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The Effect of Homesickness on Air Force Academy Cadets

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Philadelphia College of Osteopathic Medicine

Department of Psychology

THE EFFECT OF HOMESICKNESS ON AIR FORCE
ACADEMY CADETS

By Earl J Banning

Submitted in Partial Fulfillment of the Requirements of the Degree of

Doctor of Psychology

Month Year

**PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE
DEPARTMENT OF PSYCHOLOGY**

Dissertation Approval

This is to certify that the thesis presented to us by Earl Benning
on the 5th day of August, 2010, in partial fulfillment of the requirements for
the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and
literary quality.

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ABSTRACT

A slightly modified version of the Homesickness Questionnaire (HQ) was administered to 176 Air Force Academy cadets during the spring semester of 2010. Total HQ scores were positively correlated with cadet somatic complaints. Total HQ scores were negatively correlated with cadet Grade Point Average (GPA), but only for male cadets. Factor analysis of the HQ revealed two factors, as in previous studies, disliking the Academy and attachment to home. There were no significant correlations found between cadet HQ total score and Military Performance Average (MPA), Physical Education Average score (PEA), or number of demerits received. Cadets were less likely to report homesick if they had traveled away from home at least one time before entering the Academy. There was no sex difference with regards to total HQ scores.

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CHAPTER 1 - Introduction

The literature presented in this review is drawn from PubMed, MEDLINE, and the following EBSCO databases: Academic Search Premier, MasterFILE Premier, Psychology and Behavioral Sciences Collection, Health Source: Nursing/Academic Edition, PsycINFO, and PsycARTICLES. Keywords used either individually or in conjunction include: homesickness, adjustment, separation, transition, military, basic training, recruits, psychological, mental health, stress, anxiety, coping, social support, autonomy, resilience, and attachment.

Homesickness is a ubiquitous phenomenon but a neglected topic in recent research. The earliest references to homesickness come from the Bible and from Homer's *Odyssey*, describing weeping prompted by thoughts of home (Thurber & Walton, 2007; Van Tilburg, 2005). The ancient Greek physician Hippocrates ascribed homesickness to excessive black bile in the blood (Thurber & Sigman, 1998; Thurber & Walton, 2007). In the 17th century, the Swiss scholar Johannes Hofer introduced the term *nostalgia*, combining *algia*, the Greek word for pain with *nostos*, "return home" (Matt, 2007a, p. 6). In short, the condition described a painful longing for home.

The terms *nostalgia* and *homesickness* were used interchangeably into the early 20th century and soldiers were a prominent focus of study. The study of homesickness in soldiers peaked during the Civil War, including reports that some soldiers died of nostalgia during the war (Matt, 2007a). Nostalgia drew some attention during World Wars I and II. By the postwar era, however, "the cultural consensus...was that mobility was normal and that in consequence, homesickness must be conquered early (p. 7). This perspective is evident in the dearth of research on homesickness by researchers in the United States.

Much of the work on homesickness in the U.S. comes from Thurber and his colleagues whose focus is on childhood homesickness, specifically children adapting to summer camp (Thurber, 1995; Thurber, Sigman, Weisz, & Schmidt, 1999; Thurber & Malinowski, 1999; Thurber & Sigman, 1998; Thurber & Weisz, 1997a, 1997b). More recent work includes interventions for preventing and treating homesickness (Thurber, 2005; Thurber & Walton, 2007). The authors emphasize that homesickness is *not* limited to children and the strategies they present can be adapted for work with adults.

In the Netherlands, a number of researchers have engaged in theoretical and empirical explorations of homesickness (Eurelings-Bontekoe, Brouwers, Verschuur, & Duijsens, 1998; Van Heck et al., 2005; Van Tilburg, 2005; Van Tilburg, Vingerhoets, Van Heck, & Kirchbaum, 1999; Vingerhoets, 2005). The populations examined include foreign employees of a multinational technology firm (Eurelings-Bontekoe, Brouwers, & Verschuur, 2000) and college students in the Netherlands and the United Kingdom (Stroebe, van Vliet, Hewstone, & Willis, 2002). An ambitious study undertaken with the goal of reducing personnel shortages in the Royal Netherlands Army (RNLA) disclosed the fact that homesickness was a prominent factor in attrition among new trainees (Flach, De Jager, & Van de Ven, 2000). Some of the strategies adopted to address the problem are highly congruent with the techniques used to prevent homesickness in children and youth (Thurber, 2005; Thurber & Walton, 2007).

Several researchers have investigated homesickness in young men making the transition from high school to the army in Israel, where military service is mandatory for men and women reaching the age of 18 (Mayseless, 2004; Scharf, Mayseless, & Kivenson-Baron, 2004; Shulman, Levy-Shiff, & Scharf, 2000; Wintre & Ben-Knaz, 2000). Wintre & Ben-

Knaz (2000) entitled their study “It’s Not Academic, You’re in the Army Now: Adjustment to the Army as a Comparative Context for Adjustment to University.” The researchers offer a unique and valuable perspective, given the fact that with few studies on adjustment to military life, investigators must extrapolate findings from studies of first-year university students.

Each context that provokes homesickness has certain unique features. The rigorous physical training, discipline, and chain of command of military culture set it apart from the relative freedom of university life (Flach et al., 2000; Wintre & Ben-Knaz, 2000).

International students, expatriates, and immigrants are often confronted with a new language and culture that can result in acculturative stress in addition to feelings of homesickness (Eurelings-Bontekoe et al., 2000; Kegel, 2009; Tartakovsky, 2007). Some of the homesick RNLA trainees seemed to adapt to military life but were unable to cope with the possibility of foreign deployment (Flach et al., 2000). Anticipated stress due to complete separation from one’s home culture may play a role. However, Flach et al. note that very little is known about this phenomenon in military recruits.

All the NRLA candidates who dropped out of training passed psychological evaluations, yet the instruments were not sensitive to factors that might have identified those at risk for homesickness sufficient enough to interfere with their training (Flach et al., 2000). In the U.S., more than 30,000 men and women join the Air Force each year and are sent to Lackland Air Force Base, Texas, for the mandatory six-week Basic Military Training (BMT) course (Staal, Cigrang, & Fiedler, 2000). A small, though not insignificant, proportion is referred for mental health evaluations for a variety of reasons associated with their past history or with adjustment to training. In most cases, the difficulties are attributed to the

novel challenges of the training environment and the new recruits are returned to duty. On the other hand, studies undertaken by the U.S. General Accounting Office reveal that roughly one-third of enlisted Air Force personnel do not complete BMT or their first tour of duty (Englert, Hunter, & Sweeney, 2003). Mental health issues play a significant role in attrition.

Based on recruitment and training costs, the Air Force loses approximately \$46,000 for each individual who fails to complete training (Englert et al., 2003). The NRLA introduced major changes to their training program, including attempts to identify new recruits at high risk for homesickness, in order to address the shortfall of qualified personnel (Flach et al., 2000). The U.S. Navy (Williams et al., 2004, 2007) and the Australian Army (Cohn & Pakenham, 2008) have implemented psychoeducational programs to reduce psychological distress and facilitate positive coping among new recruits. The Strategies to Assist Navy Recruits' Success (STARS) project deemed the program, the BOOT Camp Survival Training for Navy Recruits (BOOT STRAP), to be a cost-efficient strategy for enhancing recruit performance and retention, saving an estimated \$18.6 million each year (Williams et al., 2007).

Theoretically, efforts to evaluate, prevent, and treat elevated levels of homesickness in military recruits could be both effective and cost-efficient. However, there is scant research on this endeavor. The present study seeks to address this gap in research. The following section is a discussion of the theoretical perspectives that are historically and currently guiding the study of homesickness.

Chapter 2 – Literature Review

Theoretical Perspectives

From Nostalgia to Homesickness. The word nostalgia, created by Hofer is a literal Greek translation of the German heimweh, denoting a “painful yearning for home or country” (Werman, 1977, p. 387). Hofer provided the case of a young man lying close to death, whose condition improved immediately upon being sent home (Van Tilburg, 2005). Regarding nostalgia as a “new disease” affecting young people far from their homes, Hofer described a constellation of symptoms including “continued sadness, meditation only of the Fatherland, disturbed sleep...decrease of strength, hunger, thirst...cares or even palpitations of the heart, frequent sighs...stupidity of the mind—attending to nothing hardly, other than an idea of the Fatherland” (cited in Matt, 2007b, p. 470). According to Hofer, the condition could ultimately prove fatal if the sufferer did not return home.

Initially, physicians believed nostalgia was unique to Switzerland or continental Europe (Matt, 2007a, 2007b). Some cultures were thought to be immune to the phenomenon. For example, the British were thought to be unlikely candidates for nostalgia because they were used to foreign trade and colonization and therefore to travel or relocation abroad. By the mid-18th century, however, the word “homesickness” became part of the English language and British colonists in North America were among those describing feelings of homesickness.

In the 18th and 19th centuries, physicians studied the phenomenon extensively, frequently using observations of soldiers. These included Napoleon’s Imperial Army, Welsh soldiers, and soldiers of the French and American revolutions (Matt, 2007a, 2007b; Werman, 1977).

In the U.S. during the early 19th century, homesickness was extremely common as waves of immigrants arrived in the U.S. and Americans migrated from one part of the sprawling country to another (Matt, 2007b). Homesickness in North America was generally regarded as ubiquitous and benign. During the Civil War, however, physicians came to see nostalgia (or homesickness) as Hofer did, namely as a potentially fatal condition. Between 1861 and 1863, army physicians diagnosed 2,588 cases of nostalgia in the Union army and implicated nostalgia as the cause of death in 13 cases. The number of cases increased over the course of the war and the most severely affected soldiers were discharged and allowed to go home so they would not die of the disease.

It has been only in the last 100 years that the meanings of homesickness and nostalgia diverged (Matt, 2007b). Doctors tended to use the term “nostalgia” and the general public used “homesickness,” but they referred to the same phenomenon. For the lay public, nostalgia eventually came to denote “a bittersweet yearning for a lost time” (p. 470). However, nostalgia was still used in reference to homesickness by a cadre of psychiatrists and academics until the 1950s and beyond.

Werman (1977) distinguished nostalgia from homesickness by describing homesickness as a state of sadness accompanied by “more or less severe somatic symptoms” that typically diminishes immediately when one returns home (p. 388). In contrast, nostalgia is characterized as “an experience with particular cognitive and affective components” induced by memories of a given time and place typically depicted as “bittersweet” (p. 388).

Professional interest in homesickness waned, not coincidentally, with the advent of global air travel (Matt, 2007a, 2007b). Ironically, the idea that mobility is a normal aspect of modern life and therefore should be something to which one is accustomed is similar to the

18th century belief that commerce and colonization immunized the British against homesickness despite evidence to the contrary.

Recent research suggests that homesickness is extremely common in an increasingly mobile world yet the prevailing attitude, even among psychologists, is that homesickness is a phenomenon of children and adolescents (Matt, 2007a, 2007b; Thurber & Walton, 2007; Van Tilburg, 2005). The myth that homesickness is a “childish” condition only exacerbates distress by lowering self-esteem and preventing adults from admitting their feelings and seeking help or support.

Some psychiatrists have expressed the view that nostalgia or homesickness primarily affects individuals who are less educated and are bound by tradition, whereas the more educated and thus more cosmopolitan classes have a future orientation that enables them to adapt to novel circumstance (Werman, 1977). According to Matt (2007b), this view has come to dominate American culture. She declares that, “Americans, particularly those in the middle class, have internalized the dictates that require them to conquer homesickness. While many feel the emotion, few would leave work or school because of the feeling; to do so would signify weakness and failure” (p. 497).

At the same time, Matt (2007b) observes that many people express homesickness in subtle ways such as surrounding themselves with foods or artifacts from their native region, city, or country. Some may resist the homesickness label but experience anxiety, depression, or somatic symptoms that compromise their jobs or academic performances.

