamma = 0.011$ ,  $SE = .002$ ,  $p < .001$ , 95% CI  $[0.01, 0.02]$ ), suggesting individual differences in the trajectory of homesickness. The intercept-slope correlation was also significant ( $\gamma = -0.049$ ,  $SE = .015$ ,  $p < .01$ , 95% CI  $[-0.08, -0.19]$ ).

### Homesickness and Adjustment

First, we examined the within-person associations between weekly ratings of homesickness and adjustment (see Table 1). On weeks where participants felt more homesick, they also felt less settled in at college (semi-partial  $R^2 = 0.029$ , 95% CI:  $[-.230, -.112]$ ), less satisfied with social life (semi-partial  $R^2 = 0.030$ ; 95% CI:  $[-.292, -.145]$ ), and marginally less satisfied with academic life (semi-partial  $R^2 = 0.003$ ; 95% CI:  $[-.135, .004]$ ). Homesickness also correlated with ratings of social network members: as expected, college relationships were worse (semi-partial  $R^2 = 0.011$ ; 95% CI:  $[-.123, -.034]$ ), but relationships with people outside of college were better (semi-partial  $R^2 = 0.005$ ; 95% CI:  $[.012, .120]$ ). There was not an association with frequency of contact for either type of relationship. When examining lagged effects, homesickness continued to predict feeling less settled in (semi-partial  $R^2 = 0.004$ ; 95% CI:  $[-.143, .004]$ ) and socially satisfied (semi-partial  $R^2 = 0.005$ ; 95% CI:  $[-.184, -.001]$ ) the following week. In contrast, there was no evidence of adjustment predicting subsequent change in homesickness ( $t_s < 1$ ).

Next, we examined whether individual differences in levels of homesickness and homesickness trajectories predict end-term adjustment to college (see Table 2). As expected, individuals who experienced higher levels of homesickness at the start of college reported worse overall adjustment to college ( $\beta = -.31$ ,  $p < .01$ ) and worse adjustment in the social domain ( $\beta = -.29$ ,  $p < .01$ ), but not the academic domain ( $\beta = .07$ ,  $p = .372$ ). These findings hold even when taking into account pre-college adjustment, suggesting that homesickness leads to declines in adjustment. Homesickness trajectories only predicted academic adjustment

( $\beta=.18, p<.05$ ), such that students had slightly worse academic outcomes if their homesickness levels had declined more quickly.

## Discussion

The present study advances past work on homesickness by using a more intensive longitudinal approach, examining a wide range of adjustment outcomes, and separating effects of homesickness from general negative affect. Consistent with past work (e.g., Thurber, 1995), homesickness was a common experience among undergraduates: 94% of students reported at least some homesickness during their first term. Despite its initial pervasiveness, homesickness tended to decline over the course of the first term, although the effect size was small. These findings may help normalize the experience of homesickness for students who feel isolated as they struggle to adjust to their new lives away from home, as this study suggests that their homesickness will likely fade over time.

Homesickness was associated with a number of adjustment problems during the first term of college. It was a robust predictor of lower overall adjustment to college, as well as adjustment in the social domain. These effects of homesickness were evident even after taking into account negative emotion, suggesting that the experience of homesickness has a unique contribution to adjustment. Given the adverse effects of homesickness at the start of college, interventions aimed at preventing homesickness before arriving on campus may be most impactful. Importantly, relationships with people outside of college did not seem to be harmed by homesickness (if anything, these social bonds became stronger); only newly formed relationships suffered. Homesickness also did not interfere with academic performance, consistent with previous cross-sectional research (Van Vliet, 2001). Unexpectedly, we found that individuals had slightly lower levels of academic satisfaction and GPAs if their homesickness had dissipated more quickly. Future work is needed to replicate these effects and explore how homesickness, and the factors that may mitigate it, impacts academic engagement (Kuh, Cruce, Shoup, & Kinze, 2008).

One potential limitation of the present research is that homesickness was assessed using a single item. While there are downsides to using single-item measures, the homesickness item was face valid and short measures can be advantageous when administered repeatedly over a short period of time. Additionally, the present study did not explore predictors of individual differences in homesickness trajectories. Past research on homesickness suggests there are a number of social risk factors, as well as other psychological and environmental predictors (Stroebe et al, 2015). Future studies are needed to explore specific mechanisms by which homesickness leads to poor adjustment outcomes. Such work could allow researchers to zero in on risk factors associated with certain trajectories and types of outcomes, aiding in the development of interventions for cases of persistent homesickness.

## Acknowledgments

This research was supported, in part, by grant MH58147 from the National Institutes of Health.

