Homesickness in Pre-adolescent and Adolescent Girls: Risk Factors, Behavioral Correlates, and Sequelae

Christopher A. Thurber
University of Washington School of Medicine

Marian D. Sigman
Department of Psychiatry, University of California–Los Angeles School of Medicine

John R. Weisz
Department of Psychology, University of California–Los Angeles

Christa K. Schmidt
Department of Psychology, University of Missouri–Kansas City

Examined homesickness in 117 girls ages 8 to 16 during a 2-week stay at summer camp. (Homesickness is the distress or impairment caused by an actual or anticipated separation from home. It is characterized by acute longing and preoccupying thoughts of home and attachment objects.) Elevated preseparation levels of homesickness, high expectations of homesickness, negative separation attitudes, low decision control, and little previous separation experience predicted in-camp levels of homesickness. During the separation, homesickness was associated with insecure interpersonal attitudes, negative initial impressions of the novel environment, high perceived distance from home, and low perceived control. Female surrogate caregivers rated homesick girls as having lower social status and more somatic complaints, social problems, and externalizing behavior than less homesick girls. Although the prevalence, intensity, and longitudinal course of homesickness in girls did not differ from analogous samples of boys, girls’ profile of risk factors, correlates, and sequelae is unique in its mixed behavioral presentation and small correlations with age and experience.

Homesickness is the distress or impairment caused by an actual or anticipated separation from home. It is characterized by acute longing and preoccupying thoughts of home and attachment objects.


The distressing and debilitating correlates of homesickness justify its study. However, no unifying theory of childhood homesickness has been proposed. Most discussions of homesickness etiology do focus on three themes, however, out of which a theory is emerging. These themes are: child characteristics, separation circumstances, and qualities of the novel...
environment. Accordingly, an insecurely attached child, who is temperamentally withdrawn, anxious, or depressed, and who has little previous experience away from home, is most likely to become homesick. In addition, homesickness is most likely when the separation circumstances are coercive or forced, and when the novel environment is aversive or simply fails to meet the child’s social, emotional, and cognitive needs.

Thurber and Sigman (1998) were the first to test alternative causal models of childhood homesickness that included the three themes described earlier. The study included 283 boys ages 8 to 16 who were spending 2 weeks at an overnight summer camp. According to one plausible pathogenic model, boys with insecure interpersonal attitudes and low perceived control (generally and over the separation specifically) developed an expectation that they would become homesick and dislike camp. This “homesick disposition” combined with little prior separation experience to account for 69% of the variance in self-reported homesickness during the subsequent 2-week stay away from home. A homesick disposition also predicted negative separation expectations and negative initial impressions of the novel environment (camp). Homesickness itself predicted internalizing behavior problems and dissatisfaction with the people and places at camp. Surrogate caregivers (cabin leaders) rated severely homesick boys as more rejected and neglected by their peers than nonhomesick boys. Although this model was empirically derived and statistically plausible, the homesick disposition theory that it posits is just a start. More data, including from girls, is needed.

According to our models, homesickness is not a strong predictor of negative emotion, supporting the notion that homesickness, anxiety, and depression are not synonymous phenomena (Thurber & Sigman, 1998). Other empirical findings support this notion. The construct validity of homesickness was shown by factor analyses of the Rate Your Day–Revised (RYDR) mood checklist (Thurber, 1995, 1997a, in press; Thurber & Sigman, 1998). Moreover, the content validity of homesickness as a discrete psychological phenomenon was shown by studies of how young people in different contexts define homesickness (Fisher, Elder, & Peacock, 1990; Fisher, Frazer, & Murray, 1984, 1986).

Conceptually, homesickness shares most in common with Separation Anxiety Disorder (SAD; American Psychiatric Association, 1994), but even these two phenomena are different. Although SAD is “excessive anxiety concerning separation from home or from those to whom the person is attached” (American Psychiatric Association, 1994, p. 110), symptoms of homesickness are most prominent after a separation and include depression as well as anxiety (Thurber, 1995). Moreover, the preoccupying thoughts that are the hallmark of homesickness can be about home or attachment objects, not just people, as in SAD. Although some homesick children most miss their parents, other most miss their dog, home cooking, or television (Thurber, 1995). One can even miss an entire country or a culture (Eisenbruch, 1990, 1997; Ekblad, 1993; Furnham, 1997).

Homesickness disposition theory lacks some otherwise expected factors. Contrary to conventional wisdom, our data suggested that homesickness in boys was not strongly associated with parental separation anxiety, geographical distance from home, presence of a sibling or friend at camp, or birth order. We have also found no consistent evidence of homesickness contagion. In other words, one boy’s severe homesickness did not reliably increase the likelihood of his cabin mate’s developing severe homesickness. (We found the same to be true among girls in this study.) Despite obvious advances in homesickness research, a basic understanding of girls’ experience and expression of homesickness is wanting. Therefore, phenomenological research must precede and lay the foundation for further theory development. This was the goal of this study: to document the prevalence, intensity, progression, predictors, behavioral correlates, and sequelae of homesickness in girls.

Aside from early impressionistic and anecdotal research, there have been only about 26 empirical studies on homesickness. Some 20 studies included adolescents (most 18-year-old university students), but just 9 included children younger than 15 years. Of these 9 studies, 3 had all-male samples. Among the 6 studies that included girls, only 2 found a sex difference in the prevalence of homesickness. Fisher et al. (1990) studied 34 girls and 77 boys ages 14 to 16 who were students at an outward-bound boarding school in Australia; Zimmerman and Bjur (1995) studied 87 boys and 100 girls at a Modern Orthodox Jewish coeducational overnight summer camp in the United States. Both studies found that girls were homesick more often than boys. Other studies at boarding schools (Fisher et al., 1984, 1986) and summer camps (Thurber & Weisz, 1997a) found no sex differences in homesickness prevalence. Thus, evidence to date is equivocal, but data on girls are quantitatively and qualitatively limited.