During the American Revolution, homesick soldiers received minimal sympathy. According to Matt (2007b), “The army’s lack of sympathy for homesick soldiers was a consequence of the high value put on honor and civic virtue, the relatively low cultural value

put on domestic life, and the lack of official acknowledgment of nostalgia as a medical condition” (p. 474). More than 200 years later, cultural attitudes equating homesickness with dependence and immaturity can still have negative consequences for military personnel. Although there is more research into adult homesickness in the Netherlands than in the U.S., this recognition of homesickness by the RNLA is driven by pragmatic concerns: recognizing homesickness as an identifiable and treatable psychosocial condition can improve the retention and performance of trained military personnel (Flach et al., 2000). Indeed, this is the goal of psychological evaluation and intervention for military recruits in the U.S. (Englert et al., 2003; Fiedler, Oltmanns, & Turkheimer, 2004; Martin, Williamson, Alfonso, & Ryan, 2000; Staal et al., 2000; Williams et al., 2004, 2007).

Contemporary Perspectives. Homesickness has been examined from a plethora of theoretical perspectives. These include: attachment theory, the attentional resources model, the competing demands model, job strain theory, person-environment fit, role transitions, geographical attachment, negative expectations, peer social support, and psychoanalytic theory (Thurber & Sigman, 1998). Despite the numerous differences in orientation, most modern theories of homesickness, “are inherently transactional, integrating characteristics of the person, the environment, and the circumstances surrounding the separation” (p. 903). Thurber and Sigman point out that in addition to the various professional conceptions, there are valuable insights drawn from observers. For example, camp counselors and camp directors are attuned to factors such as overprotective parents or the influence of other homesick children.

Vingerhoets (2005) described “dog-type” and “cat-type” homesickness. Analogous to the tendencies of dogs to become more attached to people and cats to be more attached to

places, attachment to people and places are two facets of homesickness. Although the term homesickness would seem to imply greater attachment to a place, most contemporary research emphasizes the role of interpersonal attachments (Maysless, 2004; Scharf et al., 2004; Shulman et al., 2000; Wintre & Ben-Knaz, 2000), sense of belonging (Watt & Badger, 2009), friendship (Buote et al., 2007; Paul & Brier, 2001), and social support (Brissette, Scheier, & Carver, 2002; Ramsay, Jones, & Barker, 2007; Urani, Miller, Johnson, & Petzel, 2003).

Eurelings-Bontekoe et al. (1998) emphasize that it is important to differentiate between mild homesickness, an extremely common and relatively normal reaction to the challenge of adapting to a novel environment, and a more pathological reaction that can lead to severe depression and disrupt normal activities. The authors view the distinction as parallel to the difference between normal and pathological mourning. The Homesickness Questionnaire (HQ) developed by Archer, Ireland, Amos, Broad, and Currid (1998) operationalizes homesickness as a type of grief reaction. Stroebe et al. (2002) used the Dual Process Model of Coping with Bereavement (DPM) as a framework for exploring homesickness by synthesizing Bowlby's (1969, 1973, 1980) attachment theory with the cognitive stress model of Lazarus and Folkman. Most approaches to understanding homesickness combine the dual facets of feelings of loss and adjusting to the new situation.

Van Tilburg (2005) defines homesickness as an emotion experienced "after leaving house and home" that is "characterized by negative emotions, ruminative cognitions about home, and somatic symptoms" (p. 37). She raises the issue of how homesickness is conceptually distinct by comparing it with other related emotions. The most relevant to the

present study are nostalgia, which has historical relevance, separation anxiety, grief, depression, and adjustment disorder.

Separation Anxiety. Separation anxiety disorder is classified in DSM-IV under disorders of infancy, childhood, or adolescence (APA, 2000). The central feature is developmentally inappropriate and excessive anxiety related to being separated from home or attachment figures. Severe homesickness experienced by children attending residential summer camp may be a type of separation anxiety although there are other causes. Severely homesick children experience depression and anxiety, which are also characteristic of homesick adults (Thurber, 1995; Thurber & Sigman, 1998). Many have poor coping skills that can be addressed by targeted interventions (Thurber, 2005; Thurber et al., 1999; Thurber & Walton, 2007; Thurber & Weisz, 1997a, 1997b). Inability to cope with new situations can be a manifestation of insecure attachment (Ainsworth & Bowlby, 1991).

In a comprehensive study of childhood homesickness, Thurber and Sigman (1998) concluded that among the many factors associated with homesickness, prior separation experience is a relatively consistent predictor of homesickness. Predisposing factors that emerge frequently include few previous experiences with separation, a high degree of separation anxiety, negative expectations prior to leaving, greater distance from home, insecure interpersonal attitudes, limited feelings of control, and negative experiences in the new environment. These factors are not substantially different from the contributors to feelings of homesickness in adults. Similarly, the psychosocial distress experienced by homesick children parallels the distress experienced by adults including depression, anxiety, withdrawal, and limited social, environmental, and general satisfaction. Thus, although separation anxiety is conceptually a disorder of childhood and adolescence, it is useful for

understanding the etiology of homesickness, to which some individuals are predisposed from early or middle childhood.

Adjustment Disorders. Adjustment disorders (AD) are marked by the emergence of emotional or behavioral symptoms in reaction to an identifiable stressor occurring within three months of exposure to the stressor (APA, 2000). The resulting symptoms or behaviors are considered clinically significant if they are characterized either by greater distress than would be expected from exposure to the stressor or would cause significant disruption to social, occupational, or academic activities.

The DSM-IV diagnosis of AD specifies that the symptoms do not reflect bereavement and do not meet criteria for another Axis I disorder or constitute an exacerbation of a preexisting Axis I or Axis II disorder (APA, 2000). In addition, the symptoms are expected to abate within six months after the stressor or its resulting consequences have ended.

Adjustment in military populations. In contrast to homesickness, adjustment disorders are often studied in military settings (Bonelli & Bugram, 2000; Hansen-Schwartz, Johnsen, & Andersen, 2005; Lung, Lee, & Shu, 2006; Martin et al., 2006). In a study of 328 young Austrian soldiers (ages 18-22) diagnosed with AD resulting from non-combat military stress, Bonelli and Bugram (2000) reported that for the vast majority of the soldiers (91.8%), a hallmark of AD was that they had no evidence of psychosocial disturbance in their civilian lives. In fact, on weekends when the soldiers were allowed home, most experienced an abrupt relief from their symptoms immediately upon leaving the camp. Just as suddenly, the symptoms promptly returned when they reentered the camp on Sunday evenings. The researchers found this phenomenon quite useful for differentiating between AD and anxiety

disorder, major depression, dysthymia, and personality disorders, whose symptoms did not abate during weekends.

Bonelli and Bugram (2000) observed a similar occurrence in some civilian patients, particularly those under undue stress at work. The presence of AD in civilian workers that are not separated from home distinguishes it from homesickness. Nevertheless, it is possible that homesickness was a factor for some of the soldiers, given the fact that homesickness can be quickly resolved with a return to home (Van Tilburg, 2005).

Martin et al. (2006) explored the course of adjustment, assessing depression, anxiety, and stress among Army recruits undergoing BMT at Fort Jackson, South Carolina. Self-reported depression and stress fell within normal parameters over the eight-week training period although anxiety remained slightly high. Martin et al. noted that this finding for anxiety was also reported in Air Force cadets. Also consistent with Air Force findings, women tended to report higher levels of anxiety than men. However, it has been proposed that the gender differences in reported anxiety reflect greater willingness to disclose distress on the part of women.

The most striking finding was that the Army recruits reporting the highest levels of psychological distress during the first week of training experienced the greatest degree of adjustment over the duration of BMT (Martin et al., 2006). This distinguishes adjustment difficulties from homesickness, which contrary to popular assumptions, escalates rather than abates over time (Thurber, 1995). In general, studies of military recruits show that most do adapt successfully to military training (Martin et al., 2006). At the same time, initiatives to identify and treat new recruits who experience or who are at risk for psychological problems have the potential to reduce the human and financial cost of failure to complete BMT

(Englert et al., 2003; Lubin, Fiedler, & Whitlock, 1999; Flach et al., 2000; Staal et al., 2000; Williams et al., 2004, 2007; Williams, Hagerty, Yousha, Hoyle, & Oe, 2002).

Attachment Theory. Mayseless (2004) and Scharf et al. (2004) used attachment theory as a framework for their research on Israeli youths making the transition from high school to the military. The utility of Bowlby's attachment theory is probably due to its roots in a number of theoretical orientations, encompassing systems theory, cognitive psychology, ethology (the study of animals in the natural environment), evolutionary biology, and psychoanalytic theory (Ainsworth & Bowlby, 1991). Additionally, a major strength of Bowlby's theory is that he recognized the central importance of close human attachments throughout the course of the life span (Bowlby, 1980).

Another key feature is that Bowlby (1969, 1973, 1980) insisted that a healthy sense of the self and of others develops within the context of attachment bonds rather than being independent from them. The ideal state is a "healthy self-reliance" that allows the individual to form close relationships and act independently from a "secure base" (Ainsworth & Bowlby, 1991, p. 8). A child who feels he or she has a secure base develops the confidence to leave familiar surroundings and explore the environment. This feature of attachment theory is especially pertinent to the study of homesickness.

Secure attachments also promote the ability to cope effectively with stressful situations by strengthening the person's inner resources (Mikulincer & Florian, 1998). There are at least two mechanisms underlying this effect. First, individuals who feel confident that an attachment figure will provide them with needed support in times of stress feel freer to undertake challenging situations. Second, knowledge of a secure relationship with an attachment figure works indirectly to reinforce trust in the self and others, which comes into

play under stressful conditions. Not surprisingly, the presence of a supportive other is a key factor in resiliency. Mikulincer and Florian view the attributes of secure attachments as resiliency factors that promote the development of a positive perspective on life and buffer the impact of psychological stress in the face of negative life events.

In their classic study of homesickness among first-year university students, Brewin, Furnham, and Howes (1989) found that an anxious attachment style and greater dependence on others were associated with feelings of homesickness. The researchers proposed that some attachment styles would make individuals more susceptible to acute homesickness when separated from important others. They also observed a connection between strong needs for affiliation and higher levels of depression and anxiety.

Job Strain Theory. Along with Brewin et al. (1989), the work of Fisher and Hood (1987, 1988) is frequently cited by researchers examining homesickness in college students. Fisher and Hood (1987) used separation anxiety and models of coping with the stress of new demands on the self as the frameworks for their exploration of homesickness among students in their first semester at Dundee University. Their study included the Middlesex Hospital Questionnaire (MHQ), the Cognitive Failures Questionnaire (CFQ), the College Adaptation Questionnaire (CAQ), and the Dundee Relocation Inventory (DRI), developed by the researchers. In addition, the participants were asked to provide a written, personal definition of homesickness accompanied by a self-appraisal rated on a four-point scale ranging from “not homesick” to “very homesick”; they were also asked to indicate whether or not they were currently homesick or had been homesick at some point.

All of the students, whether or not they resided at the university, showed some increase in psychological stress, notably depression and obsessionality, along with absent-

mindedness, thus signifying that the transition to college represents a major life event despite its prospective advantages (Fisher & Hood, 1987). Although they used different measures, this is largely consistent with the findings of Martin et al. (2006) for new Army recruits.

The psychological profiles were quite similar for both residential and local students. In fact, Fisher and Hood (1987) observed the fact that anxiety was actually higher in students residing at home, thus adding weight to the impact of stress in adapting to the challenges of a new environment. In terms of homesickness *per se*, students who reported being homesick in the sixth week of the semester were characterized by higher levels of psychological distress, specifically anxiety, depression, and somatic and obsessive (ruminative) symptoms. The CAQ profiles also revealed that the homesick students were less successful in adapting to the college environment. According to Fisher and Hood, the consequences of homesickness are bidirectional; that is, homesickness is detrimental to social activity and academic pursuits, which in turn, makes adaptation even more difficult.

