THE ROLE OF ADOLESCENT NEUROTICISM FOR ADULT PARTNER RELATIONSHIPS AND HAPPINESS
BETYDELSEN AV UNGDOMSNEUROTICISM FÖR VUXNA PARTNERRELATIONER 
OCH LIVSGLÄDJEN¹

Nanette S. Danielsson

Institution för beteende-, social- och rättsvetenskap
Psykologi, Örebro universitet


Nyckelord. Neuroticism, livsglädje, livsbelåtenhet, positiv affekt, negativ affekt, partnerrelationer.

¹Psykologi D, vt 06. Handledare: Håkan Stattin och Margaret Kerr.
THE ROLE OF ADOLESCENT NEUROTICISM FOR ADULT PARTNER RELATIONSHIPS AND HAPPINESS¹

Nanette S. Danielsson

Department of Behavioural, Social and Legal Sciences
Psychology, Örebro University

Neuroticism and partner relationship quality are associated with happiness. A Swedish longitudinal project was utilized to examine whether these two aspects together determine happiness. Adolescent neuroticism was measured at age 15 with the High School Personality Questionnaire (HSPQ). Measurements of neurotic manifestations were administered at ages 15-18. Adult neuroticism was measured at age 37 using the Eysenck Personality Questionnaire (EPQ-I). Measures of partner relationship quality and happiness were also administered. An adolescent neurotic dimension and partner relationship quality were related to happiness. Overall, neuroticism appears to be a better predictor of happiness with both direct effects and indirect effects through the influence on partner relationship quality.

Keywords: Neuroticism, happiness, life-satisfaction, positive affect, negative affect, partner relationship quality.


Introduction

Some people are consistently cheerful and optimistic—seemingly happy with life—while others are consistently worried and pessimistic. Why? One explanation is that this is part of a stable disposition, or a personality trait such as neuroticism. Personality traits are the characteristic ways in which people behave in numerous situations. These tendencies are thought to be genetically determined and present at birth (Buss & Plomin, 1984). The stable personality influenced components of happiness have been shown in longitudinal twin studies to be 80% heritable (Lykken & Tellegen, 1996). Indeed, personality has been shown in meta-analyses, cross-sectional and longitudinal research to be very stable (Conley, 1985; Costa & McCrae, 1988; Magnus, Diener, Fujita & Pavot, 1993; Roberts, Caspi & Moffitt, 2001; Roberts & DelVecchio, 2000; Robins, Fraley, Roberts & Trzesniewski, 2001). In fact, neuroticism in adolescence has been found to persist into adulthood (Möller, 2004). In other words, personality does not appear to change much over time.

That is unfortunate for people who have neurotic tendencies. They often experience their lives and life events in a negative way. A neurotic person is characterized by moodiness, irritability, anxiousness, complaining and pessimism (Eysenck & Eysenck, 1985). High levels of neuroticism are generally associated with self-consciousness, low self-esteem, and worrying. Very often neurotic people have a negative way of interpreting and perceiving themselves, others and the environment in which they live. They may overreact and be easily offended or upset. In addition, they are self-critical and generally dissatisfied. These individuals usually experience stress and don’t feel that they have the resources to cope
(McCrae & Costa, 1987; Watson, Clark & Harkness, 1994). Neurotic people tend to experience negative feelings, depression, hostility and guilt (Watson, 2000). Results of neuroticism may be somatic symptoms, such as difficulty sleeping, as well as physical (McCrae & Costa, 1987; Watson & Clark, 1984; Watson et al., 1994) and mental health problems (Cheng & Furnham, 2000; McCrae & Costa, 1987; Watson & Clark, 1984; Watson et al., 1994). While people who are low on neuroticism tend to be secure, confident, carefree, and content (McCrae & Costa, 1987; Watson & Clark, 1984; Watson et al., 1994). Personality traits such as neuroticism predispose people to negativity. This general way of experiencing negativity may be a hinder to experiencing happiness.

Higher levels of neuroticism have been linked to unhappiness. It may be the level of neuroticism that determines whether or not a person is happy. Happiness is typically defined by life satisfaction and a predominance of pleasant affect over negative affect. The link between neuroticism and happiness has been widely established. Neuroticism has been consistently linked to happiness in narrative reviews (Diener, Suh, Lucas & Smith, 1999; Myers & Diener, 1995) longitudinal (Argyle & Lu, 1990; Suh, Diener & Fujita, 1996; Vittersø & Nilsen, 2002), cross-sectional (Headey & Wearing, 1989) and meta-analyses. In fact, neuroticism has been found through meta-analysis to be the strongest predictor of happiness (DeNeve, 1999; DeNeve & Cooper, 1998; Heller, Watson & Ilies, 2004). In cross-sectional research, neuroticism was found to account for eight times the happiness variance as extraversion, the next strongest predictor of happiness (Vittersø & Nilsen, 2002). Whether a person is happy or not appears to be largely dependent on their level of neuroticism. However, there will be some people who despite neurotic tendencies are happy. Likewise, some people who are low on neuroticism will be unhappy. Being low on neuroticism appears to be necessary, but insufficient for experiencing happiness. In other words, being low on neuroticism predisposes people to being happy, but it is no guarantee. Being low on neuroticism is not enough to experience happiness. What accounts for the difference?