Of the six studies that examined homesickness in preadolescent and adolescent girls, none included girls younger than 11 years. Three used only retrospective self-report. None measured preseparation attitudes and moods. Only two measured homesickness intensity (the other four measured only incidence or frequency). None included standardized observational measures of behavior problems, and none reported the personal or social consequences of homesickness. Therefore, to achieve our goal of documenting the phenomenology of homesickness in girls, we used an improved methodology that included (a) girls as young as 8; (b) pro-
spective, longitudinal self-report of homesickness prevalence and intensity; (c) preseparation and postcamp measures of attitudes, homesickness, and negative mood; (d) observations from surrogate caregivers about behavior problems and social status; (e) self-report of overall, social, and environmental satisfaction; and (f) relevant demographic variables, such as age, year at summer camp, and previous experience away from home, that have been implicated as risk factors. Summer camp was chosen as the environment in which to study homesickness because (a) the separation was discrete yet substantial in time (2 weeks); (b) the contact with home and caregivers was limited to letters, except in emergencies; and (c) the setting and research methods resembled that of previous studies with boys, thus permitting valid comparisons.

Based on previous research with children (Fisher et al., 1990; Fisher et al., 1984, 1986; Vernberg & Randall, 1997; Zimmerman & Bijur, 1995), emerging theory (Fisher, 1989; Thurber & Sigman, 1998; van Tilburg & Vingerhoets, 1997), and analogous studies with boys at summer camp (Thurber, 1995, in press), we hypothesized that the following would be true for girls (hypothesis = H):

H1: Absolute prevalence of homesick feelings (i.e., any report of any level of homesickness on any day) would top 90%, but only 20% of the girls would report moderate-to-severe levels of homesickness.

H2: The 2-week progression of homesickness would vary by mean intensity. The most homesick girls would begin their stays with an elevated level of homesickness, would become increasingly homesick over time, and would experience a decrease in homesickness just prior to reuniting with caregivers. By comparison, the progression of homesickness for the less homesick girls would be comparatively stable.

H3: Girls who reported anticipatory homesickness and negative moods 2 months prior to leaving home would be more likely to report high levels of homesickness during camp than girls who were asymptomatic before camp. Severely homesick girls would also report postcamp distress more frequently than less homesick girls.

H4: Homesickness would be correlated with the following attitudinal, cognitive, emotional, and demographic risk factors: preseparation expectations of homesickness, preseparation homesickness and negative mood, low preseparation expectations of camp, low in-camp expectations of the separation, large perceived distance from home, low decision control, low general perceived control, negative initial experiences at camp, insecure interpersonal attitudes, youth, and little previous experience at summer camp.

H5: Homesickness would be associated more commonly with internalizing behavior problems than with externalizing behavior problems, as rated by female surrogate caregivers.

H6: Homesickness would have significant personal and interpersonal sequelae. Girls who reported high levels of homesickness during their separation from home would report lower levels of overall, social, and environmental satisfaction at the end of their stay. Moreover, cabin leaders would perceive that homesick girls had lower social status than their less homesick peers.

Method

Participants

Participants were all campers at a residential girls' summer camp in rural New England. This particular camp had a national and international draw, but most girls were from the northeastern United States. The camp grounds comprised more than 220 acres of wooded, lakeside property and offered a diverse program of athletic and artistic recreation from which the girls could choose. Days were highly structured, but included several blocks of free time. The camp was composed of four divisions. Each division had between two and nine cabins, each with room for between 8 and 16 girls and two or three female cabin leaders. Girls were assigned to cabins according to their grade level in school. Letters were the only contact with home.

Parent and child consent were obtained by mail several months prior to the start of camp. Of 324 campers registered for one 2-week session of the 1995 summer, 117 (36%) participated. Ethnic minorities constituted 8% of the sample (4% Asian American, 3% African American, and 1% Mexican American). The modal child's parents were technicians, semiprofessionals, or small business owners, but parents' occupational status ranged from executives and major professionals to manual and service workers to unemployed. Scholarship funding permitted admission to this camp without regard to financial means.

Participants ranged in age from 8.8 to 15.9 years (M = 12.5, SD = 1.8). They had spent between 1 and 8 previous summers at this camp (M = 2.5, SD = 1.7). Four of the 117 participants did not return preseparation questionnaires, and 26 did not return postcamp questionnaires. Therefore, the sample sizes were 113 preseparation, 117 in-camp, and 91 postcamp. As an equitable incentive, all 324 girls who attended that session of camp took part in a raffle for camp memorabilia.

There were no statistically significant differences between participants and nonparticipants in age (12.5 vs. 12.8 years), distance to camp from home (152 vs. 197 miles), family socioeconomic status (M = 65 vs. M
= 61 on the Hollingshead, 1975, scale), or number of previous summers spent at this or any camp (3.1 vs. 3.4). According to these indicators, the participants were representative of the population of girls attending this camp. (According to informal questioning on opening day, the primary reason for not participating was parents' being too busy to return consent forms.) The sample was intended to represent a normal cross-section of English-speaking, nondisabled, nonclinic-referred, preadolescent and adolescent girls who attend residential summer camps in the United States.