## References

- Bell J, Bronnick R. Young people in transition: The relationship between homesickness and self-disclosure. *Journal Of Adolescence*. 1998; 21(6):745–748. [PubMed: 9971730]
- Brewin CR, Furnham A, Howes M. Demographic and psychological determinants of homesickness and confiding among students. *British Journal of Psychology*. 1989; 80:467–477.
- Burt CB. Concentration and academic ability following transition to university: An investigation of the effects of homesickness. *Journal Of Environmental Psychology*. 1993; 13(4):333–342.
- Carden AI, Feicht R. Homesickness among American and Turkish college students. *Journal of Cross-Cultural Psychology*. 1991; 22:418–428.
- Diener E, Emmons R, Larsen J, Griffin S. The Satisfaction With Life Scale. *Journal of Personality Assessment*. 1985; 49:71–75. [PubMed: 16367493]
- Edwards LJ, Muller KE, Wolfinger RD, Qaqish BF, Schabenberger O. An  $R^2$  statistic for fixed effects in the linear mixed model. *Statistics in Medicine*. 2008; 27:6137–6157. [PubMed: 18816511]
- Fisher, S. *Homesickness, Cognition, and Health*. Hove, UK: Lawrence Erlbaum; 1989.
- Fisher S, Hood B. The stress of the transition to university: A longitudinal study of psychological disturbance, absent-mindedness and vulnerability to homesickness. *British Journal of Psychology*. 1987; 78:425–441. [PubMed: 3427309]
- Fisher S, Murray K, Frazer NA. Homesickness, health and efficiency in first year students. *Journal Of Environmental Psychology*. 1985; 5(2):181–195.
- Kuh GD, Cruce TM, Shoup R, Kinzie J. Unmasking the effects of student engagement on first-year college grade and persistence. *Journal of Higher Education*. 2008; 79:540–563.
- Srivastava S, Tamir M, McGonigal KM, John OP, Gross JJ. The social costs of emotional suppression: A prospective study of the transition to college. *Journal of Personality and Social Psychology*. 2009; 96:883–897. [PubMed: 19309209]
- Stroebe M, Schut H, Nauta M. Homesickness: A systematic review of the scientific literature. *Review of General Psychology*. 2015; 19:157–171.
- Thurber CA. The experience and expression of homesickness in preadolescent and adolescent boys. *Child Development*. 1995; 66:1162–1178. [PubMed: 7671654]
- Thurber CA. The phenomenology of homesickness in boys. *Journal of Abnormal Child Psychology*. 1999; 27(2):125–139. [PubMed: 10400059]
- Thurber CA, Walton EA. Preventing and treating homesickness. *Pediatrics*. 2007; 119:192–201. [PubMed: 17200288]
- Thurber CA, Walton EA. Homesickness and adjustment in university students. *Journal of American College Health*. 2012; 60:415–419. [PubMed: 22686364]
- Tochkov K, Levine L, Sanaka A. Variation in the prediction of cross-cultural adjustment by Asian-Indian students in the United States. *College Student Journal*. 2010; 44(3):677–689.
- Urani MA, Miller SA, Johnson JE, Petzel TP. Homesickness in socially anxious first year college students. *College Student Journal*. 2003; 37(3):392–399.
- van Vliet, A. *Homesickness: Antecedents, consequences and mediating processes*. Utrecht, Germany: Utrecht University Press; 2001.
- Watt S, Badger E. Effects of social belonging on homesickness: an application of the belongingness hypothesis. *Personality and Social Psychology Bulletin*. 2009; 35:316–330.

**Table 1**  
Results of Multilevel Modeling Predicting Adjustment from Weekly Homesickness

Outcome	Model 1		Model 2		Adjustment (prior week)
	Intercept	Homesickness (current)	Intercept	Homesickness (prior week)	
Settled in at college	5.52	-.17 (.03)**	5.55	-.07 (.04) <sup>†</sup>	.03 (.04)
Academic satisfaction	4.33	-.07 (.04) <sup>†</sup>	4.31	-.04 (.04)	.03 (.04)
Social satisfaction	4.71	-.22 (.04)**	4.71	-.09 (.05)*	-.04 (.04)
Frequency of contact					
College relationships	11.25	-.18 (.19)	10.86	.06 (.19)	.07 (.03)*
Home relationships	3.37	.20 (.15)	3.63	-.17 (.19)	-.12 (.04)**
Relationship quality					
College relationships	5.01	-.08 (.02)**	5.02	-.04 (.03)	.03 (.04)
Home relationships	5.27	.07 (.03)*	5.29	.02 (.03)	-.07 (.04) <sup>†</sup>

Note. Unstandardized estimates are presented with standard errors in parentheses. Model 1 included homesickness and negative emotional experience. Model 2 assessed lagged effects by including the previous week's levels of homesickness, negative emotion, and adjustment.

<sup>†</sup>  $p < .10$

\*  $p < .05$ .

\*\*  $p < .01$ .



**Table 2**  
Results of Regression Analyses Predicting End-Term Adjustment from Prior Homesickness Level and Trajectory

	Model 1		Model 2		Baseline adjustment
	Homesickness intercept	Homesickness slope	Homesickness intercept	Homesickness slope	
Overall college adjustment	-.36 (.10)** [-.55, -.16]	1.00 (.107) [-1.11, 3.11]	-.38 (.10)** [-.57, -.19]	.63 (1.04) [-1.43, 2.70]	.21 (.07)** [.08, .34]
Social adjustment	-.34 (.11)** [-.56, -.12]	-.61 (.121) [-2.99, 1.78]	-.38 (.11)** [-.60, -.16]	-.79 (1.17) [-3.09, 1.52]	.23 (.07)** [.09, .37]
Academic adjustment	.06 (.09) [-.11, .23]	2.21 (.98)* [.27, 4.15]	.07 (.08) [-.09, .24]	2.05 (.95)* [.17, 3.93]	.29 (.08)** [.13, .45]
				Homesickness intercept x slope	
				.17 (.98) [-1.77, 2.11]	
				.23 (1.12) [-1.98, 2.44]	
				-.68 (.90) [-2.46, 1.10]	

Note. Unstandardized coefficients are presented with standard errors in parentheses. 95% CIs are listed in brackets. Model 1 included individual homesickness intercept and slope estimates, the interaction between intercept and slope, negative emotional experience, and dummy variables for sex (1 = female, 0 = male) and race (1 = European-American, 0 = not European-American). Model 2 included a pre-college assessment of the criterion variable as an additional predictor.

<sup>†</sup>  $p < .10$

\*  $p < .05$ .

\*\*  $p < .01$ .