Another explanation for why some people are happier than others, involves relationships to others. In particular, those who are happy or satisfied with life tend to have supportive partner relationships. There have been a number of cross-sectional studies examining the connection between relationships and happiness. A group of College students in Northern England reported that being “loved by loved ones” was the most important perceived source of happiness (Crossley & Langdr ridge, 2005). People from nine European nations, who had supportive, stable relationships, were twice as happy as those that were single (Gundelach & Kreiner, 2004). The happiest people in a large group of college students at the University of Illinois were those with close supportive relationships. There were those with relationships that were unhappy. However, all of those who were very happy had close supportive relationships (Diener & Seligman, 2002). This conclusion was supported by a larger study encompassing 41 nations around the world (Haller & Hadler, 2006). It appears that close supportive relationships are central to experiencing happiness. Close, stable relationships appear to be another necessary but insufficient factor for experiencing happiness (Diener & Seligman, 2002). Are neuroticism and partner relationship quality related in experiencing happiness?

One possibility is that neuroticism and partner relationship quality might work together to determine happiness. This is reasonable because longitudinal research shows that they are related to each other (Möller, 2004). Higher levels of neuroticism have been linked to lower social competence (Argyle & Lu, 1990), and lower social competence should negatively affect close personal relationships. In fact for men and women, lower levels of neuroticism in adulthood have been strongly associated with partner (Möller, 2004) and relationship satisfaction (Buss, 1991; Karney & Bradbury, 1997; Karney & Bradbury, 2000; Robins, Caspi & Moffitt, 2000). Levels of partner neuroticism are not only predictive of
marriage quality, but also of marriage longevity. Higher levels of neuroticism experienced by both partners were found to be very common for people who either divorced, or remained unhappily married (Kelly & Conley, 1987). I only found one study that examined neuroticism and partner relationship quality in relation to happiness. This was a cross-sectional study in England involving 1,200 couples. The primary aim of this study was to find predictors of happiness for married couples. Neuroticism was found to have direct effects on happiness. Additionally, neuroticism was also found to affect happiness indirectly through its influence on marriage quality. Of these two factors, marriage quality was found to be the most important factor, followed by neuroticism (Russell & Wells, 1994). The relations between neuroticism and partner relationship quality for predicting happiness has been established. What remains to be seen is how the two are involved in determining happiness.

There are at least two ways that this could happen. First, partner relationship quality could moderate the link between neuroticism and happiness, meaning that if neurotic people have good partner relationships, they might be protected from lower levels of happiness. To this date there have been no studies looking at whether good partner relationships can compensate for neuroticism in experiencing happiness. It may be that the behaviour of a loving and supportive partner has positive effects on a person’s neurotic tendencies.

Another way that neuroticism and partner relationship quality might work together to determine happiness is that neuroticism might affect happiness through its effects on the quality of the partner relationship. This would be a mediating effect. Negative neurotic tendencies affect how people perceive and relate to others, as well as how they behave. Neuroticism has been found in longitudinal research to characterize, rather than change the quality of the relationship. Partner’s neurotic tendencies are present at the formation of the relationship and are stable. This likely sets a negative tone for the relationship (Caughlin, Huston & Houts, 2000; Karney & Bradbury, 1997). People who are high on neuroticism tend to have negative explanations for their partners’ behaviour (Karney & Bradbury, 2000). A moderating effect would mean that the neurotic partner is reacting in a negative way; thereby influencing the quality of the relationship. In turn, low quality of the partner relationship would be expected to influence the level of happiness experienced.

In this study, I ask how neuroticism and partner relationship quality work together to determine happiness. I see neuroticism as a stable personality trait, so I consider how neuroticism in late adolescence and adult partner relationship quality influence happiness in middle adulthood. I use several indicators of neuroticism, specifically self-esteem, body perception and sleep problems. For happiness, I use three measures: life satisfaction, positive affect, and absence of depression. I ask, first, whether neuroticism is stable over this part of the life course and whether adolescent neuroticism is related to good partner relationships and happiness in adulthood. Second, I ask which is the better predictor of happiness: adolescent neuroticism or good partner relationships in adulthood? Finally, I examine the moderation and mediation hypotheses. Genus aspects will not be included in this study because it has already been widely established that women experience more neuroticism than men. However a discussion will follow of the possible implications for people experiencing neuroticism, as well as ideas for therapy and future research.