**Materials**

Five questionnaires were used in this study. The first was the RYDR, a mood checklist (Thurber, 1995, in press; Thurber & Sigman, 1998), which assesses homesickness, positive emotions, and negative emotions. The RYDR has 15 items, such as "I missed my family," "I felt happy," and "I felt sad" that participants rate on an 11-point numerical rating scale. Our previous studies, which factor analyzed the RYDR, confirmed the construct validity of three subscales: Homesickness, Positive Emotion, and Negative Emotion. For this sample of 117 girls, the factor structure of the RYDR was identical, and the subscales had high internal consistency: Homesickness subscale $\alpha = .89$ (3 items), Positive Emotion subscale $\alpha = .89$ (6 items), and Negative Emotion subscale $\alpha = .91$ (6 items).

To index general perceived control, the RYDR that girls completed for this study also asked them to rate the statement "I felt like I had control over how things went for me today" on a scale ranging from 0 to 10. In past studies of homesickness (Thurber, 1995; Thurber & Sigman, 1998), this question was reliably correlated ($r = .46$) with the total score on the Perceived Control Scale (PCQ; Weisz, Proffitt, & Sweeney, 1991), an established self-report measure with 32 items.

The About Me Questionnaire (AM; Thurber & Sigman, 1998) assesses attitudinal factors relevant to camp. There are two subscales: In-Camp Positive Separation Expectations and Perceived Control Over the Decision to Attend Camp. Sample items include "How much did you want to come to camp this summer?" and "How much did you feel forced to come to camp?" Girls were also asked to rate their perceived distance from home on the same 11-point numerical rating scale ranging from 0 (not far at all) to 10 (very far). The criterion validity of the AM subscales has been demonstrated by their predictive validity in the pathogenic models of homesickness discussed earlier. The reliability of AM subscales was excellent in earlier study of boys, with Cronbach's alpha ranging from .79 to .87. For this sample of 117 girls, reliability was high for both the Expectations scale ($\alpha = .79$; 12 items) and the Decision Control scale ($\alpha = .73$; 6 items)

The Self-Reported Attachment Style Prototypes (SRASP; Bartholomew & Horowitz, 1991), adapted for use with children (Thurber, Bombar, & Sigman, 1994; Thurber & Sigman, 1998), assesses the security of interpersonal attitudes. This adapted SRASP asked participants to make numerical scale ratings of how much each of four short paragraphs was an accurate description of them. The paragraphs, each read aloud twice by cabin leaders while girls fellow along, describe four empirically supported relationship styles: secure, preoccupied, fearful, and dismissing. A composite score of self-perceived relationship security can be derived by subtracting participants' endorsements of the preoccupied, fearful, and dismissing paragraphs from their endorsement of the paragraph describing a secure style. Thus, the higher the composite score on the SRASP, the more the child perceives secure interpersonal attachment.

The My Time at Camp questionnaire (Thurber & Sigman, 1998) assesses general, social, and environmental satisfaction. General satisfaction was assessed by asking girls to rate their time at camp on a scale from 0 to 10. Social and environmental satisfaction were assessed with multi-item subscales that included items such as, "In general, the kids in my cabin were ..." and "How much did you like living in a cabin in the woods?" rated on the same 11-point numerical rating scale. Item-specific semantic anchors served as guides. Both multi-item subscales had high internal consistency: Social Satisfaction $\alpha = .78$ (8 items) and Environmental Satisfaction $\alpha = .66$ (7 items).

The Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1991) assesses a wide range of problem behaviors (see Figure 1). Scoring programs provide age- and sex-normed T scores. The CBCL has solid and extensively documented reliability and validity.

Demographic data, such as age and year at camp, were retrieved from camp records.

**Procedure**

Along with their consent form, girls completed one RYDR between 7 and 12 weeks prior to their 2-week stay at camp. Even though usually administered as a daily questionnaire, the preseparation RYDR that girls completed asked them to report on how they had been feeling during the last 2 weeks. Girls also completed two supplementary RYDR subscales designed to measure their expectations of homesickness and their expectations of summer camp. Both subscales had good internal consistency: Expectations of Homesickness

---

1 Although girls were instructed to complete the questionnaire on their own, it is impossible to know whether some parents helped some girls understand or complete the questionnaire. Certainly, the fourth-grade reading level of the RYDR facilitated independent completion.
scale $\alpha = .69$ (3 items) and Expectations of Camp scale $\alpha = .79$ (5 items) for this sample.

During staff training week, prior to girls' arrival at camp, cabin leaders participated in 4 hr of training in the administration and timing of the various measures. They understood that this study was designed to assess children's adjustment to summer camp, but they were naive to specific hypotheses.

Once at camp, girls completed questionnaires in the privacy of their own bunk beds. On the five designated evenings, senior cabin leaders assisted in the distribution and administration of each measure. To allow nonparticipants to remain indistinguishable from participants, girls who had chosen not to participate got blank pieces of paper and a pencil, with which they could write a letter or draw. Once questionnaires were completed, the cabin leader collected them and sealed them in an envelope. All envelopes were collected that same evening by Christa K. Schmidt. (Because girls' answers were confidential, no action was taken to alert staff if one of their campers reported severe homesickness.) On average, 1% of the questionnaires was incomplete or blank. Girls who had not completed questionnaires, either due to carelessness or illness, were asked to complete them the following morning. Further procedural details were reported in Thurber (1995, in press) and Thurber and Sigman (1998).