Thurber and Malinowski (1999) found that boys at a summer camp who experienced symptoms of anxiety and depression were actually more likely than other boys to explore their environment. However, this seemed to reflect a form of social withdrawal as opposed to the adventurousness facilitated by secure attachments (Bowlby, 1969, 1973). Although the distressed boys frequently sought solitude, they did not express a preference for being alone and were actually quite unhappy (Thurber & Malinowski, 1999). Among the university students, the homesick individuals were prone to ruminating, which undermined their ability to concentrate on academic activities and socialize with other students (Fisher & Hood, 1987).

Fisher and Hood (1987) concluded that separation anxiety and job strain probably operate independently in causing and sustaining feelings of homesickness. They also observed that the homesick students demonstrated greater psychological vulnerability before leaving home, thus implying that some individuals are more easily prone to developing homesickness. Synthesizing the separation anxiety and job strain models, Fisher and Hood propose that adaptation to a new environment involves a type of cost-benefit analysis that weighs the advantages and threats of the new environment against the security and advantages of life at home. Disparities between what the person seeks and what the person receives from the new environment create the preconditions for the experience of homesickness.

The Immunization Hypothesis. In a subsequent study restricted to residential students, Fisher and Hood (1988) examined gender differences and separation histories in the experience of homesickness. Their findings contrasted with the earlier study (Fisher & Hood, 1987) because CFQ scores did not predict homesickness in the previous student, but did distinguish between homesick and non-homesick students in the later one (Fisher & Hood, 1988). Specifically, the stress experienced by homesick students resulted in being more absent-minded. There were no gender differences in homesickness although female students experienced more stress according to their CFQ profiles.

No association was observed between the students' histories of mobility and psychological profiles. However, Fisher and Hood (1988) found some support for the assumption that previous moves would have an immunizing effect against homesickness. Thurber and Sigman (1998) deemed the link between previous separations and lower

vulnerability to homesickness the most consistent finding in research on homesickness in children and youth.

According to Fisher and Hood (1988), accepting the immunization hypothesis has certain key implications for the understanding of life events. Given the idea that certain moves are advantageous, it would follow that first, the learning experience from one move carries over to another, and second, that the learning experience is not concerned with coping with separation *per se*, but rather with gaining the resource for adapting to a new environment that is potentially beneficial. Emphasizing that this is a manifestation of *selective resourcefulness*, Fisher and Hood used the metaphor of a lock and key. Specifically, “the key might be tuned and fashioned so that certain locks are easily opened” (Fisher & Hood, 1988, p. 319).

The Nature of Homesickness

Van Tilburg (2005) conceptualizes the *homesickness experience* as a distinctive phenomenon comprising four interrelated features: 1) the antecedent situation, 2) the person, 3) the response and reactions, and 4) social regulation and control. Her model is derived from research with 229 homesick women who completed a questionnaire encompassing each of the four dimensions.

The Antecedent Situation. The antecedent situation is central to the definition of homesickness. In effect, the antecedent is the transition from familiar surroundings to a novel environment or situation (Van Tilburg, 2005). The study found homesickness to be a *direct* response to being separated from home. Most of the participants felt homesick even before they had time to explore their new surroundings. Interestingly, a substantial proportion of the women were on pleasure trips with their families but they still became severely homesick.

Van Tilburg and her colleagues also observed a phenomenon they labeled *anticipation homesickness* that develops even before the person leaves the familiar environment. In this situation, “The obsessive thoughts about and the focus on the old environment of the homesick inhibit and interfere with the exploration of an adaptation to the new environment” (p. 43).

Two intriguing factors were the absence of geographic distance and separation from family as causes of homesickness (Van Tilburg, 2005). Only 15% of the women were alone and some, 6%, were actually within about five kilometers from their homes. It is also interesting that vacations emerged as a prominent cause of homesickness in other research with Dutch adults. The situation is voluntary, enjoyable, and in most cases the person is accompanied by family or friends. However, these factors do not seem to buffer against homesickness for those who are predisposed.

The Person. Predisposition toward homesickness raises the issue of how individual characteristics affect the development of homesickness. Brewin et al. (1989) and Fisher and Hood (1987, 1988) found that certain attributes made students more or less vulnerable to homesickness. Van Heck et al. (2005) aptly describe the literature examining the relationships between homesickness and temperament and personality as less than voluminous. In fact, research in this area remains sparse.

Eurelings-Bontekoe et al. (1998) examined features of DSM-III-R and ICD-10 personality in two groups of women: those in a state of enduring homesickness and those who experienced homesickness only during holiday trips. A total of 46 volunteers met the first criterion and 96 met the second. A group of 383 women served as a control. In addition

to the survey, 21 of the homesick women participated in group discussions about homesickness.

Overall, both groups of homesick women displayed greater evidence of features of personality disorders than women in the control group (Eurelings-Bontekoe et al., 1998). This effect was independent of whether or not the women were currently experiencing feelings of homesickness. Eurelings-Bontekoe et al. noted that they observed the same pattern in research with homesick men. Based on the participants' DSM-III-R and ICD-10 profiles, avoidant/anxious and dependent personality characteristics indicated the strongest relationship to homesickness; this was consistent with the adult male study as well as with Thurber's (1995) findings for preadolescent and adolescent boys. One feature that distinguished the personalities of the homesick Dutch women was the presence of anger (Eurelings-Bontekoe et al., 1998).

Reflecting the influence of early attachments, 14 of the 21 focus group participants depicted their early childhood environments as neglectful and the remaining seven women described it as over-protective (Eurelings-Bontekoe et al., 1998). In other words, none of the homesick women was raised in an early environment conducive to the formation of secure attachments (Bowlby, 1969). More than half of the women reported being sent to boarding school (Eurelings-Bontekoe et al., 1998). However, rather than serving as a positive learning experience or inoculation against homesickness (Fisher & Hood, 1988), the women interpreted the experience as lack of love or of rejection by parents (Eurelings-Bontekoe et al., 1998). The attachment style of the homesick women could best be described as *ambivalent*. On one hand, they were heavily dependent upon others and strived for harmony

in their relationships but at the same time, they felt angry, pressured, and dissatisfied and longed to be more independent and autonomous.

Although acknowledging that the narratives of a small group of women cannot objectively be called representative, Eurelings-Bontekoe et al. (1998) point out that the overriding themes are insecure attachments and negative separation experiences in childhood, as well as difficulties with anger regulation. In clinical experiences, these characteristics often occur in conjunction with one another.

Van Heck et al. (2005) investigated the relationship between personality and temperament and homesickness using the “Big Five” model of personality. The participants were 206 Dutch adults, ranging in age from 18 to 73 years. Women composed the majority of the sample.

According to their profiles on the Big Five factor model, homesick men and women were fairly introverted, emotionally unstable, and not open to new experiences (Van Heck et al., 2005). In addition, the homesick participants were less capable of dealing effectively with emotional strain, had difficulties with verbal, emotional, or motor regulation, were unable to adapt to changing environment conditions, and had low self-esteem. The homesick women also showed tendencies toward rigidity and submissiveness. According to Van Heck et al., these findings are consistent with and expand upon previous research.

Van Heck et al. (2005) proposed two theoretical models for guiding future research on homesickness. The first was originally proposed by McCrae and Costa as a framework for examining personality theories. The model encompasses five types of personality factors: 1) *basic tendencies*, which includes the five main personality factors in conjunction with physical attributes, cognitive capabilities, physiological drives, and focal vulnerabilities; 2)

characteristic adaptations such as learned behaviors, acquired competencies, beliefs, and goals, and interpersonal adaptations; 3) *self-concepts*; 4) the *objective biography*; and 5) *emotional influences* on development from an ecological perspective.

The second framework is based on Hobfoll's model of *ecological congruence* (Van Heck et al., 2005). According to the model, *resources* such as social support, coping mechanisms, and personality characteristics have a positive, a negative, or no effect on psychological distress and physical symptoms, contingent upon whether or not the constellation of resources is sufficient for or insufficient for or interferes with the emotional, biological, and task demands confronting the person. The central facet of this paradigm is the *fit of resources with demands*, which is affected by a number of factors such as personal and cultural values, environmental constraints, threat appraisal, needs assessment, and perception of the availability of prospective sources of support.

According to Van Heck et al. (2005), an advantage of both models is that they promote the exploration of homesickness and personality from an ecological perspective. Fisher and Hood (1987) included the resources model in conjunction with role strain theory.

Reactions and Responses. Homesickness has cognitive, emotional, physiological, and behavioral manifestations (Van Tilburg, 2005). Interestingly, Van Heck and her colleagues note that crying virtually never appears in studies of homesickness, yet it was one of the most common reactions to homesickness in their study of adult women. Literary references to weeping or tears appear in the *Odyssey* and the Bible as well as in numerous later works.

Van Tilburg et al. (1999) explore all four types of reactions to homesickness in four groups of women: chronically homesick women, homesick prone women, women who had recovered from homesickness, and a control group of non-homesick women. The total

sample included 325 participants, with homesick prone women representing the largest segment. The measures utilized included the CHQ, the Dutch version of the Profile of Mood States (POMS), the Hopkins Symptom Checklist (HSCL) and an assessment of salivary cortisol administered to a sub-group of 57 chronically homesick, homesick prone and non-homesick participants. The chronically homesick women were asked to rate their homesickness at the onset of the study, followed by a second present rating and a retrospective assessment three years later.

The analysis confirmed that homesickness is linked with diminished mood, cognitive problems, and physical symptoms (Van Tilburg et al., 1999). An intriguing finding was that the negative effects were apparent in the *homesick prone* group as well as in the homesick women. Actually, that should not be surprising, given that signs of homesickness often appear prior to the actual move. The prevalence of this effect adds weight to the argument in favor of early identification and intervention for military recruits who might experience homesickness that disrupts or terminates their training (Flach et al., 2000).

Van Tilburg et al. (1999) noted that several studies report that rigidity, or alternately, being closed to new experience, predisposes individuals toward anxiety or other psychological distress in situations that involve even slight changes that would be indiscernible for most people. Preoccupation with worries and the inability to concentrate on daily activities were prevalent among the homesick and among the homesick prone women. In addition, the homesick prone, chronically homesick, and recovering women reported social difficulties, dislike of traveling alone, and fears that were not common among the non-homesick women. Despite the high levels of subjective anxiety and distress reported by the homesick and homesick prone women, Van Tilburg et al. found no clear evidence of elevated

cortisol levels. Based on previous studies, they note that the association between the subjective experience of stress and the physiological stress response is not necessarily clear-cut.

The three-year follow-up disclosed that the probability of recovering from chronic homesickness is not optimistic (Van Tilburg et al., 1999). Only 12.5% of the chronically homesick women said their symptoms had completely abated after three years and another 37.5% ascribed their recovery to returning to their original home environments. Although the study included a sizable number of women who had recovered from homesickness, Van Tilburg et al. pointed out that many experienced homesickness in childhood but not as adults. According to a retrospective analysis of the homesick women's estimates of whether or not they would recover within three years, the group was evenly divided among those who overestimated, underestimated, or made a precise estimate of their chances for recovery. At the same time, the underestimations were slight. Thus, most of the participants were fairly accurate.

The overall conclusion is that for many people, homesickness is not a transient phenomenon, and the physical, psychological, and cognitive consequences can be present in those who are prone to homesickness as well as in those currently experiencing it (Van Tilburg et al., 1999).

Homesickness in Young Adults

Randall (2004) examined homesickness in a study involving 162 first-year university students and their parents. As in the study of Archer et al. (1998), female students expressed stronger feelings of homesickness than did their male peers. Also consistent with Archer et al., anxiety was more strongly linked with homesickness than depression although both were linked with homesickness (Randall, 2004). For both male and female students, emotional

independence from parents served as a powerful protective factor against homesickness. However, certain features distinguished homesick male students, notably shyness and insecure attachment; they also came from families that were less emotionally expressive and supportive and more controlling.

In general, the parents were relatively accurate in assessing their children's homesickness (Randall, 2004). However, their focus was primarily on their children's feelings about missing home rather than in adjusting to a novel environment. Some discrepancies between the self-reports of male students and their parents' appraisals, as well as evidence of more socially desirable responses among students with minimal homesickness, suggest that the male students might have been underreporting their feelings of homesickness. According to Randall, the findings demonstrate that homesickness is quite prevalent and unique from other emotions. Akin to Archer et al. (1998), Randall (2004) argues that homesickness should be explored from a developmental perspective.