Method

Participants

The analyses conducted in this study are based on data from a birth to midlife longitudinal project. The Solna Project was conducted by researchers at the Clinic for the Study of Children’s Development and Health at the Karolinska Hospital in Stockholm. The participants
were a random sample of children born between the years of 1955-1958 in Solna Sweden. In Sweden most women take advantage of prenatal care. Every fourth pregnant mother registered at the Solna prenatal clinic was asked to participate in a long-term paediatric study. Only 3% refused. The resulting sample of 212 children consisted of 122 boys and 90 girls. Comparisons of socio-economic factors, parental age, maternal civil status, birth order, gestational age and weight, in addition to registered criminality has shown this sample to be representative of Swedish children in general (Karlberg et al., 1968; Stattin & Klackenberg-Larsson, 1990). Goals of the study were to track the children’s somatic, psychological and social development. The information was collected through somatic registrations, medical examinations, interviews, inventories and ratings, objective tests, sociometric methods and projective techniques. The measures and methods used have passed stringent psychometric tests. The somatic development of the children in the cohort has been summarized in the form of growth charts of various body measurements. These have been used as reference measures in daily child-health and clinical work in Sweden since 1973 (Karlberg et al. 1976). This group of children were examined six times during their first year, twice during the second year and annually thereafter until age 18. Participants were tested as closely as possible to the given ages to control for differences in chronological age; usually within ±14 days. Additional data were collected on this cohort at the ages of 21, 25 and 37.

The present study included those original participants that were available for data collection at the average age of 37. Participants were administered the questionnaires as closely as possible to age 37 to control for differences in chronological age. This remaining group represents 91% of those still alive at the time of data collection.

Procedures

While the stability of neuroticism has previously been established a goal of this study was to predict adult outcomes from neuroticism in adolescence (Conley, 1985; Costa & McCrae, 1988; Roberts et al., 2001; Roberts & DelVecchio, 2000). Therefore it was important to examine the stability of neuroticism from adolescence to adulthood. The personality trait of neuroticism was measured along with known manifestations of neuroticism. Some aspects of neuroticism may be missed when measuring the trait alone. In order to take this study a step further than previous studies, manifestations of neuroticism were examined along with the trait neuroticism. These were poor self-esteem, poor body image and sleep problems. A broad measure of neuroticism may be a better measure than the trait alone. In this study adolescent and adult neuroticism, neurotic manifestations and a combined factor were all measured and compared. Finally, neuroticism was examined in relation to happiness and partner relationship quality.

Material

Adolescent Neuroticism Measures

Neuroticism. At age 15, the adolescents were administered Cattell’s High School Personality Questionnaire (HSPQ, Form A) (Cattell, 1962). Ormerod and Billing (1982) performed a principal components analysis with a varimax rotation of the original model of HSPQ. In their analysis, the factor Anxiety/Neuroticism included four of the 13 original scales; C(-): Neurotic – Emotionally Stable, D: Phlegmatic – Excitable, Q3(-): Casual – Controlled, and Q4: Relaxed – Tense. Coefficient alpha for factor II, Anxiety/Neuroticism was 0.76. In the current study neuroticism is measured using three of the four scales from the Anxiety/Neuroticism factor in the Billing’s study. The scale Q3 was excluded because it was
included in the Anxiety/Neuroticism factor and the Expedient/Conscientious controlled factor. The alpha reliability for these three scales was .79 (N = 167).

**Poor self-esteem.** At age 18, the adolescents were administered the Rosenberg Self-esteem Scale (Rosenberg, 1979). They were asked how well 10 statements describe them. The statements used in this study were: “On the whole, I am satisfied with myself,” “At times I think I am no good at all,” “I feel that I have a number of good qualities,” “I am able to do things as well as most other people,” “I feel that I do not have much to be proud of,” “I certainly feel useless at times,” “I feel that I’m a person of worth, at least on an equal plane with others,” “I wish that I could have more respect for myself,” “All in all, I am inclined to feel that I am a failure” and “I take a positive attitude toward myself” (1 = strongly agree, 5 = strongly disagree and 6 = don’t know). The alpha reliability for this scale was .80 (N = 171).

**Poor body image.** This measure was developed for the Solna Project and was part of a larger questionnaire about what teenagers sometimes worry about (Kerr & Stattin, 2000). The adolescents answered these items at age 15. The statements were “I worry about my appearance,” “I worry about my shape,” “I worry about boys/girls seeing me naked (same sex),” “I worry about boys/girls seeing me naked (opposite sex)” and “I worry that my body does not look mature enough” (1 = very much, 5 = never). The scores from these 5 items were averaged to form this measure. The alpha reliability for this measure was .74 (N = 156).

**Sleep problems.** This measure was included in a questionnaire developed for the Solna Project (Kerr & Stattin, 2000). For this study the adolescent’s answers from ages 15, 16 and 17 were averaged to form the measure. The adolescents were asked “do you have trouble sleeping” (1 = no, 5 = yes often). The alpha reliability for this measure was .62 (N =147).