The timing of in-camp assessments was based on the aforementioned Hypotheses 1 to 6 concerning the pathogenesis and progression of homesickness. Although daily administration of the RYDR would have been ideal, constraints in the camp schedule permitted only five incremental administrations, on Days 1, 4, 8, 11, and 14.2

\footnote{Repeated RYDR administration generated considerable discussion in this research program. Specifically, reviewers raised the possibilities that repeatedly asking children about their moods and homesick feelings would either alter children's expectancy about becoming homesick or cause them to develop homesickness. Although these were reasonable concerns, repeated RYDR administration—even daily administration—appeared to have no reliable effect on children's self-reported moods and homesickness. First, it is important to remember that the RYDR contains both positive and negative items, so the questionnaire does not "pull" for a bias-inducing expectancy in any single direction. Second, Thurber (1997a, in press) showed that boys who completed 14 daily RYDRs did not differ in levels of homesickness, positive emotion, or negative emotion from boys who completed just 2 RYDRs in 2 weeks. 189
On Day 1 of their camp stay, girls completed one RYDR, the AM attitudes questionnaire, and the adapted SRASP. Next, they completed RYDRs on Days 4, 8, and 11. The RYDR on Day 4 additionally asked girls to identify and rate how good was the best thing that had happened to them at camp thus far. Then, on Day 14 of their 2-week stays, girls completed a RYDR and the My Time at Camp satisfaction questionnaire. Also on Day 14, cabin leaders were asked to complete a CBCL, based on their 2 weeks of observations, for each participant in their cabin. Finally, leaders rated, on scales from 0 to 10, how much each of the participating girls in their cabins had been rejected, accepted, and neglected by her peers. Previous studies with boys (Thurber, in press; Thurber & Sigman, 1998) demonstrated the validity of this brief index of social status in predicting self-reports of homesickness.

No logistical problems were encountered in questionnaire completion. Periodic monitoring of random cabins suggested that participants’ confidentiality was preserved and procedures were carefully followed. One month after returning home, girls completed a postcamp RYDR that they returned by mail.

Results

This section is divided into six parts, corresponding to the hypotheses described earlier.

H1: Homesickness Prevalence and Intensity

Consistent with H1, homesick feelings were quite prevalent. Some 94.9% of the sample endorsed a non-zero rating on one of the three homesickness factor items on the RYDR (“I felt homesick,” “I missed my family,” or “I wanted to be home”) on at least 1 day during their stay. However, this 94.9% figure is a gross overestimation of true homesickness. On average, the girls enjoyed camp. The mean of the Homesickness factor, averaged over the five in-camp administrations, was only 8.6 (SD = 6.9; range = 0–26) on the 31-point scale. An accurate estimate of what we think of as homesickness, not mere homesick feelings, was 19.5%—that portion of the sample with a mean score on the Homesickness factor greater than or equal to 15, the midpoint of the factor’s 31-point range. Finally, if severe homesickness can be defined as more than 2 standard deviations from the sample mean (in this case, > 22), then only 8.5% of the girls (1 in 12) were severely homesick.

For future analyses, the sample was divided into severity quartiles (high, moderate, low, and negligible) using cutoff scores of 3, 6, and 12 on the RYDR Homesickness factor. Although other arbitrary partitions of the sample were possible, these cutoff scores were desirable for two reasons. First, the groups remained large enough to preserve statistical power. Second, the high-homesickness group had a mean factor score greater than the midpoint of the scale and almost 2 standard deviations above the mean for the entire sample, making the label high ecologically valid. The quartiles had mean Homesickness factor levels of 18.8 (SD = 4.3, n = 29), 8.6 (SD = 1.6, n = 33), 4.8 (SD = 9, n = 29), and 1.2 (SD = 1.0, n = 26), respectively.

H2: Progression of Homesickness

Consistent with H2, the high-homesickness quartile had an elevated level of homesickness on Day 1 of their separation, and this level increased over time, decreasing just prior to reuniting with caregivers. By contrast, each of the less homesick quartiles experienced a relatively stable longitudinal course of less intense homesick feelings. Figure 2 shows the progression of the girls’ mean RYDR factor scores, including preseparation and postcamp levels of Homesickness, Positive Emotion, and Negative Emotion. The figure compares the high-homesickness quartile (bold lines) to the three less homesick quartiles combined (thin lines).

---

The Other Problems scale on the CBCL contains items that do not load on any of the eight major clinical subscales. Administration of the Other Problems scale was omitted, as it would have required asking cabin leaders serving as surrogate caregivers questions such as whether their campers smeared feces or masturbated excessively. Such questions were not deemed relevant to this study and may have offended some parents.

---

Copyright © 1999. All rights reserved.
Repeated measures analyses of variance (ANOVAs), with the Days 1, 4, 8, and 11 of the RYDR Homoeickness factor as within-subjects factors, were used to analyze the observed trends in homoeickness for the high-homoeickness quartile and the three less homoeickness quartiles combined (henceforth referred to as the less homoeickness group). As hypothesized, the high-homoeickness quartile evidenced a significant, positively sloped linear trend from Day 1 to Day 11, before declining on Day 14, $F(1, 28) = 12.7, p < .001$, $\eta^2 = .31$. The linear contrast for the less homoeickness group was not significant. However, these girls did evidence a slight, inverted U-shaped quadratic homoeickness progression, $F(1, 87) = 4.9, p < .05$, $\eta^2 = .05$.

The fact that this progression pattern replicated that of two different samples of boys, reported in Thurber (1995) and Thurber (in press), strongly supports its external validity. But was this longitudinal trend internally valid, or was it a statistical artifact, created by dividing quartiles by in-camp levels of homoeickness? To address this threat to internal validity, additional analyses were conducted. This time, new quartiles were constructed, based on girls’ Homoeickness factor scores from their preseparation RYDR responses. New cutoff scores of 0, 3, and 9 were chosen because girls’ scores on the preseparation RYDR Homoeickness factor were uniformly lower than their in-camp scores.