Beck, Taylor, and Robbins (2003) applied Aaron Beck's theory of the effects of sociotropy and autonomy on depression to the study of homesickness and psychological distress in first-year college students. According to the theory, individuals who are highly sociotropic would be unduly susceptible to life events involving interpersonal disruptions or loss. The study was designed to expand the theory to adaptation to a new environment, thereby placing homesickness within the context of separation anxiety, adjustment disorder, and disrupted attachment. As conceived by Beck et al., although homesickness is not a formal clinical diagnosis, according to DSM-IV criteria, the symptoms would be diagnosed as Adjustment Disorder with Depressed Mood. The HQ of Archer et al. (1998) was used to assess homesickness in 167 university students during their first semester. Other measures

utilized were the Personal Style Inventory (PSI) and the Center for Epidemiological Studies Depression Scale (CES-D).

An unanticipated finding was that both sociotropy and autonomy were related to homesickness, albeit to different aspects (Beck et al., 2003). As expected, sociotropy was associated with depressive symptoms and with HQ dimensions related to attachment to home. More detailed analysis showed that sociotropy indirectly affected depression mediated by attachment to home. Autonomy was associated with dislike of the university, manifest in symptoms of restlessness, anger, and blame, and was more consistent with the job strain theory of homesickness (Fisher & Hood, 1987). In contrast, sociotropy reflected the grief reaction component of homesickness (Beck et al., 2003).

Watt and Bader (2009) investigated homesickness from the perspective of the human need for a sense of belonging. Also reflecting the role of dependence in homesickness, one assumption was that homesickness would be stronger in individuals with greater needs for affiliation. The researchers also proposed that students who form more close friendships in the new environment and feel more highly accepted will experience less homesickness. To explore their hypotheses fully, Watt and Bader conducted two studies, the first involving international students at five Australian universities and the second involving students at the University of New England (UNE) located in New South Wales. The university is located in a rural area apart from the homes of most students.

The first study found that the need to belong was most strongly related to homesickness (Watt & Badger, 2009). This finding is not surprising, given that the participants were international students dealing with varying degrees of cultural differences between their homelands and the Australian campus. The need to belong was also powerful

for the students in the second study, who represented a fairly homogenous group not far from their homes. The number of close friends at the university did not affect homesickness in either study and length of residence in Australia had no effect on homesickness for the international students.

Length of stay tends to have small or negligible effects. Similar findings have been reported for Dutch and British university students (Stroebe et al., 2002) and adolescents from Russia and the Ukraine who migrated to Israel without their parents (Tartakovsky, 2007). The effects of duration on homesickness tend to be more pronounced in research involving individuals whose time living abroad spans a wide range from several months to many years (Eurelings-Bontekoe et al., 2000). In their study of corporate expatriates, Eurelings-Bontekoe et al. also found that homesickness was higher in employees whose home culture diverged to a greater degree from the host country.

Watt and Badger (2009) were not surprised that making friends at the university did not ameliorate feelings of homesickness. According to the authors, “people *expect* [original emphasis] that making new friends will predict positive adjustment and reduce homesickness” but that is not necessarily the case (p. 526). Paul and Brier (2001) observed that preoccupation with friends at home was more predictive of homesickness among first-year college students than making friends on campus. However, Buote et al. (2007) found that new friendships did indeed buffer homesickness and facilitate adjustment among first-year students, particularly those living on campus.

Buote et al. (2007), who employed both qualitative and quantitative research methods, utilized participants drawn from six Canadian universities. The qualitative data illuminated the dynamics involved in the students’ expectations for and establishment of new

friendships and the various ways the friendships affected their adjustments to the new environment. The students' narratives revealed how being open to new friendships led to their development. Indirectly, the narratives revealed how extraversion and openness to experience can protect against homesickness (Van Heck et al., 2005).

Watt and Badger (2009) observed that homesick and non-homesick students had the same number of friends but the quality of the friendships seemed to differ. That is, the homesick students did not derive the same degree of social support from their friendships as did their non-homesick peers. In their study of young (aged 17-21) and mature (>21 years) local and international students at an Australian university, Ramsay et al. (2007) noted that many of the students desired more support than they received. In particular, the international students wanted more emotional, practical, and information support. Across all groups of students, friends served as the main sources of all types of support.

One criticism of research on social support is that support is a multifaceted concept that is often operationalized too narrowly (Ramsay et al., 2007). There is overall concurrence that there are four main types of support: emotional, practical, informational, and social companionship support. However, few studies address all four facets of support. Ramsay et al. found that overall there was positive association between the extent of the students' adjustments and the amount of each type of support they received. There were also group differences in the sources of support and the students' satisfaction with the support.

According to Ramsay et al. (2007), the most important—and disturbing—finding was that small but significant proportions of local and international students (10.7% and 20.6%, respectively) reported having no source of social companionship support. Although there were no significant differences in the degree of emotional support reported by the local and

international students, the researchers noted that the international students relied heavily on university personnel for support. Roughly half of all the students desired more social companionship and international support and about one-third would have preferred more practical and emotional support. The overall implication is a need for formal channels to help students (or other individuals adapting to a new environment) build strong social support networks.

Urani et al. (2003) examined the effects of social support and social anxiety on homesickness among first year college students at Loyola University. The students were approached during the fifth through seventh weeks of the semester and were asked to report how they were currently feeling and retrospectively to assess how they felt during the first two weeks. Path analysis revealed a significant link between social anxiety and homesickness at the onset of the semester. Although homesickness diminished over time for the students in general, the socially anxious students experienced greater difficulty in building new social networks and in securing social support. Social support protected against homesickness. However, social anxiety can be an impediment to acquiring social support, thereby predisposing socially anxious individuals to higher levels of homesickness.

Homesickness and Adjustment in Military Recruits

Flach et al. (2000) conducted a study exploring the reasons that new recruits drop out of the Royal Netherlands Army (RNLA). The RNLA requires roughly 4,000 new fixed-term privates and corporals annually. Before being selected, all candidates must undergo medical and psychological evaluation and those who pass the examinations begin training immediately, on the theory that they are suitable for military service. However, some recruits drop out before completing training. Combined with recruiting difficulties due to a highly competitive labor market, the dropout phenomenon has led to a serious shortage of military personnel and has been given high priority by the RNLA. The study was driven by increasing dropout rates, particularly a steep increase from 15% in 1998 to nearly 24% in 1999. A particular issue is the number of new recruits who leave within three weeks, a group accounting for almost half of the trainees who drop out. In response to these trends, the RNLA undertook an extensive study at the start of 2000.

The researchers used four modes of inquiry: 1) an analysis of the exit surveys completed by all fixed-term contractors who left the RNLA since March 1999, a total of 601 recruits; 2) telephone interviews with a random sample of 47 fixed-term contractors who began training in the second half of 1999 and left within three weeks; 3) face-to-face interviews with the 43 contractors who began training in February 2000 and left within three weeks; and 4) a questionnaire given to 149 officers and noncommissioned officers (NCOs) involved in training (Flach et al., 2000).

The former recruits provided a variety of reasons for ending their training (Flach et al., 2000). Homesickness emerged as the second most prevalent reason for leaving. In

descending order, the five most commonly cited reasons were: *military life did not suit me* (46%), *homesickness* (28%), *the situation at home* (24%), *disappointing salary* (24%), and *did not get the function desired* (18%). Homesickness was once again the second most common reason for leaving given in interviews. Almost one-third of those interviewed (32%) cited homesickness as a reason for leaving training. Dissatisfaction with specific features of the training was the predominant reason for leaving (58%), and 28% left due to factors at home. Flach et al. emphasized the fact that the respondents were free to give more than one reason and very few reported only one reason.

Flach et al. (2000) drew upon the work of Vingerhoets, Van Tilburg, and their colleagues for the definition and features of homesickness. They note that about 30% of the new recruits reported homesickness as a major reason for ending their training; however, it was not recognized by a sizable proportion of the instructors. They surmise that candidates with certain predisposing characteristics, putting them at high risk for homesickness would not have passed the selection process. Furthermore, homesickness was typically cited in conjunction with other reasons for leaving. Based on the patterns that surfaced, the researchers divided the former contractors into five clusters. Homesickness figured prominently in two of the clusters, which yielded three ways in which homesickness influenced the decision to terminate training: 1) homesickness resulting from the situation at home, 2) homesickness resulting from poor adjustment to military life, and 3) homesickness resulting from the inability to deal with a possible mission abroad.

For individuals in the first group, homesickness emanated from a desire to provide support for relatives or friends who were dealing with issues such as death, illness, or psychosocial distress (Flach et al., 2000). For those whose homesickness resulted from being

unable to adjust to military life, a striking finding was that the overwhelming majority (86%) embarked on their training with high enthusiasm and motivation. Flach et al. suggest that their initial energy (as well as positive psychological profiles) was the reason why the instructors were unaware that they were homesick. The main obstacle seemed to be adapting to the rigors and demands of the new environment. Two-thirds of the respondents stated that the transition from civilian to military life was too abrupt and difficult. In fact, Flach et al. suggest that “culture shock” might properly describe the dramatic transition from civilian to military life. The survey responses disclosed several possible causes including insufficient knowledge about the training, a de-motivating first-day program (20% said they thought of leaving the first or second day), excessively difficult training the first few weeks (80% said the training accelerated too rapidly and they felt extremely pressured), young age (the youngest recruits were the most easily prone to homesickness), and training that was too strict and authoritarian, which contrasted sharply with the more permissive way most young adults are used to dealing with parents, teachers, and other authority figures.

The last reason, the perceptions of the recruits who left of undue strictness, revealed a sharp disparity between the instructors and the former contractors (Flach et al., 2000). Although the vast majority of instructors (90%) disagreed with the statement, “*the treatment of the candidates by the instructor is too strict and not in keeping with the time,*” more than one-quarter of the candidates who left training were dissatisfied with the way they had been treated.

Flach et al. (2000) described the third group, those whose homesickness was related to apprehension about being deployed abroad, as a unique group and the least easily recognized. Most members of this group left training at a later stage than the others and

appeared to adapt fairly well to military life. It is possible that their homesickness might be better understood in the context of acculturation. Homesickness experienced by international students, expatriates, and immigrants has distinct features related to language, culture, geographic distance and other factors (Eurelings-Bontekoe et al., 2000; Kegel, 2009; Ramsay et al., 2007; Tartakovsky, 2007). Flach et al. (2000) assert that homesickness related to apprehension regarding deployment abroad warrants further research attention.

In order to reduce attrition among new recruits, the RNLA adopted a number of strategies (Flach et al., 2000). One strategy involves offering candidates who leave military training the opportunity to return within six months without having to undergo a second selection process. Even more important, the RNLA made several changes to the initial training program. One is the implementation of an introductory course designed to acquaint new recruits with military life and promote the formation of a cohesive group. They also altered the first day of the program, which was heavily criticized. In fact, the overall training program was redesigned to provide the new candidates with much more extensive information on military life, along with providing more opportunities for them to contact home. Additional changes include an extension of the training program from three to four months, efforts to improve the quality instruction including more rigorous instructor evaluation, teaching the instructors how to smooth the transition from civilian to military life, and raising their awareness of homesickness so they can recognize it and work to diminish it.

At the time of the study, researchers at the University of Leiden had devised a questionnaire for estimating the probability of homesickness, which with further validation, could be used as part of the psychological evaluation for the military (Flach et al., 2000). Overall, the techniques adopted by the RNLA to familiarize new recruits with the training

program and ease them into military life are consistent with the strategies recommended for children and adolescents (Thurber, 2005; Thurber & Walton, 2007).