**Adult Neuroticism Measures**

**Neuroticism.** At age 37 the participants completed Eysenck’s Personality Questionnaire (EPQ-I) (Eysenck & Eysenck, 1975). Only the neuroticism scale was important in the current study. The participants answered 23 items with a yes or no response. Examples of the questions asked were “After the fact, do you often worry about what you shouldn’t have done or said?”, “Are you easily irritated?”, “Are your feelings easily hurt, or offended?”, “Do you often experience torment from guilt feelings?” and “Do you consider yourself a nervous person?” The alpha reliability for this measure was .87 (N=175).

**Poor self-esteem.** This measured was taken from the Rosenberg Self-esteem Scale (Rosenberg, 1979). At age 37 the participants were asked how well 10 statements described them. The statements used in this study were: “On the whole, I am satisfied with myself,” “At times I think I am no good at all,” “I feel that I have a number of good qualities,” “I am able to do things as well as most other people,” “I feel that I do not have much to be proud of,” “I certainly feel useless at times,” “I feel that I’m a person of worth, at least on an equal plane with others,” “I wish that I could have more respect for myself,” “All in all, I am inclined to feel that I am a failure” and “I take a positive attitude toward myself” (1 = strongly agree, 5 = strongly disagree). The alpha reliability was for this measure was .87 (N =184).

**Poor body image.** Information on adult body image was obtained at age 37. For this measure two open-ended questions developed for the Solna Project were taken out of an interview about self-perception (Kerr & Stattin, 2000). The first item was “What do you think about your appearance? Would you like to look different in any way, or are you content as you are? (1= mentioned would like to look different in several respects; or responded
negatively as a first response about personal appearance, 4 = only satisfied). The second item was “How do you experience your body? Do you feel shy when others look at you, shy about being seen naked or ashamed of you body at the beach or other places where people are undressed? Or are you primarily satisfied with how your body looks?” (1 = very ashamed of my body, 6 = very satisfied, proud). For this measure the scores from the two items were averaged. The alpha reliability for this measure was .61 (N = 160).

Sleep problems. The adult sleep problems measure was administered at age 37 as part of a larger questionnaire developed for the Solna Project (Kerr & Stattin, 2000). Included were questions about current sleep problems as well as problems sleeping during the last year. The first measure was about current sleep quality. The items were “Do you have difficulty sleeping?” and “Do you sometimes wake up during the night and have difficulty falling back asleep; even in the early morning? (1 = never, 6 = almost every night). The second measure was a statement about sleep quality during the last year. The participants checked a box if the statement described them. The item was “Sleep difficulties: difficulty falling asleep, waking during the night, slept badly”. These two separate measures were averaged to form a measure of sleep quality. These two measures had a small correlation .13. However it was decided that two measures were better than one. Both measures yield a better estimate of sleep disturbances in mid-age than a concentration of one of them.

Adult Happiness Measures

Happiness is generally defined by two components. The personality influenced cognitive component is called life satisfaction. The emotional component is called affect. Life satisfaction is how people subjectively perceive their lives and affect is how people feel. In this study I used one life satisfaction measure and two measures of affect: negative affect (depression) and positive affect. Positive and negative affect are generally measured separately. While related they tend to be independent. Happiness is the cognitive evaluation of life satisfaction and a dominance of positive affect over negative affect.

Partner relationships are also considered important to experiencing happiness. Prior cross-sectional research shows indications that good partner relationships may be necessary while insufficient to experiencing happiness (Diener & Seligman, 2002). Therefore, I examined the relation of neuroticism and partner relationships in experiencing happiness.

Life-satisfaction. Life satisfaction was measured by a 15 item version of Neugarten et al.’s Life Satisfaction Index A (Neugarten, Havighurst & Tobin, 1961) administered at age 37. The items measure global and general life satisfaction. Examples of items included are “These are the best years of my life,” “As I look back on my life, I am fairly well satisfied,” “I would not change my past life even if I could,” and “I’ve gotten pretty much what I expected out of life.” Answers for the items were agree, disagree or not sure. Agree or disagree were given a score of either a 0 or a 2 depending on the direction of the question (positive, or negative). In other words, a positive answer was scored as 2; a negative answer was scored as 0. Not sure was given a score of 1. The alpha reliability for this measure was .81 (N = 183).