For this analysis, and this analysis only, quartiles were divided according to these preseparation levels of homoeickness. Results supported H2 and discounted an artifactual explanation for the characteristic progressions. The most homoeickness girls showed the most pronounced trend to become increasingly homoeickness between Days 1 and 11 and then reported a decrease in homoeickness on Day 14. Other groups showed this trend to a lesser extent.

H3: Preseparation and Postcamp Risk for Homoeickness and Negative Emotion

Levels of self-reported preseparation and postcamp RYDR factor scores were compared between the high-homoeickness quartile and the less homoeickness group. At preseparation, the high-homoeickness quartile scored higher than the less homoeickness group on RYDR Homoeickness ($M = 8.8, SD = 7.7$ vs. $M = 4.5, SD = 6.6$; $W = 4396, p < .005$) and lower on RYDR Positive Emotion ($M = 45.4, SD = 9.3$ vs. $M = 49.8, SD = 6.9$; $t(111) = 2.67, p < .01$). There were no significant preseparation differences on RYDR Negative Emotion.

At postcamp, the high-homoeickness quartile scored higher than the less homoeickness group on RYDR Homoeickness ($M = 9.3, SD = 8.0$ vs. $M = 3.3$; $SD =$ 4.6; $W = 3099, p < .01$). However, there were no significant postcamp differences on RYDR Positive or Negative Emotion.

As a check against the possibility that the high-homoeickness quartile was an artifact of a reporting bias, repeated measures analyses of covariances, with the five incremental in-camp RYDR factor scores as within-subjects factors, were performed to test for group differences in the three RYDR factor scores, once preseparation levels had been covaried out. Results confirmed that differences between the high-homoeickness quartile and the less homoeickness group still existed, even after controlling for preseparation levels: RYDR Homoeickness, $F(4, 105) = 6.8, p < .0001$, $\eta^2 = .21$; RYDR Negative Emotion, $F(4, 105) = 2.6, p < .05$, $\eta^2 = .09$; and RYDR Positive Emotion, $F(3, 281) = 5.6, p < .0001$, $\eta^2 = .18$.

H4: Risk and Protective Factors

As shown in Table 1, the profile of risk and protective factors for homoeickness was largely consistent with H4. Preseparation attitudes and emotions were reliably related to in-camp homoeickness. Girls’ mean in-camp scores on the RYDR Homoeickness scale were negatively correlated with preseparation expectations of summer camp and positively correlated with preseparation expectations of homoeickness, preseparation RYDR Negative Emotion, and preseparation RYDR Homoeickness.

Analysis of the AM subscales revealed that homoeickness was negatively correlated with in-camp separation expectations and positively correlated with perceived (but not actual) distance from home. Girls’ homoeickness was negatively correlated with general perceived control, but unrelated to perceived control over the decision to attend camp. This apparent contradiction was explained by item analysis. Although the AM decision control subscale had high internal consistency ($\alpha = .73$; 6 items), only two of the items were consistently related to homoeickness: “How much control did you have over coming to camp this summer?” ($r = -.22, p < .05$) and “How much did you feel forced to come to camp?” ($r = .30, p < .001$).

Homoeickness was negatively correlated with girls’ ratings of the best thing about camp during the initial 4 days and with perceived relationship security, as measured by the SRASP. As expected, there was no reliable relation between homoeickness and socioeconomic scale.

Exceptions to the hypothesized risk factor profile were noted in the domains of age and previous experience. The RYDR Homoeickness factor was negatively correlated with the number of total summers that girls had spent at this or any other camp, but only marginally correlated with exact age, and not at all correlated.
with the number of years that the girls had spent at this camp.

Identifying significant correlates of homesickness was the first step in eventually being able to predict which girls became severely homesick during a 2-week separation. As a second step, discriminant function analysis (DFA) was used to evaluate the relative importance of independent predictor variables to girls’ membership into the high-homesickness quartile (RYDR Homesickness factor score $M \geq 12$) versus the less homesick group.

When the 12 hypothesized correlates of homesickness were entered as independent predictors of classification into the high-homesick quartile, a canonical discriminant function was derived, with an eigenvalue of .70, that significantly discriminated between the high- and less homesick quartiles, $\chi^2(12, N = 113) = 54.4, p < .0001$. Table 2 lists the standardized canonical discriminant function coefficients in order of the magnitude of their contribution to predicting homesickness group membership. Years at camp was an unexpectedly strong predictor, given its weak correlation with homesickness. This result suggests that years at camp has predictive value only in combination with other variables. Using the values in Table 2, the discriminant function could correctly classify 81.5% of the girls in the high-homesickness quartile and 85.7% of the girls in the less homesick group. The 12 predictors collectively accounted for 41% of the variance in girls’ mean self-reported levels of homesickness.

**H5: Behaviors Associated With Homesickness**

Inconsistent with H5, girls’ homesickness was most frequently associated with externalizing behavior. The RYDR Homesickness factor correlated moderately with the following CBCL narrow-band T scores, as reported by cabin leaders (Social Problems: $r = .34, p < .0001$; Delinquent Behavior: $r = .36, p < .0001$; Ag-