Sandal et al. (1999) explored the relationship between personality factors and coping strategies in a sample of submarine crewmembers and office personnel employed by the Royal Norwegian Navy. One of the assumptions guiding the study was that poor coping skills would be linked with feelings of homesickness and isolation as well as physical symptoms and other manifestations of psychological distress. The instruments utilized included the Personality Characteristics Inventory (PCI), the Utrecht Coping List (UCL), and measures of salivary cortisol taken during three submarine missions. The Submarine Stress Questionnaire (SSQ) consisted of seven items specific to the situation. "Feeling Isolated and Homesickness" is one of three components, along with "Social Factors" and "Leadership and Workload."

Although there were some correlations between the scales of the PCI and the UCL, Sandal et al. (1999) noted that there was no clear-cut relationship between the two. Interpersonal orientation, motivation, and habitual coping strategies emerged as the main predictors of how the submarine crewmembers coped with the stressful environment. Those who employed more effective coping strategies were less stressed by the sustained close proximity to others and were less vulnerable to feelings of homesickness and isolation because of being separated from their family, friends, and familiar surroundings. Problem-focused coping techniques and interpersonal sensitivity in conjunction with powerful achievement motivation were the main drivers of superior coping skills during submarine missions.

Although a submarine is a highly unique environment, the overall pattern supports the idea that the ability to cope well with stress is a protective factor against homesickness (Fisher & Hood, 1987, 1988; Van Heck et al., 2005; Van Tilburg, 2005).

Adjustment to the Transition to Military Life. Shulman et al. (2000) approached the transition from high school to military service from the perspective that positive family support fosters autonomy in adolescents that will help them make a successful transition to adult life. The study focused on the connections between family relationships and attitudes toward separation and the adjustment of Israeli soldiers during the initial weeks of basic training. Although military service is mandatory for both men and women in Israel, the Israeli studies focused on men because their training is more intensive and they are expected to serve a longer time. The participants were a diverse group of 48 young men who were contacted during the third week of BMT. Every third week, the soldiers were allowed to spend weekends with their families and they were requested to have both their parents complete a questionnaire.

The results supported the assumption that the young soldiers who grew up in a family milieu that encouraged closeness and personal growth and whose parents effectively coped with their son's leaving for military service were better adjusted during the first weeks of BMT. Shulman et al. (2000) observed a direct relationship between the parents' perceptions and the assessments of the commanders and other soldiers but an indirect relationship between the parents' responses and the soldiers' perceptions of military and social competence. This last finding is probably not surprising, given the fact that during adolescence and young adulthood, attachment figures outside of the family take precedence over family members as sources of support and reference. Shulman et al. view this as

especially pertinent during military training when close ties are forged and become central to soldiers' lives. The researchers invoke Weiss, who asserted that the bonds that develop under conditions of stress and constant proximity represent attachments.

At the same time, Shulman et al. (2000) emphasize that family relationships set the stage for relationships built in adult life. Parental factors accounted for part of the observed relationships between the soldiers' perceived social nominations, their relationships with a best friend, and the number of social nominations they received. Operating in a similar fashion to 360-degree or multi-rater feedback, the information gained from four distinct sources, namely the soldiers, parents, commanders and peers, offers a firm foundation for future research into the adjustment of new recruits.

Also, in examining the influence of parenting styles, Wintre and Ben-Knaz (2000) focused specifically on adaptation to military life as distinct from adapting to university life. The study draws from previous research documenting that authoritative parenting, characterized by monitoring the child's behavior, setting developmentally appropriate expectations, and engaging in clear and direct communication with the child, is the most conducive to the child's healthy development. Authoritative parent can be viewed as a balanced approach parenting, situated between authoritarian and permissive parenting.

According to Wintre and Ben-Knaz (2000), authoritative parenting is often seen as the "best" parenting style, reflecting a "generalized goodness" (p. 147). Alternately, they propose that the advantage of authoritative parenting may come from its congruence with the authoritative school environment. However, the army is an authoritarian as opposed to an authoritative environment. The researchers propose that permissive parenting might benefit young people embarking on a venture with more freedom such as traveling. Although

homesickness was not the focus of the study, the prospect that different parenting styles might affect the development of homesickness in two very different contexts in which homesickness might emerge is an intriguing prospect for future research.

Like all military organizations, the Israeli army is based on discipline, tradition, and a formal chain of command. At the same time, Wintre and Ben-Knaz (2000) point out several distinguishing features. First, the compulsory service at the age of 18 places the transition to the army from high school in the context of a developmentally appropriate task analogous to the transition to college for most North American youth. Second, as a result of the draft, there is no self-selection process involved. Third, the Israeli army is in a situation in which the threat of active combat and the possibility of dying are very real. This intensifies the need for discipline and obedience, which in turn, reinforces the authoritarian nature of military training.

The participants were 144 young men between the ages of 18 and 20 who were in the initial stages of training for the Israeli Defense Forces (IDF). All were undergoing rigorous intensive training in an all-male, paratrooper combat unit. The group was culturally diverse; 45% of the mothers and 55% of the fathers were born outside of Israel, although 88% of the trainees were born in Israel.

Ironically, permissive parenting had the most positive impact, operating indirectly through self-esteem and perceived stress, and exerting a positive, total effect on three of the four models of adjustment outlined by Wintre and Ben-Knaz (2000); these involved personal-emotional adaptation, social comfort, and performance and motivation. Authoritarian parenting exerted a positive effect on personal-emotional adaptation, via the mechanisms of mutual reciprocity and self-esteem. In contrast to prior research involving

parenting styles and adjustment to university life, authoritative parenting had negative effects, operating through perceived stress and depression on attachment and commitment and personal-emotional adaptation.

Wintre and Ben-Knaz (2000) construe their findings as evidence for a dynamic-context model of how parenting influences adjustment, which is related to Bronfenbrenner's ecological model. Similar research could discern whether or not the same pattern emerges in North America where authoritative parenting is the predominant mode and military service is undertaken under different conditions. The finding which is considered highly applicable to the U.S. military is that both perceived stress and depression were linked with poor adjustment to the army on all dimensions. The ubiquity of these associations are driving efforts toward better identification and intervention for new recruits who exhibit signs of depression and anxiety (Englert et al., 2003; Fiedler et al., 2004; Lubin et al., 1999; Martin et al., 2006; Staal et al., 2000; Williams et al., 2002, 2004, 2007).

Attachment styles. Both Scharf et al. (2004) and Mayselless (2004) used developmental and attachment theory as the frameworks for their research on Israeli men making the transition to military service. Scharf et al. (2004) began their longitudinal study by administering the Adult Attachment Interview (AAI) to 88 youths during their senior year of high school. Used extensively to assess attachment styles in adolescence and adulthood, the AAI classifies individuals into one of three categories. *Autonomous* individuals have secure attachments and are capable of simultaneously maintaining their independence by forming close relationships with others. They are also expected to be adaptable and have good coping skills. *Dismissing* individuals tend to downgrade the influence of early attachments on their development, detach from or suppress expressions of distress, distrust

others, and maintain emotional distance from others. Finally, *preoccupied* individuals are confused about their past experiences and often vacillate between anger and passivity. Individuals in this group most closely resemble the homesick prone personality (Eurelings-Bontekoe et al., 1998; Van Heck et al., 2005).

One year after the participants completed the AAI as high school seniors, Scharf et al. (2004) surveyed them and their peers regarding their adaptations to military services. Three years later, the participants and their parents engaged in in-depth interviews about the young men's independence and capacity for intimacy.

The results confirmed the fact that more autonomous participants made more extensive use of problem-focused coping strategies and coped with BMT more effectively than those with a dismissing style (Scharf et al., 2004). Furthermore, the peers of autonomous soldiers concurred that they had superior coping skills and higher social competence. Not surprisingly, the autonomous soldiers reported having greater support from their parents during the intensive and stressful training period than did dismissing soldiers. The comparison is made only between those with autonomous and dismissing attachment profiles because only a few soldiers exhibited preoccupied attachment.

At the three-year assessment, marking the end of the military service, the securely attached autonomous young men had better quality relationships with friends, parents, and romantic partners than did the dismissing participants (Scharf et al., 2004). No significant relationships emerged between attachment styles and self-efficacy or individuation. At the same time, autonomous individuals tended to be more capable of adapting to challenging experiences and capitalizing on their prospective value as learning experiences. From an alternative perspective, Scharf et al. construe their findings as evidence that the differences

between autonomous and dismissing individuals become more pronounced under stressful conditions that present personal challenges and highlight personal vulnerabilities or inner strengths.

Notably, an earlier study conducted by Scharf demonstrated that autonomous adolescents were more capable of coping with severe separations, whereas dismissing adolescents were least able to cope with severe separations (Scharf et al., 2004). In the longitudinal study, the main advantages of an autonomous attachment profile were the ability to cope constructively with challenging and stressful situations and form close bonds with others.

Mayseless (2004) explored the development shift from parents to peers as attachment figures and the effects of this shift on adaptation to military service. The study was designed as a replication of two earlier research projects which examined the transfer of attachment at adolescence and included assessments at two points: three months prior to entry into the army and six months later after completing BMT. The participants were 143 18-year old men chosen to serve in IDF combat units. By the second assessment, a subgroup had been transferred to the Israeli Navy although they did not differ from the group as a whole.

As anticipated, the young men were in the process of transferring their attachment from their parents to close friends and romantic partners. At the same time, although the peers clearly took precedence as a "safe haven," Mayseless (2004) emphasized the fact that the parents continued to provide a secure base (p. 549). This trend parallels the development of North American adolescents and thus could be useful for understanding adaptation to military training in the U.S. Participants with insecure attachments (either avoidant or dependent) were less advanced in navigating the transition.

Contrary to the typical finding of benefits for secure attachment, Mayseless (2004) observed that the soldiers who feared closeness were the quickest to abandon their parents as a secure base and seek out the company of peers. They appeared to be compensating for the absence of close bonds with their parents through friendships with peers and appeared to adjust quite well to military life. On the other hand, fear of abandonment was related to poorer adjustment; this is consistent with other studies.

Self-reliance. Ainsworth and Bowlby (1991) view self-reliance as a positive outcome of a secure base in childhood. Quick et al. (1996) investigated the impact of self-reliance on successful completion of BMT among new U.S. Air Force recruits. A preliminary study was conducted to assess the construct validity of the *Self-Reliance/C* and *Self-Reliance/O* questionnaires designed to evaluate counterdependence and overdependence, respectively. The participants were two groups of “regular” trainees (one male and one female) nearing the end of their training and the third group was composed of “problem trainees,” men and women clinically diagnosed with medical or behavior problems that would postpone or prevent the successful completion of BMT.

Comparisons showed that the regular trainees had significantly higher self-reliance, self-esteem and lower evidence of burnout than the problem trainees (Quick et al., 1996). The superior self-reliance of the regular trainees was apparent on both self-reliance questionnaires. The second study, devised to determine the predictive validity of the questionnaires and involving a much larger sample, took place after the regular trainees graduated from training. No major differences between the graduates and non-graduates emerged on the *Self-Reliance/C* but the *Self-Reliance/O* scores clearly showed that the non-graduates were significantly higher in over-dependence when they began BMT. This pattern

is largely analogous to the detrimental impact of fear of abandonment but not fear of intimacy on the adjustment of the Israeli soldiers (Mayseless, 2004).

Quick et al. (1996) concluded that self-reliance was useful for discerning Air Force recruits who would be more or less susceptible to psychosocial problems such as burnout, posttraumatic stress disorder (PTSD), and other stress-related disorders. In the second study, the researchers pointed out that 93.2% of the regular trainees successfully completed training, thereby implying that the Air Force has effective selection criteria. Based on the link between secure attachments and self-reliance, Quick et al. propose that interventions designed to increase social support and by extension, self-reliance, may be key to helping new recruits develop independence and coping skills. In fact, this was the case with an intervention that helped at-risk Air Force recruits develop important social support resources and coping skills that enhanced their sense of self-reliance. Similar programs have proven effective in the U.S. Navy (Williams et al., 2004, 2007) and the Australian army (Cohn & Pakenham, 2008).

Conclusion

Homesickness is a ubiquitous and generally mild response to being separated from one's home, family, and friends and to being confronted with adaptation to a new environment. For some individuals, homesickness reaches a magnitude that disrupts normal functioning analogous to pathological mourning or grief (Eurelings-Bontekoe et al., 1998).