Positive affect. This measure included 11 items about self-reported positive affect. The items were part of the Mental Health Inventory (MHI) (Veit & Ware, 1983) administered at age 37. The items were “How happy, satisfied, or pleased have you been with your personal life during the last month (1 = extremely happy, could not be more happy or pleased, 6 = very dissatisfied, unhappy most of the time)?”, “During the past month, how much of the time have you felt that the future looks hopeful and promising (1 = all the time, 6 = none of the time)?”, “How much of the time, during the past month, has your daily life been full of things that
were interesting to you (1 = all the time, 6 = none of the time)?”, How much of the time, during the past month, did you feel relaxed and free of tension (1 = all the time, 6 = none of the time)?”, “During the past month, how much of the time have you generally enjoyed the things you do (1 = all the time, 6 = none of the time)?”, “When you get up in the morning, this past month, about how often did you expect to have an interesting day (1 = always, 6 = never)?”, “How much of the time, during the past month, have you felt calm and peaceful (1 = all the time, 6 = none of the time)?”, “During the past month, how much of the time have living been a wonderful adventure for you (1 = all the time, 6 = none of the time)?”, How much of the time, during the past month, have you felt cheerful, light-hearted (1 = all the time, 6 = none of the time)?”, “During the past month, how much of the time were you a happy person (1 = all the time, 6 = none of the time)?”, and “How often, during the past month, have you been waking up feeling fresh and rested (1 = always, everyday, 6 = never wake up feeling rested)?”. The alpha reliability for this measure was .92 (N = 184).

**Depression.** This measure included 4 items about self-reported depression. The items were part of the Mental Health Inventory (MHI) (Veit & Ware, 1983) administered at age 37. The items asked were: “Did you feel depressed during the past month (1 = yes, to the point that I did not care about anything for days at a time, 5 = no, never felt depressed at all)?”, How much of the time, during the past month, have you felt downhearted and blue (1 = all the time, 6 = none of the time)?”, “During the past month, how much of the time have you been moody or brooded about things (1 = all the time, 6 = none of the time)?” and “During the past month, how much of the time have you been in low or very low spirits (1 = all the time, 6 = none of the time)?”. The alpha reliability for this measure was .91 (N = 184).

**Good partner relationships.** In this study the measure of partner relationships includes both marriage and partner co-habitation (Möller, 2004; Möller & Stattin 2001). The partnership relationship measure was a composite of two measures included in a questionnaire developed for the Solna project. The questionnaire was administered at age 37. This measure includes a total of seven items. The first four items measure partner satisfaction. The second measure contains three items that measure partner relationship quality in general. The first four items were “Does your partner talk to you about his/her problems (1 = yes, always, 4 = never)?”, “How warmly do you feel toward your partner? (1= very much, 5 = not at all)?”, “How well do you and your partner get along together (1 = badly, 5 = very well)?”, and “How often are you really angry at your partner (1 = never, 5 = often)?”.

The last three items are measures of relationship quality in general. The first of these items is “Do you and your partner have any particular interests in common (1 = no common leisure-time interests, no recreation together, 5 = share common interests, always same amusements)?”. The final two items are open-ended interview items that were coded. These were “How would you describe your spouse (1 = only negative characteristics mentioned, 5 = only positive characteristics mentioned)”, and “To give an overall impression of your relationship, how would you describe the home atmosphere (1 = very disharmonious, almost divorce atmosphere, 5 = unusually cordial relations, open and warm home atmosphere)?”. The alpha reliability for the full scale of seven items was .78 (N = 147).

**Analyses**

The first question was whether there was a continuation of neuroticism from adolescence into adulthood. This question was investigated using Pearson’s correlations between the adolescent and adult neurotic manifestations. The second question was whether the different manifestations of neuroticism were highly associated with each other. Pearson’s correlations
were used to investigate the relationships between the various variables in adolescence and adulthood. The next step was to investigate whether these manifestations would create single factors in adolescence and adulthood using factor analysis. The third question was whether the three outcome variables could be predicted from early neuroticism, partner relationship quality and the interaction between these two variables. Regression analyses were used to investigate this.

Results

**How Adolescent Neuroticism Affects Adult Partner Relationships and Happiness**

*Is there a long-term continuation of neuroticism?*

This question was answered by examining whether early indicators of neuroticism in adolescence are related to neuroticism in adulthood. The early indicators were neuroticism, poor self-esteem, poor body image, and sleep problems. All four manifestations of neuroticism were found to be quite substantially stable over time. Many of the people who experienced early neurotic manifestations also experienced these in adulthood. As shown in Table 1, the personality trait neuroticism was highly correlated between adolescence and adulthood ($r = .46, p < .001$). Poor self-esteem at age 18 was also found to be highly correlated with adult levels of poor self-esteem ($r = .40, p < .001$). Also, having a poor body image at age 15 was related to poor body image in adulthood ($r = .20, p < .05$). Finally, having sleep problems between the ages of 15 and 17 was strongly related to experiencing sleep problems in adulthood ($r = .27, p < .01$). In short, the answer to the first question appears to be yes: different indicators of neuroticism appear to be stable throughout life. Note that we predict neuroticism indicators over 20 years, hence the size of the correlations were quite substantial. Table 1 shows the correlations between the manifestations at Time 1 and Time 2.