---

**Table 1. Correlates of Girls’ Self-Reported Homesickness (RYDR Homesickness Factor)**

<table>
<thead>
<tr>
<th>Correlate</th>
<th>Pearson r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preseparation Positive Expectations of Camp (RYDR)</td>
<td>-.40</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Preseparation Expectations of Homesickness (RYDR)</td>
<td>.57</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Preseparation RYDR Homesickness</td>
<td>.34</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Preseparation RYDR Negative Emotion</td>
<td>.26</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>In-Camp Attitudes and Emotions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Camp Positive Separation Expectations (AM)</td>
<td>-.46</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Perceived Distance From Home (AM)</td>
<td>.42</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td>Actual Distance From Home</td>
<td>.10</td>
<td>.27</td>
</tr>
<tr>
<td>General Perceived Control (RYDR)</td>
<td>-.31</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Perceived Control Over the Decision to Attend (AM)</td>
<td>-.07</td>
<td>.47</td>
</tr>
<tr>
<td>Rating of the Best Thing About Camp During Initial 4 Days</td>
<td>-.27</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Perceived Relationship Security (SRAISP)</td>
<td>-.25</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Demographic Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Scale</td>
<td>-.06</td>
<td>.53</td>
</tr>
<tr>
<td>Chronological Age</td>
<td>-.16</td>
<td>.09</td>
</tr>
<tr>
<td>Years Spent at This Camp</td>
<td>-.09</td>
<td>.35</td>
</tr>
<tr>
<td>Years Spent at This or Any Other Camp</td>
<td>-.19</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*Note: RYDR = Rate Your Day-Revised; AM = About Me Questionnaire; SRAISP = Self-Reported Attachment Style Prototypes.

*All correlations are significant at the .05 level.

**Table 2. Standardized Canonical Discriminant Function Coefficients for 12 Predictors and Correlates of a High Level of Homesickness During Girls’ 2-Week Stays at Overnight Summer Camp**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preseparation Expectations of Homesickness</td>
<td>.62</td>
</tr>
<tr>
<td>Rating of the Best Thing About Camp During Initial 4 Days</td>
<td>-.58</td>
</tr>
<tr>
<td>Years Spent at This Camp</td>
<td>.43</td>
</tr>
<tr>
<td>Preseparation Positive Expectations of Camp</td>
<td>-.41</td>
</tr>
<tr>
<td>Perceived Distance From Home (AM)</td>
<td>.41</td>
</tr>
<tr>
<td>In-Camp Positive Separation Expectations (AM)</td>
<td>.33</td>
</tr>
<tr>
<td>Preseparation RYDR Homesickness</td>
<td>.29</td>
</tr>
<tr>
<td>Preseparation RYDR Negative Emotion</td>
<td>-.23</td>
</tr>
<tr>
<td>Perceived Relationship Security (SRAISP)</td>
<td>-.18</td>
</tr>
<tr>
<td>Chronological Age</td>
<td>-.13</td>
</tr>
<tr>
<td>Years Spent at This or Any Other Camp</td>
<td>-.10</td>
</tr>
<tr>
<td>Perceived Control Over the Decision to Attend Camp (AM)</td>
<td>-.05</td>
</tr>
<tr>
<td>General Perceived Control</td>
<td>.00</td>
</tr>
</tbody>
</table>

*Note: AM = About Me Questionnaire; RYDR = Rate Your Day-Revised; SRAISP = Self-Reported Attachment Style Prototypes.
gressive Behavior: \( r = .41, p < .0001 \). Scores on three narrow-band scales were mildly correlated with homesickness intensity, at marginal levels of significance (Anxious/Depressed Behavior: \( r = .18, p = .05 \); Thought Problems: \( r = .18, p = .06 \); Attention Problems: \( r = .18, p = .06 \)). Self-reported homesickness correlated moderately with both broad-band T scores (internalizing: \( r = .26, p < .005 \); externalizing \( r = .27, p < .005 \)). Figure 1 illustrates that cabin leaders perceived more problem behaviors in girls who rated themselves as most homesick than in girls who rated themselves as less homesick.

**H6: Sequeleae of Homesickness**

One-way ANOVAs were used to compare the high-homesickness quartile to the less homesick group on the indexes of satisfaction. Consistent with previous research, homesick girls reported less general satisfaction, \( F(1, 113) = 4.5, p < .05 \); social satisfaction, \( F(1, 113) = 4.2, p < .05 \); and environmental satisfaction, \( F(1, 113) = 5.2, p < .025 \).

A multivariate ANOVA was used to compare the high-homesickness quartile to the less homesick group on cabin leaders' ratings of girls' social status. The omnibus \( F \) was significant, \( F(3, 113) = 11.5, p < .01 \), with a medium-sized effect (\( \eta^2 = .10 \)), confirming that girls who privately reported severe homesickness were perceived by their surrogate caregivers to have lower social status than other girls. Univariate \( F \) tests were all significant: Rejected, \( F(3, 113) = 11.5, p < .01, \eta^2 = .09 \); Accepted, \( F(3, 113) = 9.6, p < .005, \eta^2 = .08 \); Neglected, \( F(3, 113) = 4.0, p < .05, \eta^2 = .03 \).

**Discussion**

The results of this study provided initial support for the following phenomenological elements of homesickness in girls:

1. Feelings of homesickness were prevalent. About 95% of the girls reported some feelings of homesickness at some time during their stay.
2. Approximately 20% of the girls experienced moderate-to-high levels of homesickness, and about 8.5% were severely homesick.
3. The most homesick girls became increasingly homesick during most of their separation, with intensity diminishing just prior to reuniting with caregivers.
4. The most homesick girls reported higher preseparation and postcamp levels of homesickness and higher preseparation levels of negative emotion than their less homesick peers. The most homesick girls did not report decreased levels of preseparation positive emotion or increased levels of postcamp negative emotion.

5. A risk factor profile emerged that supported homesickness dispostion theory. Distress and negative expectations before camp, pessimistic attitudes at camp, and poor initial experiences combined with insecure interpersonal attitudes and low perceived control to predict homesickness.

6. Youth and experience at any summer camp were only mildly related to girls' average homesickness intensity. Previous experience at this particular camp was not a reliable protective factor.

7. Homesick girls had a mixed internalizing and externalizing behavioral presentation. However, they were no more likely to exhibit withdrawn behavior than their less homesick peers, and only marginally more likely to exhibit anxious or depressed behavior.