A persistent myth surrounding homesickness is that it affects only children. In American culture, this idea is accompanied by the belief that not being able to conquer homesickness is a sign of weakness or failure (Matt, 2007b). The internalization of such beliefs would make it especially difficult for military recruits to admit to feelings of homesickness. At the same time, evidence from the few military studies and the existing body of research on homesickness suggests that homesickness plays a role in depression, anxiety, and adjustment difficulties experienced by new recruits. Programs designed to promote successful adjustment have proven highly effective (Williams et al., 2004, 2007; Quick et al., 1996). However, none adopted by the U.S. military specifically deal with homesickness.

The most extensive study of homesickness in the military comes from the RNLA (Flach et al., 2000). The fairly high prevalence of homesickness and its impact on the decision to terminate training was an unexpected finding of a major initiative to reduce attrition. In response to the information, the RNLA undertook efforts to better prepare new candidates and ease them into the rigorous training program. University researchers developed a questionnaire designed to identify candidates at high risk for homesickness and incorporate it into the psychological evaluation. There is sufficient knowledge of predisposing factors to facilitate early identification.

A program developed to enhance self-reliance and coping through social support has proven effective in helping U.S. Air Force cadets who have psychosocial problems complete their training (Quick et al., 1996). A psychoeducational program can easily be adapted to include components addressing the features of homesickness and be tailored to the individual profiles of new recruits.

Specific Hypotheses

The following research hypotheses were investigated.

- 1) There will be a negative correlation between HQ scores and number of times a cadet has been away from home.
- 2) There will be a significant, positive correlation between HQ score and number of reported health issues at the Academy.
- 3) There will be a significant, negative correlation between HQ score and Military Performance Average (MPA), Physical Education Average (PEA), as well as Grade Point Average (GPA)
- 4) There will be a significant, positive correlation between HQ score and number of demerits received by cadets.
- 5) Males will report less homesickness than females on the HQ.

CHAPTER 3 - Method

Participants

Three groups of participants were used; total number of participants was 176. Forty-four participants were from the PEERS program, a nationally recognized program at many colleges, teaching college students counseling skills to help other student deal with stress and other problems. This study received 99 participants from the Behavioral Science Pool at the Academy. The Behavioral Science pool is made up of voluntarily participating cadets who receive extra credit by taking part in various studies. The remainder of the participants, 33, was from the Peak Performance Center, which is the college counseling center at the Academy. Participants consisted of 60 freshman, 43 sophomores, 54 juniors, and 18 seniors. One-hundred and fifteen participants were males, and 61 were females. Although age was not asked on the questionnaire, the average age of students at the Academy is 18-24.

Procedures

The data were collected in three different ways over a two week period during the spring semester of 2010. As soon as approval for the study was given, the survey was placed on SurveyMonkey so that students from the Behavioral Science Pool could complete it and receive extra credit. An e-mail was sent from the chair of the Behavioral Science Pool, indicating that the study was available. After two weeks, data were collected and the survey was removed from the website. During the same two week period, Captain Banning met with the PEERS at their monthly meeting and handed out the survey. Everyone at the meeting, 44 participants, completed the survey. Although there are 85 PEERS, only 44 were available for data collection. Last, over the same two week period, Captain Banning handed out surveys to anyone coming to the Peak Performance Center for counseling. No one declined the survey,

leading to 33 participants. A statement regarding voluntary participation (Appendix C) was included in SurveyMonkey and was read to volunteers at the PEERS meeting and at the Peak Performance Center. The AI created a second survey monkey for students from the Behavioral Science Pool to log in to and utilize so that results would not be connected to the students names. However, the AI was able to give those students extra credit for participating in the survey. The data were stored on the AI's computer, which is password protected, and is in a locked office in the Peak Performance Center. The Peak Performance Center also requires a code to enter the counseling area.

Dependent Variables Measurements

Cadet Health. Cadets were asked how often they experience somatic complaints such as headaches, diarrhea and stomachaches with choices being never (1), sometimes (2), often (3), or very often (4). Each response was coded with a number.

Trainee Military Performance. Trainees were asked to submit current Grade Point Average (GPA), Military Performance Average (MPA), and Physical Education Average (PEA).

Behavioral Issues. Cadets were asked how many demerits they had received since coming to the Academy.

Gender Differences. All cadets were asked 'gender' as part of the HQ.

Experience as Predictive Factor. Cadets estimated how many times they had the experience of being away from home, for periods of 3 days, of 5 days, of 1 week, of 2 weeks, of one month and of more than a month.

The Homesickness Questionnaire

Criticizing the existing research for assessing homesickness as if it were a unidimensional phenomenon, Archer et al. (1998) developed an instrument operationalizing homesickness as a type of grief reaction. Consequently, the Homesickness Questionnaire (HQ) captures cognitive, motivational, emotional, and behavioral elements typically associated with grief such as intrusive thoughts about one's home, a powerful desire to return home, anger toward individuals connected with the separation, anxiety and depression, and behaviors aimed at maintaining connections with home. The HQ also includes "reversed homesickness" items, also derived from grief reactions such as, "There is so much going on here that I hardly ever think about my home" and "I am really happy to be here at the university" (p. 209). Notably, the HQ was created for use with college students, following the work of Brewin et al. (1989) and Fisher and Hood (1987, 1988); however, the questionnaire can easily be adapted to military recruits, expatriate multinational employees, or other adult populations. The features of grief and corresponding questions are in Figure 1.

Archer et al. (1998) tested the HQ in three samples of first-year college students at a time, roughly six weeks into their second semester. The HQ was administered in conjunction with the single-item homesickness measure utilized by Fisher and Hood (1987, 1988), the MHQ, the CFQ, and the Impact of Events Scale (IES). Archer et al. (1998) chose the IES because it encompasses the two dimensions of avoidance and intrusion, which are involved in grief reactions, despite the fact of its being devised to assess posttraumatic stress

Table 1.

Features of grief and corresponding statements

Features of grief	Statement
Preoccupation/Intrusive thoughts	I can't help thinking about my home I hardly ever think about my home (R) When I'm thinking about nothing in particular my thoughts come back to home I can't concentrate on my work because I'm always thinking about home There is so much going on here that I hardly ever think about home (R)
Distress related to missed attachment	I get really upset when I think about home Thinking about home makes me cry
Seeking to maintain attachment	I visit home as often as I can I write home every week It upsets me if I am unable to phone home each week I rarely write home (R) I hardly ever visit home during the term time (R)
Dreams related to home	I dream about my home I dream about my friends at home I often dream about my family back home
Restlessness	I can't seem to settle here at the Academy I feel restless here I've settled in really well at the Academy (R) I can't concentrate on my work
Anger/blame	I hate this place The people here annoy me My parents pushed me into coming to college I am really happy to be here at the Academy (R)
Guilt	I wish I had never come to the Academy I blame myself for having come to the Academy
Loss of self	I feel empty inside I feel as I've left part of me at home
Identification	I try to make my room like that at home I am drawn towards people who come from my hometown
Avoidance	I try to shut off thinking about my home If I ever went home for the weekend, I wouldn't come back I avoid going home because it would be too upsetting If I go home for the weekend I feel excited at the prospect of coming back to the Academy (R)

Note: R indicates items that were reverse-scored.

The 33-item HQ proved internally consistent (Cronbach's Alpha - .88) and revealed a factor structure relevant to the way in which previous researchers conceptualized homesickness (Archer et al., 1998). In addition, the total HQ scores were strongly correlated with the single-item assessment of homesickness and 28 of 33 items effectively discriminated between subgroups classified according to their profiles on the single-item studies (Brewin et al., 1989; Fisher & Hood, 1987, 1988). The decisive finding was that homesickness emerged as a multifaceted rather than a unidimensional concept. Noting that there was some support for both the separation and job strain models, Archer et al. (1998) found that even though the predominant factor was attachment to one's home, the students' reactions to the university environment also affected their feelings of homesickness. Adding to the complexity, the researchers observed that some HQ items failed to load highly on either one of the two main factors but nonetheless revealed significant distinctions between the homesick and non-homesick participants.

Minimal modifications were made to the HQ for this study. The word "university" was replaced with "Academy" because the measure is being given in a different setting. All other parts of the measure were unchanged.

CHAPTER 4: Results

Analysis of HQ

Descriptive Statistics. Analysis of the HQ revealed a mean of 71, and a standard deviation of 13.427. Archer et al. (1998) reported a mean of 65 on the 33-item HQ for first year university students. First year cadets showed a mean of 64 on the 33-item measure. Therefore, HQ scores for this study were quite similar to the Archer study.

Reliability. The HQ showed good internal consistency (Cronbach's Alpha = .89, N=176, N of items = 39).

Factor Analysis. Results of the Rotated Component Matrix (Extraction method: principal component analysis; Rotation method: varimax with Kaiser normalization) indicated two factors; one related to attachment to home, and the other related to disliking the Academy, as shown in Appendix G. Table 2 summarizes the questions that loaded most heavily on each factor.

Table 2.

Questions Loading on Subscales

Factor 1 – Attachment to Home

I can't help thinking about home

When I'm thinking about nothing in particular, my thoughts always come back to home

There is so much going on here that I hardly ever think about home

When not at the Academy, I would visit home as often as I can

I would like to phone home every day

If given the choice, I would rarely phone home*

I often dream about my family back home

Factor 2 – Dislike of the Academy

I wish I had never come to the Academy

I can't seem to settle here at the Academy

I hate this place

To be honest, I don't feel like making the effort to adjust to the Academy

No matter what I do, I can't settle in here

I don't feel like I fit in

I blame myself for having come to the Academy

I feel restless here

* = Reversed scoring item

Research Hypotheses

HQ Score and Experience Away from Home. The Pearson R Correlation was significant (correlation = $-.131$, $p < .05$), having a negative relationship with regards to total HQ score and the experience away from home category. A significant, negative relationship was shown for the Dislike subscale (correlation = $-.141$, $p < .05$); however, no significant relationship was revealed for the Attachment subscale (correlation = $.105$, $p = .083$)

Correlation between HQ and Somatic Complaints. The Pearson R Correlation between total HQ score and Somatic complaints showed a significantly positive relationship (correlation = $.220$, $p < .01$). Further, the two subscales, Attachment (correlation = $.206$, $p < .01$) and Dislike (correlation = $.211$) showed a significantly positive relationship.

Correlation between HQ score and GPA. The Pearson R Correlation between total HQ score and GPA showed a significantly negative relationship (correlation = $-.250$, $p < .01$). The two subscales, Attachment (correlation = $-.174$, $p < .05$) and Dislike (correlation = $-.295$, $p < .01$) also showed significant results.

Correlation between HQ score and MPA. Results of the Pearson R Correlation between HQ score total and MPA were not significant (correlation = $-.090$, $p = .120$). There was a significant negative relationship between HQ score and MPA (correlation = $-.143$, $p < .05$) for the Dislike subscale. However, no significant relationship was found for the Attachment subscale (correlation = $.045$, $p = .278$).

Correlation between HQ score and PEA. There was no significant Pearson R Correlation between PEA and HQ score (correlation = $.082$, $p = .144$). The two subscales, Attachment (correlation = $-.078$, $p = .155$) and Dislike (correlation = $.035$, $p = .325$), did not reveal significant correlations between the two factors.

Correlation between HQ Scores and Demerits. Results of the Pearson R Correlation did not reveal a significant relationship between total HQ score and Demerits (correlation = .054, $p = .240$). Results were also not significant for the subscales, Attachment (correlation = .073, $p = .170$) and Dislike (correlation = .071, $p = .411$).

Table 3.