**Table 1. Intercorrelations between the neurotic manifestations at Time 1 and 2 ($r$).**

<table>
<thead>
<tr>
<th>Neurotic dimensions</th>
<th>Neuroticism (age 37)</th>
<th>Poor self-esteem (age 37)</th>
<th>Poor body image (age 37)</th>
<th>Sleep problems (age 37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>.46***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15)</td>
<td>(148)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor self-esteem</td>
<td>.40***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(18)</td>
<td>(158)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor body image</td>
<td></td>
<td>.20*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15)</td>
<td>(145)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep problems</td>
<td></td>
<td></td>
<td>.27**</td>
<td></td>
</tr>
<tr>
<td>(15-17)</td>
<td>(156)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Values in parentheses represent the number of people included in each correlation.*

*p < .05. **p < .01. ***p < .001.*

*Are the different manifestations of neuroticism associated with each other?*

Table 2 shows the relations between the various adolescent manifestations of neuroticism. Neuroticism was highly related to poor self-esteem ($r = .43, p < .001$), poor body image ($r = .39, p < .001$) and sleep problems ($r = .32, p < .001$). Adolescents experiencing
poor self-esteem also appeared to experience sleep problems \( (r = .26, p < .01) \). How teenagers feel about their bodies does not seem to have much of an impact on either their self-esteem \( (r = .14, p > .05) \) or sleep quality \( (r = .13, p > .05) \). It appears that the personality trait neuroticism is substantially linked with the other indicators of neuroticism in adolescence.

<table>
<thead>
<tr>
<th>Table 2. Intercorrelations between the various neurotic manifestations in adolescence (r).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurotic</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Neuroticism</td>
</tr>
<tr>
<td>Poor self-esteem</td>
</tr>
<tr>
<td>Poor body image</td>
</tr>
</tbody>
</table>

*Note: Values in parentheses represent the number of people included in each correlation. * \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \).*

Table 3 shows the intercorrelations between the manifestations of neuroticism in adulthood. Neuroticism was highly correlated with poor self-esteem \( (r = .54, p < .001) \), poor body image \( (r = .37, p < .001) \) and sleep problems \( (r = .41, p < .001) \). In addition, poor self-esteem was highly associated with sleep problems in adulthood \( (r = .20, p < .01) \). While poor self-esteem was only modestly correlated with having a poor body image in adolescence. Self-esteem was highly correlated with body image in adulthood \( (r = .31, p > .001) \). Similar to the adolescent findings, having a poor body image showed only modest correlations with sleep quality \( (r = .13, p > .05) \). Also similar to the adolescent analysis, having a poor body image correlated weakly with sleep quality. However, neuroticism, poor self-esteem, poor body image and sleep problems appear to operate together in adulthood just like in adolescence.

<table>
<thead>
<tr>
<th>Table 3. Intercorrelations between the various neurotic manifestations in adulthood (r).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxious dimension</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Neuroticism</td>
</tr>
<tr>
<td>Poor self-esteem</td>
</tr>
<tr>
<td>Poor body image</td>
</tr>
</tbody>
</table>

*Note: Values in parentheses represent the number of people included in each correlation. * \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \).*
In order to find out whether one or several underlying dimensions existed for the neuroticism measures at age 37 (neuroticism, poor self-esteem, poor body image, and sleep problems), a principal components analysis was performed including these four measures. This analysis yielded one single factor with an eigenvalue above one. Hence, these four measures at age at 37 can be subsumed into one factor.

The same procedure was repeated for the markers of neurotic behaviour in mid-adolescence. A principal component analysis was performed for the measures of neuroticism at age 16, poor self-esteem at the age of 18, poor body image at the age of 16, and sleep problems between the ages of 15 and 17. Again one single factor with an eigenvalue over 1 was found.

The neurotic markers at age 37 made up one single factor and the neuroticism markers at ages 15 to 18 also made up one factor. Hence, in the last analyses, rather than using the separate measures, the single composite factors from mid-adolescence (ages 15 to 18) and age 37 will be used. The correlation between these two factors was high, indicating high stability between adolescence and middle age (\( r = .51, p < .001 \)).

I calculated the relations between positive affect, life satisfaction, depression, and good partner relationships at the age of 37, on the one hand and the adult manifestations of neuroticism, on the other (see Table 4). As reported in the table, all five of the neuroticism indicators were significantly associated with all of the measures of happiness (high positive affect, high life satisfaction, lack of depression) as well as with good partner relationships. Apparently, neuroticism is detrimental for happiness and good partner relationships.

Table 4. Correlations between the adult neurotic manifestations, including the adult neurotic dimension and the outcome and partner relationship variables (r).