8. Homesick girls were generally less satisfied with their camp experience and were rated by surrogate caregivers as less popular than their less homesick peers.

Anecdotal evidence collected during this field research was a convincing source of data for estimating the clinical significance of homesickness. Severely homesick girls were observed to struggle with interpersonal interactions, refuse to eat, cry inconsiderably, beg persistently to call home or return home, and be preoccupied with thoughts of home. Severe homesickness was truly debilitating for some girls. However, pinpointing the severity of the high-homesickness quartile was difficult without standardized clinical measures or diagnostic interviews. As a point of comparison, nearly 19% of the high-homesickness group in Thurber (1995) and 18% in Thurber (in press) met or exceeded cutoff scores for severe depression or anxiety on either the Children's Depression Inventory (Kovacs, 1980) or the Revised Children's Manifest Anxiety Scale (Reynolds & Richmond, 1978). Given girls' nearly identical levels of homesickness on the identical questionnaire that boys used (the RYDR), it is reasonable to suppose that a similar percentage of the high-homesickness quartile in the girls' camp was also experiencing severe depressive symptoms, anxious symptoms, or both.

Regarding the anticipatory component to homesickness, several possibilities exist:

1. Girls experience symptoms of anxiety when the stressor of separation is perceived as inevitable but nevertheless avoidable (Alloy, Kelly, Mineka, & Clements, 1990).
2. Girls' preseparation distress reflects trait depressive and anxious symptoms, subsequently exacerbated by the stress of leaving home.

---

*Three girls did not complete the satisfaction survey at the end of their 2-week stays.*

---

Copyright © 1999. All rights reserved.
3. Girls experience preseparation distress secondary to their recall of previous separations that have been uncomfortable.

Whatever the etiology of preseparation distress and expectations of homesickness, the predictive validity of a homesick disposition seems nearly as strong in girls as it is in boys.

Postcamp levels of distress are difficult to explain because both the threat of separation and the actual period of separation were terminated. Elevated postcamp levels of homesickness may be explained by (a) slow dissipation of in-camp levels of distress; (b) negative memories of the separation, triggered by filling out a RYDR 1 month after camp; (c) heightened vigilance for possible future separations; (d) a baseline level of mildly negative emotion; or (e) an exaggeration bias. Further research is necessary to evaluate these and other possibilities. More important, there were no postcamp differences in the RYDR Positive Emotion factor between the high-homesickness groups and the less homesick group. This suggests that, even after a bout of homesickness, girls were generally happy. Only a shadow of the negative emotion associated with separation may endure.

Despite some timing variations in RYDR administration between earlier samples of boys and the present sample of girls, this study suggested no significant sex differences in the prevalence, intensity, or progression of homesickness. These findings are consistent with previous studies on homesickness in 1st-year university students (Brewin, Furnham, & Howes, 1989; Burt, 1993; Fisher & Hood, 1987, 1988; Fisher et al., 1985; Lu, 1990; Platt & Eisenman, 1970; Wouiff, 1975) and in adolescent boarding school students (Fisher et al., 1984, 1986; cf. Fisher et al., 1990). Moreover, comparison with analogous studies of boys suggested many similarities in the predictors and sequelae of homesickness (Thurber, 1995, 1997b, in press; Thurber & Sigman, 1998). Despite these similarities, there were noteworthy sex differences in behaviors associated with homesickness and in the predictive value of experience variables.

In two previous studies of boys at summer camp (Thurber, 1995, in press), male cabin leaders who completed CBCLs reported predominantly internalizing behavior among boys whose RYDRs indicated high homesickness. By contrast, female cabin leaders in this study perceived associations between homesickness and both internalizing and externalizing behavior in girls. Several explanations, alone or in combination, may account for these sex differences. First, the behaviors associated with homesickness could be an artifact of reporter bias. Homesick boys and girls may exhibit the same internalizing and externalizing behaviors, at the same rates, but male and female cabin leaders perceive these behaviors differently in children of their same sex. Second, certain behaviors may be associated with homesickness because of the manner in which homesickness emerges. Perhaps boys who exhibit internalizing behaviors, such as crying or acting fearful, are undesirable as friends to other boys. These internalizing boys may have trouble establishing satisfactory interpersonal relationships at summer camp, become lonely, and increasingly homesick. For girls, internalizing behaviors may be acceptable to same-sex peers, but externalizing behaviors may alienate them from other girls, causing a similar cascade of loneliness and homesickness. Third, homesick boys may be more inclined than girls to suppress their emotions. As noted earlier, recent studies of how boys and girls cope with homesickness found that girls were more likely than boys to cope by seeking social support. Perhaps some of girls' "externalizing" behavior is actually affiliative, confiding behavior (Brewin et al., 1989).

A second noteworthy sex difference was the weak relation between age, number of previous camp stays, and homesickness in girls relative to boys. Researchers have long suggested that younger, less experienced young people are at a significantly higher risk for homesickness than their older, more experienced peers (Fisher & Hood, 1988; Fisher et al., 1990; Fisher et al., 1986; McCann, 1943; Thurber, 1995, in press; Thurber & Sigman, 1998; Thurber & Weisz, 1997a). Others have found no relation between previous separation experience and homesickness (Brewin et al., 1989; Fisher et al., 1984; Rose, 1947, 1948). In this study, the design of the camp may partly explain why this relation was not strong among the girls. At the boys' camp, assignment to divisional groups was done by exact age. Most young, inexperienced campers lived together. By contrast, assignment to divisions at the girls' camp was done by school grade. This sometimes permitted older, more experienced girls to room with younger, less experienced girls. Perhaps this latter group benefited from older girls' coping advice or adaptive examples of successful negotiation of a 2-week separation from home. Future research should examine how experience and example impact coping. Perhaps children's orientation to novel environments such as camps, boarding schools, foster homes, inpatient hospital units, and foreign cultures could be enhanced by a buddy system wherein young children, with little separation experience, little experience in the novel environment, or both, are paired with older, more experienced children. Also worthy of future research are the mechanisms (e.g., learned coping, familiarity, self-confidence) that render protective any direct or vicarious experience with a separation environment.