Correlation Results

	Exp	Som	GPA	MPA	PEA	Dem	HQ	Dis	Attach
Mean	4.68	5.72	2.80	2.98	2.70	19.59	60.94	19.22	25.87
SD	1.79	7.61	6.14	0.28	0.48	43.90	10.71	4.58	6.15
Exp	-	0.09	0.05	0.07	0.06	0.06	-0.13**	-0.14**	-0.11
Som	0.09	-	-0.21*	-0.21*	-0.12	0.05	0.22*	0.21*	0.21*
GPA	0.05	-0.21*	-	0.47*	0.20*	-0.20*	-0.25*	-0.30*	-0.17**
MPA	0.07	-0.21*	0.47*	-	0.14**	-0.40*	0.09	-0.14**	0.05
PEA	0.06	-0.12	0.20*	0.14**	-	0.06	-0.08	-0.04	-0.08
Dem	0.06	0.05	-0.20*	-0.40*	0.06	-	0.05	0.02	0.07
HQ	-0.13**	0.22*	-0.25*	0.09	-0.08	0.05	-	0.87*	0.86*
Dis	-0.14**	0.21*	-0.30*	-0.14**	-0.04	0.02	0.87*	-	0.59*
Attach	-0.11	0.21*	-0.17**	0.05	-0.08	0.07	0.86*	0.59*	-

*Statistically significant findings $p < .01$

**Statistically significant findings $p < .05$

Note: The Scales are: Ex= Cadet's experience away from home; Som = Reported Somatic Complaints; GPA = Grade Point Average; MPA = Military Performance Average; PEA = Physical Education Average; Dem = Demerits Received; Dis = Dislike Factor; Attach = Attachment Factor.

Ancillary Statistics

Gender Differences. Further analysis of HQ results revealed some differences between gender responses. Results of Pearson R Correlations by gender are listed below (Table 4). For some categories, there were significant correlations for men but not for women such as the relationship between HQ total and Experience Away from home (Men: correlation = $-.187$, $p < .05$; Women: correlation = $.029$, $p = .411$), HQ and Somatic Complaints (Men: correlation = $-.261$, $p < .01$; Women: correlation = $.186$, $p = .075$), and HQ and GPA (Men: correlation $-.314$, $p < .01$; Women: correlation = $-.015$, $p = .454$). Results were also significant for the subscales, Dislike and Attachment, for the same factors discussed above (Table 3).

It is of note that both men and women showed a significant, positive relationship for the Attachment Subscale and Somatic Complaints (Men: correlation = $.202$, $p < .05$; Women: correlation = $.231$, $p < .05$). However, although the men continued to show significant results when comparing both the HQ total and Somatic complaints (correlation = $.261$, $p < .01$) as well as when comparing the Dislike Subscale and Somatic complaints (correlation = $.277$, $p < .01$), the women did not show significant results, as can be seen below in Table 4. Last, only the men showed a significant, negative relationship when comparing the Dislike subscale and MPA (correlation = $-.215$, $p < .01$). The result for men did not show a significant relationship when comparing MPA to HQ total (correlation = $.143$, $p = .287$) or the Attachment Subscale (correlation = $.101$, $p = .144$).

Table 4.

Gender Differences

Factor	<u>HQ Total</u>		<u>Dislike</u>		<u>Attachment</u>	
	Men	Women	Men	Women	Men	Women
Exp	-.187**	.029	-.201**	.046	-.159**	.009
Som	.261*	.186	.277*	.156	.202**	.231**
GPA	-.314*	-.015	-.368*	.023	-.274*	.099
MPA	.143	.075	-.215**	.103	-.101	.081
PEA	-.148	-.015	-.120	.002	-.137	.011
Dem	-.093	.044	-.025	.108	-.084	-.057

*Statistically significant findings $p < .01$

**Statistically significant findings $p < .05$

Note: The Scales are: Ex= Cadet's experience away from home; Som = Reported Somatic Complaints; GPA = Grade Point Average; MPA = Military Performance Average; PEA = Physical Education Average; Dem = Demerits Received; Dis = Dislike Factor; Attach = Attachment Factor.

To further evaluate gender differences, an Independent Samples T-Test was performed using a 95% confidence interval (Table 5). The only significant difference between means was for PEA ($t=5.78$, $p < .01$). There was no significant difference between men's and women's HQ total, Attachment Subscale, or Dislike Subscale scores.

Table 5.

T-Tests for Gender

	Mean (Men)	Mean (Women)	t (174)	p
Exp	4.66	4.70	-0.16	0.88
Som	4.79	7.48	-2.25	0.09
GPA	2.85	2.79	0.57	0.57
MPA	2.98	2.99	-0.18	0.86
PEA	2.84	2.43	5.78	0.00*
Dem	23.78	11.84	1.72	0.09
HQ	72.00	70.41	0.78	0.88
Dis	19.63	18.46	1.63	0.10
Attach	25.97	25.70	0.26	0.80

*Statistically significant findings $p < .01$

Note: The Scales are: Ex= Cadet's experience away from home; Som = Reported Somatic Complaints; GPA = Grade Point Average; MPA = Military Performance Average; PEA = Physical Education Average; Dem = Demerits Received; Dis = Dislike Factor; Attach = Attachment Factor.

Correlation between HQ score and Sponsor Family. Results of the Pearson R

Correlation showed a significant negative correlation between Sponsor Family Rating and HQ total (correlation = $-.23$, $p < .01$), Dislike Subscale (correlation = $-.21$, $p < .01$) and the Attachment Subscale (correlation = $-.22$, $p < .01$). To further evaluate for gender differences, an Independent Samples T-Test was used. Results were not significant (Table 7).

Table 6.

Correlation Results for Sponsor Rating

	HQ	Dislike	Attachment
Sponsor	-0.23*	-0.21*	-0.22*

*Statistically significant findings $p < .01$

Table 7.

T-Tests for Gender and Sponsor Family Rating

	X Men	X Women	t	p
Sponsor	7.72	7.57	-0.31	0.76

Chapter 5 - Discussion

Analysis of the HQ supports previous research (Archer et al., 1998) showing the measure to be internally consistent and reliable. Additionally, factor analysis of the HQ revealed two dimensions of homesickness, disliking the Academy and attachment to home. However, some questions did not load on either factor, which may suggest that homesickness is more complex than the two factors listed.

It is not surprising that cadets' homesickness scores correlated negatively with GPA, based on previous research indicating poor performance and homesickness (Fisher and Hood, 1998). As noted previously, homesickness often involves ruminating thoughts (Van Tilburg, 1995). Cadets experiencing homesickness may have more difficulty focusing, paying attention and studying. The effect may be a lower GPA. Motivation may also play a role. Significantly homesick cadets may have a strong attachment to home, as well as a significant dislike for the Academy. Such factors may decrease a cadet's motivation to perform well.

Although GPA and Homesickness showed a negative relationship, this occurred only for men, and not for women. As noted in previous research (Matt, 2007a, 2007b; Thurber & Walton, 2007; Van Tilburg, 2005), there is a strong stigma regarding homesickness which prevents adults, particularly men, from seeking help. The women may be more likely than men to discuss homesickness with their peers, or to attend counseling. The college counseling center, the Peak Performance Center, is typically over-represented with women patients. Although the population at the Academy is approximately three-quarters men and one-quarter women, the PPC case load is exactly the opposite, one-quarter men, and three-quarters women. Homesick men may keep their thoughts and feelings about home to

themselves, and thus experience ongoing symptoms. By not seeking help or social support, the male cadet's performance, particularly grades, may decline.

Although women reported more somatic complaints overall, their physical symptoms were not correlated with homesickness. Homesickness may be only one factor related to female somatic complaints. Stress of academic and military life may also play a role. Women may experience stressors that are different from men's stressors because male stereotypes may prevail at the Academy. It appears that homesick men are more likely to report somatic complaints. As noted, men are less likely to discuss homesickness due to the stigma of being homesick. Men may be more likely to report physical complaints, because the stigma is most likely lower for health concerns as compared with the stigma of being homesick. Women's somatic complaints were correlated with HQ score, but only for the Attachment subscale. Women may experience somatic complaints on a significant level, only when their homesickness is strongly related to home relationships.

It appears that improved social support can buffer against homesickness (Brissette, Scheier, & Carver, 2002; Ramsay, Jones, & Barker, 2007; Urani, Miller, Johnson, & Petzel, 2003). The higher a cadet rated his or her sponsor family, the less homesickness the cadet experienced. The current study also shows how an actual sponsor family in the local area, can help cadets reduce overall feelings of homesickness. Although beyond the scope of this study, these results could also be reflective of the quality of the sponsor family a cadet receives.

Although previous research suggested a relationship between homesickness and behavioral issues (Thurber, 1995), this study failed to support such a notion. It did not appear

that increased homesickness related to additional behavioral problems at the Academy. It is of note that the previous study occurred in a camp setting. It may be possible that behavioral issues do not occur in young adults who are homesick; however, homesick children may express their distress through acting out.

Previous research had indicated no gender differences between men and women for reported homesickness (Randall, 2004). This study found similar results, with no significant difference between reported homesickness for each gender. It seems that men are less likely to discuss homesickness with others; however, they will report homesickness on a confidential measure. Many of the surveys were completed online, giving the cadet complete anonymity. It is felt that this approach resulted in more honest reports of homesickness criteria. Based on previous research as well as this study, it appears that both men and women experience homesickness at an equal level.

No significant relationship was found between homesickness and other performance measures such as physical fitness. Certainly, fitness measures aspects of performance different from GPA. It appears that homesickness is not a factor for poor physical fitness. Also, military performance was unchanged by homesickness symptoms. Cadets were able to follow room guidelines and to march properly, even when homesick. It may be that more physical activities are less affected by homesickness. As noted, rumination is a significant symptom of homesickness which may relate to poor focus and therefore to poor grades. Homesick cadets may be able to perform physical activities that require less mental focus, even when homesick. Further analysis did reveal a negative relationship between the Dislike subscale and MPA score. It appears that when cadets have a strong negative opinion of the Academy, their military performance grade is lower.

Studies have shown mixed results regarding homesickness and experiences of being away from home. This study showed a negative relationship between experience away from home and overall homesickness score. Therefore, the more time a cadet has spent away from home, the less homesickness that would be reported. This finding supports previous studies (Thurber, 1998) indicating reduced homesickness in camp settings when children had been away from home in the past.

Concerns for current study

Because of the speed at which data needed to be collected, several factors emerged. To expedite the IRB process, the study was constructed in such a manner to be exempt. By omitting identifiers of cadets, much of the data relied on self-report. Cadets may not have been completely honest with regard to symptoms, reported GPA, and other data collected. Due to time constraints, the researcher was also forced to use the most convenient populations at the Academy, rather than a random sample. Data were collected from Behavioral Science students, students attending counseling, and student counselors. Certainly, results may be specific only for those populations rather than for the Academy as a whole.

Much of the results were based on correlations, which do not suggest causation, but simply a relationship. Although GPA and homesickness may be related, the current study does not evaluate for additional factors that may be involved. Also, it is unclear if the cadets had been homesick since arriving at the Academy, or only at the time the survey was given. It would be more useful to give the HQ, and then evaluate cadet GPA at a later date.

Additionally, correlations were used many times in this study. Therefore, some significant results could simply be due to chance.

The population was somewhat unrepresentative of the Academy as a whole. Overall, the Academy is made up of 75% men and 25% women. In this study, women made up almost 50% of the population. Seniors were underrepresented as well, making up less than 11% of the sample, yet seniors represent about 20% of the Academy population. Results may not generalize well to Academy seniors.

Suggestions for future research

To improve on the current study, identifying information should be collected. With this information, items such as GPA, MPA, and PEA could be verified. Additionally, the cadet's AOC could rate his or her performance for additional assessment of performance. The researcher could contact the medical clinic and assess for numbers of health appointments each cadet has used, rather than simply relying on self-report.

A longitudinal design may reveal more substantial and in-depth results. The HQ could be given to all cadets entering Basic Training. A second measure could be given at the end of Basic Training to assess for changes. Also, information could be collected every year until the cadet graduates, regarding performance. The researcher could then ascertain if homesickness predicted Academy drop-out as well as poor performance. Such information would be invaluable in developing programs to address homesickness and subsequent adjustment issues.

Future research could further evaluate reasons for gender differences. It appears that although women experience homesickness, they are able to buffer against performance

effects, such as lower GPA. Additional research could evaluate help-seeking behaviors and use of social support by women at the Academy, in contrast to the use of these means of assistance by men at the Academy.