<table>
<thead>
<tr>
<th></th>
<th>Neuroticism (age 37)</th>
<th>Poor self-esteem (age 37)</th>
<th>Poor body image (age 37)</th>
<th>Sleep problems (age 37)</th>
<th>Neurotic dimension (age 37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive affect (37)</td>
<td>-.44***</td>
<td>.46***</td>
<td>-.30***</td>
<td>-.37***</td>
<td>-.56***</td>
</tr>
<tr>
<td></td>
<td>(181)</td>
<td>(184)</td>
<td>(184)</td>
<td>(184)</td>
<td>(181)</td>
</tr>
<tr>
<td>Life-satisfaction (37)</td>
<td>-.43***</td>
<td>.44***</td>
<td>-.25**</td>
<td>-.31***</td>
<td>-.52***</td>
</tr>
<tr>
<td></td>
<td>(180)</td>
<td>(183)</td>
<td>(183)</td>
<td>(183)</td>
<td>(180)</td>
</tr>
<tr>
<td>Depression (37)</td>
<td>.60***</td>
<td>.40***</td>
<td>.26***</td>
<td>.43***</td>
<td>.62***</td>
</tr>
<tr>
<td></td>
<td>(181)</td>
<td>(184)</td>
<td>(184)</td>
<td>(184)</td>
<td>(181)</td>
</tr>
<tr>
<td>Good partner relationships (37)</td>
<td>-.32***</td>
<td>-.21*</td>
<td>-.23**</td>
<td>-.24**</td>
<td>-.36***</td>
</tr>
<tr>
<td></td>
<td>(145)</td>
<td>(146)</td>
<td>(147)</td>
<td>(147)</td>
<td>(144)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses represent the number of people included in each correlation.
* \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \).

Can adult happiness and good partner relationships be predicted from the different neurotic manifestations in adolescence? Table 5 shows the correlations between the adolescent neuroticism variables and the outcome variables. As reported in the table, the composite adolescent neuroticism factor was significantly associated with all three measures of adult happiness as well as with partner relationships. So, neuroticism measured already in
mid-adolescence seems to be detrimental for adult happiness and good partner relationships. Also interesting to note in Table 5 is that adult depression could be significantly predicted from all of the different neuroticism indicators in mid-adolescence. However, there were mixed results when the neurotic manifestations were treated separately. This may be because neuroticism as a dimension does a better job of predicting adult outcomes. Just as there are three components to happiness, it appears that the components of neuroticism work together. Using a neurotic dimension measures not only the trait but also the manifestations of neuroticism in predicting adult outcomes. When the elements are only looked at separately some predictive power may be lost. Higher levels of neuroticism at age 15 were linked to lower adult positive affect ($r = -.20, p < .05$) and lower partner relationship quality ($r = -.22, p < .05$) and elevated levels of depression ($r = .33, p < .001$). Having poor self-esteem at age 18 was related to lower partner relationship quality ($r = -.20, p < .05$) and higher levels of depression ($r = .20, p < .05$). Adolescents that experience poor body image at age 15 appear to have lower levels of positive affect ($r = -.23, p < .01$) and higher levels of depression ($r = .24, p < .01$). Having sleeping problems, between the ages of 15 and 17, appears to be linked to problems in all aspects of happiness and partner relationships at adult age. Overall, the neurotic dimension appears to be the better predictor of adult outcomes.

Table 5. Correlations between the adolescent neurotic manifestations, including the neurotic dimension and the outcome and partner relationship variables in adulthood ($r$).

<table>
<thead>
<tr>
<th></th>
<th>Neuroticism (age 15)</th>
<th>Poor self-esteem (age 18)</th>
<th>Poor body image (age 15)</th>
<th>Sleep problems (age 15-17)</th>
<th>Neurotic dimension (age 15-18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive affect</td>
<td>-.20*</td>
<td>-.08ns</td>
<td>-.23**</td>
<td>-.26**</td>
<td>-.28**</td>
</tr>
<tr>
<td></td>
<td>(151)</td>
<td>(158)</td>
<td>(145)</td>
<td>(156)</td>
<td>(143)</td>
</tr>
<tr>
<td>Life-satisfaction</td>
<td>-.15ns</td>
<td>-.02ns</td>
<td>-.08ns</td>
<td>-.16*</td>
<td>-.17*</td>
</tr>
<tr>
<td></td>
<td>(150)</td>
<td>(157)</td>
<td>(144)</td>
<td>(155)</td>
<td>(142)</td>
</tr>
<tr>
<td>Depression</td>
<td>.33***</td>
<td>.20*</td>
<td>.24**</td>
<td>.30***</td>
<td>.41***</td>
</tr>
<tr>
<td></td>
<td>(151)</td>
<td>(158)</td>
<td>(145)</td>
<td>(156)</td>
<td>(143)</td>
</tr>
<tr>
<td>Good partner relationships</td>
<td>-.22*</td>
<td>-.20*</td>
<td>-.10ns</td>
<td>-.25**</td>
<td>-.29**</td>
</tr>
<tr>
<td></td>
<td>(121)</td>
<td>(126)</td>
<td>(115)</td>
<td>(125)</td>
<td>(113)</td>
</tr>
</tbody>
</table>

Note: Values in parentheses represent the number of people included in each correlation.
* $p < .05$. ** $p < .01$. *** $p < .001$.