Although this study advanced phenomenological knowledge about childhood homesickness, it was limited in several ways. First, no diagnostic measures of depression and anxiety were included. Although the RYDR is an efficient, reliable, and valid index, the rela-
HOMESICKNESS IN GIRLS

tation between homesickness and certain clinical symp-
toms was untested. Second, the sample was largely
European American. Girls from ethnic minorities may
have a different experience and expression of home-
sickness. Third, the moderate sampling rate raised con-
cern about sample bias. Although the population of girls
studied was representative of girls attending the camp in
age, years at camp, and socioeconomic level, it is posi-
ble that girls or parents who anticipated difficulty with
the separation chose not to participate at a higher rate
than girls who anticipated no problems. Of course, the
entire population of campers may have been self-se-
lected. Perhaps the girls who felt the most trepidation
about separating from home—those who were most at
risk for becoming homesick—never enrolled in this
camp in the first place.

The predictors of homesickness in Table 2 illumina-
tate targets for intervention. One target is presepara-
tion status. Our data suggest that girls at risk for
severe homesickness could be identified accurately
several months prior to separation. Preventive inter-
ventions then could focus on orienting them to the
novel camp environment, through various media, in
an effort to reverse negative expectations and anxiety
about the unknown. Orientation materials could also
engender strong positive expectations by profiling
girls who have fun at camp and who cope effec-
tively with homesick feelings. It also seems critical
that parents include their daughter’s decision in the
time away from home, where to go to camp, and
as long to stay. Practice separations (e.g.,
spending a long weekend at a friend’s house) may
also reverse negative preseparation expectations by
instilling confidence and promoting in-vivo coping
with mild homesickness.

Once at camp, girls benefit from surrogate care-
givers who can reinforce positive attributes, physical
distraction, letter writing, and other forms of effective
coping (Thurber, 1997b; Thurber & Weisz, 1997a).
Staff might also train social skills and facilitate friend-
ships to diminish symptoms of homesickness. Other
cornerstones of in-camp interventions are the normal-
ization of homesick feelings, accurate empathy, and
teaching effective coping. The most homesick girls
and boys are those who relinquish control of their cop-
ing efforts because they believe that nothing they think
or do will make them feel better (Thurber & Weisz,
1997a, 1997b). Finally, staff should heed data about
the progression of homesickness. Because the most
homesick children become increasingly homesick
throughout most of their 2-week separation, efforts to
identify and remedy homesickness should not be aban-
donned after the first few days of camp.

For the more than 5 million children who attend
overnight camps each summer, homesickness is a fa-
miliar feeling. For 1 in 5 children, homesickness is
quite distressing, and for about 1 in 12, it is debili-
tatingly severe. As we gain an understanding of the
phenomenology of homesickness, its risk factors, pro-
tective factors, and sequelae, we should also turn our
attention toward the millions of children who do not
have the luxury of attending summer camp but are nev-
ertheless separated from home and attachment objects.
Refugee children, foster children, hospitalized chil-
dren, and homeless children all surely know homesick-
ness but in ways quite different from the girls in this
study. As established research programs focused on
these children evolve, we hope they will include stud-
ies of homesickness. And as our understanding of
homesickness evolves, we hope that the theoretical
advances and clinical findings will guide programs
aimed at teaching children to prepare for and cope with
inevitable separations.

References

Behavior Checklist and Revised Child Behavior Profile.
Burlington: University of Vermont, Department of Psychiatry.

Comorbidity of anxiety and depressive disorders: A helplessness-
lessness—hopelessness perspective. In J. D. Maier & C. R.
Cloninger (Eds.), Comorbidity of mood and anxiety disorders

American Psychiatric Association. (1994). Diagnostic and statistical

among young adults: A test of a four-category model. Journal of
Personality and Social Psychology, 61, 226–244.

psychological determinants of homesickness and confiding
among students. British Journal of Psychology, 80, 467–477.

Burt, C. (1993). Concentration and academic ability following transi-
tion to university: An investigation of the effects of homesick-

S. Fisher & C. L. Cooper (Eds.), On the move: The psychology of
change and transition (pp. 191–205). New York: Wiley.

Eisenbruch, M. (1997). The cry for the lost place: Cultural be-
reavement and cultural survival among Cambodians who re-
settled, were repatriated, or stayed at home. In M. A. L. van
Tilburg & A. J. M. Vingerhoets (Eds.), Psychological as-
pects of geographical moves: Homelessness and accultur-
ation stress (pp. 119–142). Tilburg, The Netherlands: Tilburg
University Press.

in a Swedish refugee camp: Aftermath of the collapse of Yugo-
slavia. Stress Medicine, 9, 159–166.

Lawrence Erlbaum Associates, Inc.

in the Australian Bush. Children’s Environments Quarterly, 7,
15–22.

to boarding school: A diary-style analysis of the problems and
worries of boarding school pupils. Journal of Environmental
Psychology, 4, 211–221.

in boarding school children. Journal of Environmental Psychol-
ogy, 6, 35–47.

195

Copyright © 1999. All rights reserved.


Manuscript received December 16, 1997
Final revision received September 29, 1998