Addressing Homesickness at the Academy

It appears that homesickness relates to decreased GPA and somatic complaints. Factors such as a good sponsor family appear to reduce the effects of homesickness. Also, it seems that homesickness declines over time. It may be most useful to address prevailing myths about homesickness through educational briefings. These briefings would educate basic cadets about how common homesickness is and how talking about homesickness can reduce symptoms. The purpose of education is to normalize the homesick experience and encourage basic cadets to seek counseling if necessary.

Simple interventions could easily be tailored for the Academy Basic Training environment. Increased phone calls to home, reading letters from home, and having pictures of family members may greatly reduce homesickness. Although the idea is to train cadets for future possible deployment experiences, such limited communication rarely exists in a deployed environment with many bases having access to the internet, social networking sites, and letters from home. Based on the current study, interventions for homesickness may lead to improved GPAs, reduced somatic complaints, and improved mood.

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Appendix A

Homesickness Questionnaire – Cadet (HQ-C)

Gender : M F Class: _____ GPA: _____ MPA: _____	Never	Sometimes	Often	Very Often
I can't help thinking about my home	1	2	3	4
I can't concentrate at the Academy because I'm always thinking about home.	1	2	3	4
When I'm thinking about nothing in particular, my thoughts always come back to home.	1	2	3	4
I hardly ever think about my home.	1	2	3	4
There is so much going on here that I hardly ever think about home.	1	2	3	4
When not at the Academy, I would visit home as often as I can	1	2	3	4
I would like to phone home every day	1	2	3	4
Thinking about home makes me cry	1	2	3	4
I dream about my friends at home	1	2	3	4
I've settled in really well at the Academy	4	3	2	1
If I could go home for the weekend, I wouldn't want to come back	1	2	3	4
I would like to make my room like that at home	1	2	3	4
If given the choice, I would rarely home phone	1	2	3	4
I hate this place	1	2	3	4
If I had the opportunity, I would hardly ever visit home during the school year	1	2	3	4
I am drawn towards people who come from my hometown region	1	2	3	4
I get really upset when I think about home	1	2	3	4
I am really happy to be here at the Academy	4	3	2	1
It upsets me if I am unable to phone home	1	2	3	4
I can't concentrate on my work	1	2	3	4
I feel empty inside	1	2	3	4
I should avoid going home because it would be too upsetting	1	2	3	4
I wish I had never come to the Academy	1	2	3	4
I dream about my home	1	2	3	4
I try to shut off thinking about my home	1	2	3	4
The people here annoy me	1	2	3	4
I can't seem to settle here at the Academy	1	2	3	4
I often dream about my family back home	1	2	3	4
My parents pushed me into coming to the Academy	1	2	3	4
I feel as if I've left part of me at home	1	2	3	4
I blame myself for having come to training	1	2	3	4
I feel restless here	1	2	3	4
If I could go home for the weekend, I would feel excited at the prospect of coming back to the Academy	1	2	3	4
No matter what I do, I can't settle in here	1	2	3	4
I'm worried about what the future holds	1	2	3	4
I don't feel like my normal self	1	2	3	4
I don't feel like I fit in	1	2	3	4
To be honest, I don't feel like making the effort to adjust to the Academy	1	2	3	4
I'm overwhelmed with all that I have to do	1	2	3	4

Appendix B

Demographic Information

Gender: M F (Circle)

GPA _____

MPA _____

PEA _____

Class _____

- 2 Since entering the Academy, how many demerits have you received? _____
- 2) How many times per month do you experience headaches? _____
- 3) How many times per month do you experience stomachaches? _____
- 4) How many times per month do you experience diarrhea? _____
- 5) Do you have a sponsor family? Yes No

2 How would you rate your satisfaction with the sponsor family program?

Very Dissatisfied

Very Satisfied

1 2 3 4 5 6 7 8 9 10

2 Other than coming to the Academy, approximately how many times have you been away from home for:

3 days _____

5 days _____

1 week _____

2 weeks _____

One month _____

More than a month _____

Appendix C

Script for PEERS and PPC Participants:

You have the opportunity to take part in research at the Academy by completing a brief questionnaire regarding homesickness. While homesickness has been related to military training drop-out, poor performance, and somatic complaints, the topic has not been specifically studied at the Air Force Academy. Such research could be used to improve military training environments throughout the Air Force.

Participation will take less than 30 minutes. If you wish to participate, you will not put your name on the paper so you will not be identified in any way. It is highly encouraged that you answer the questions honestly. You may stop at any time or leave blank any question you do not wish to answer.

If you choose not to participate, there is no consequence for not taking part in the study.

Again, participation is voluntary. Are you interested in taking the survey?

Appendix D

Date Posted : _____

RESEARCH BOARD : 110/310(circle)

EARN EXTRA CREDIT

STUDY TITLE: The Effect of Homesickness On Air Force Academy Cadets

Please read:

As part of the BS 110 and 310 courses, you have the option of participating in this study for extra credit, participating in another extra credit assignment as specified in the course syllabus, or not participating in any extra credit assignment.

Before you decide to participate, please understand that participation in the research study is strictly voluntary. In addition, it is your right to stop at any time before, during, and after the study and decide you do not want to participate.

If you have any questions, please feel free to contact: Captain Earl Banning at [333-2107] or e-mail at: earl.banning@usafa.edu

Time Required For Each Project: In general, an effort is made such that both extra credit options are equivalent, and thus studies of different lengths have greater or lesser writing attached to them to be fair.

Cancellation Note: If you did sign up for extra credit research participation, but need to cancel, please contact the experimenter at least 24 hours in advance of your appointment.

Interested? E-mail Capt Earl Banning at earl.banning@usafa.edu



Approved: FAC20100052E: 2 April, 2010

Appendix E

Email to BS from Participant Pool Manager (Capt Stilson)

You have the opportunity to earn 1 unit of extra credit by completing a brief questionnaire regarding homesickness. While homesickness has been related to military training drop-out, poor performance, and somatic complaints, the topic has not been specifically studied at the Air Force Academy. Such research could be used to improve military training environments throughout the Air Force.

If you choose to participate, you will be asked to follow a link to a homesickness questionnaire. Your participation will take less than 30 minutes. After completing the questionnaire, you will follow a second link to give you name. This way, your name is not connected to your questionnaire data. If you wish to participate, it is highly encouraged that you answer the questions honestly.

To complete the survey, follow this link:

<http://www.surveymonkey.com/s/6D9XD2X>

After completing the survey, use this link to enter your name so you can get your 1 unit of credit:

<http://www.surveymonkey.com/s/6DJLWFX>

Debrief – Provided at end of survey

Thank you for participating in the Homesickness study. Your responses will help increase understanding of how cadets adjust to the Academy. If you would like to know the results of the study, contact Captain Earl Banning (earl.banning@usafa.edu). If you have any concerns regarding homesickness or the survey, you may also contact the Peak Performance Center (333-2107).

Again, thank you for your time and effort.

Appendix F

SurveyMonkey Questionnaire

1. Default Section

1. Please enter your name to receive credit through the Behavioral Science Pool. Please remember that your name is not connected to your survey results regarding homesickness.

1. Description of Study

1. You have the opportunity to earn 1 unit of extra credit by completing a brief questionnaire regarding homesickness. While homesickness has been related to military training drop-out, poor performance, and somatic complaints, the topic has not been specifically studied at the Air Force Academy. Such research could be used to improve military training environments throughout the Air Force.

Your participation will take less than 30 minutes. After completing the questionnaire, you will follow a second link to give you name. This way, your name is not connected to your questionnaire data. If you wish to participate, it is highly encouraged that you answer the questions honestly.

2. Homesickness Questionnaire - Cadet (HQ-C)

1. I can't help thinking about my home

• Never Sometimes Often Very Often

2. I can't concentrate at the Academy because I'm always thinking about home

• Never Sometimes Often Very Often

3. When I'm thinking about nothing in particular, my thoughts always come back to home.

• Never Sometimes Often Very Often

4. I hardly ever think about my home

• Never Sometimes Often Very Often

5. There is so much going on here that I hardly ever think about home.

• Never Sometimes Often Very Often

6. When not at the Academy, I would visit home as often as I can

• Never Sometimes Often Very Often

7. I would like to phone home every day

• Never Sometimes Often Very Often

8. Thinking about home makes me cry.

• Never Sometimes Often Very Often

9. I dream about my friends at home.

• Never Sometimes Often Very Often

10. I've settled in really well at the Academy.

• Never Sometimes Often Very Often

11. If I could go home for the weekend, I wouldn't want to come back.

• Never Sometimes Often Very Often

12. I would like to make my room like that at home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I would like to make my room like that at home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. If given the choice, I would rarely phone home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I hate this place.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. If I had the opportunity, I would hardly ever visit home during the school year.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I am drawn towards people who come from my hometown region.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I get really upset when I think about home	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I am really happy here at the Academy	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. It upsets me if I am unable to phone home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I can't concentrate on my work	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I feel empty inside.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I should avoid going home because it would be too upsetting.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. I wish I had never come to the Academy.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I dream about my home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I try to shut off thinking about my home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. The people here annoy me.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I can't seem to settle here at the Academy.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I often dream about my family back home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. My parents pushed me into coming to the Academy.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. I feel as if I've left part of me at home.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I blame myself for having come to training.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. I feel restless here.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. If I could go home for the weekend, I would feel excited at the prospect of coming back to the Academy.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. No matter what I do, I can't settle in here.	Never	Sometimes	Often	Very Often
•	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

36. I'm worried about what the future holds.

Never	Sometimes	Often	Very Often
• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>

37. I don't feel like my normal self.

Never	Sometimes	Often	Very Often
• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>

38. I don't feel like I fit in.

Never	Sometimes	Often	Very Often
• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>

39. To be honest, I don't feel like making the effort to adjust to the Academy.

Never	Sometimes	Often	Very Often
• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>

40. I'm overwhelmed with all that I have to do.

Never	Sometimes	Often	Very Often
• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>	• <input type="radio"/>

3. Demographics

1. Gender:

- Male
- Female

2. GPA:

3. MPA:

4. How many times per month do you experience headaches?

5. How many times per month do you experience stomachaches?

6. How many times per month do you experience diarrhea?

7. Since entering the Academy, how many demerits have you received?

8. Do you have a sponsor family?

- Yes
- No

9. If you do have a sponsor family, how would you rate your satisfaction with the sponsor family program?

Very Dissatisfied
Very Satisfied

10. Approximately how many times have you been away from home for:

3 days

5 days

1 week

2 weeks

a month

more than a month

11. Class

2013

2012

2011

2010

10. Approximately how many times have you been away from home for:

- 3 days _____
- 5 days _____
- 1 week _____
- 2 weeks _____
- a month _____
- more than a month _____

11. Class

- 2013
- 2012
- 2011
- 2010

4. End of Survey

Thank you for participating in the Homesickness study. Your responses will help increase understanding of how cadets adjust to the Academy. If you would like to know the results of the study, contact Captain Earl Banning (earl.banning@usafa.edu). If you have any concerns regarding homesickness or the survey, you may also contact the Peak Performance Center (333-2107). Again, thank you for your time and effort.

Appendix G

Rotated Component Matrix

Rotated Component Matrix^a

	Component	
	1	2
q23	.731	
q21	.719	
q27	.711	
q36	.699	
q14	.679	
q38	.657	
q34	.648	
q37	.627	
q32	.620	
q31	.604	
q35	.565	
q30	.539	.470
q20	.518	
q29	.479	
q18	.477	
q17	.475	.382
q25	.461	.327
q39	.447	
q19	.411	.346
q26	.405	
q10	.400	.287
q12	.393	
q9	.391	.354
q22	.340	
q15		-.721
q24	.325	.711
q1	.345	.689

q6		.679
q5		-.675
q3	.379	.669
q13		-.643
q28	.383	.631
q7		.578
q2	.423	.548
q8	.338	.445
q11	.297	.365
q4		.261
q16		
q33		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.