The intercorrelations among the adult outcome variables were also examined (See Table 6). All the adult outcome variables were highly related to one another. Adults who experienced life satisfaction tended to feel more positive ($r = .62, p < .001$) and less negative affect ($r = -.48, p < .001$) as well as better partner relationship quality ($r = .37, p < .001$). Those who felt more positive affect tended to experience more life satisfaction ($r = .62, p < .001$), less negative affect ($r = -.67, p < .001$) and had better partner relationships ($r = .43, p < .001$). Individuals who tended to be depressed experienced less positive feelings ($r = -.67, p < .001$) and life satisfaction ($r = .37, p < .001$) as well as poorer partner relationships ($r = -.40, p < .001$). People who had good partner relationships also tended to experience more life
satisfaction and feel a predomination of positive affect over negative affect. It seems that good partner relationships may indeed be important to experiencing happiness. Furthermore, experiencing one of the outcome variables appears to affect the others.

Table 6. Intercorrelations between the outcome and partner relationship variables (r).

<table>
<thead>
<tr>
<th>Positive Affect (age 37)</th>
<th>Life-satisfaction (age 37)</th>
<th>Depression (age 37)</th>
<th>Good partner relationships (age 37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affect</td>
<td>.62***</td>
<td>-.67***</td>
<td>.43***</td>
</tr>
<tr>
<td>Life-satisfaction</td>
<td>(183)</td>
<td>(184)</td>
<td>(146)</td>
</tr>
<tr>
<td>Depression</td>
<td>-.48***</td>
<td>.37***</td>
<td></td>
</tr>
<tr>
<td>(183)</td>
<td></td>
<td>(145)</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>- .40***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(146)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Values in parentheses represent the number of people included in each correlation. * p < .05. ** p < .01. *** p < .001.

How well are adult life satisfaction, positive affect, and depression predicted from adolescent neuroticism, adult partner relationships, and the interaction between neuroticism and partner relationships?

To answer this question, three simultaneous regression analyses were conducted. The first analysis was whether neuroticism, good partner relationships, or an interaction of the two was the better predictor of life satisfaction in adulthood. A regression model including early neuroticism, good partner relationships, and the interaction between the two explained 18% of the variance for life satisfaction (see Table 7). Good partner relationships were the best predictor ($\beta = .33, p < .001$). Having good partner relationships appears to be necessary, but insufficient, for experiencing high life satisfaction (Diener & Seligman, 2002). Early neuroticism was not predictive of future life satisfaction ($\beta = -.15, p > .05$). It appears that neurotic teenagers may grow up to experience life satisfaction after all. No effect of the interaction between neuroticism and good partner relationships was found ($\beta = -.14, p > .05$). In other words, having good partner relationships does not moderate the effects of neuroticism on life satisfaction.

Next, early neuroticism, good partner relationships and an interaction of the two were examined to see which best predicted positive affect. This model explained 26% of the variance for positive affect. Good partner relationships was the best predictor ($\beta = -.42, p < .001$). Having good partner relationships apparently tends to make people feel happy. Adolescent neuroticism showed only a tendency to predict future positive affect ($\beta = -.16, p > .05$). There was no effect of the interaction term ($\beta = .11, p > .05$). Hence, having good partner relationships were not found to have a moderating effect on neuroticism in experiencing positive affect.

Finally, early neuroticism, good partner relationships and an interaction of the two were examined to see which best predicted adult depression. This model explained 26% of the variance for depression. Neuroticism in adolescence was the best predictor of experiencing depression in adulthood ($\beta = .34, p < .001$). However, good partner relationships were also a potent predictor of depression ($\beta = -.28, p < .01$). Having poor partner relationships seems to influence whether a person feels depressed. There was no significant interaction effect ($\beta = -.07, p > .05$). Hence, no moderating effect could be detected. It appears that partner
relationship quality affects all three aspects of happiness. While, neuroticism appears to affect happiness largely through negative affect. Overall partner relationship quality is the better predictor. However, neuroticism is a potent predictor.

Table 7. Slopes from simultaneous regression models using early neuroticism and adult partner relationships to predict happiness in adulthood.

<table>
<thead>
<tr>
<th></th>
<th>Life satisfaction</th>
<th>Positive affect</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early neuroticism</td>
<td>-.15ns</td>
<td>-.16ns</td>
<td>.34***</td>
</tr>
<tr>
<td>Good partner</td>
<td>.33***</td>
<td>.42***</td>
<td>-.28**</td>
</tr>
<tr>
<td>relationships</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction (early</td>
<td>.14ns</td>
<td>.11ns</td>
<td>-.07ns</td>
</tr>
<tr>
<td>neuroticism &amp; good partner relationships</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: \* p < .05. ** p < .01. *** p < .001.*

What remained was an examination of the mediating effects of good partner relationships on neuroticism in experiencing happiness. Three simultaneous regression analyses were used to examine whether good partner relationships would mediate the effects of early neuroticism in the experience of happiness. In each regression two models were examined. These were direct and mediation models (see Figure 1). In the first regression analysis the direct effects of neuroticism and the mediating effects of good partner relationships for experiencing life satisfaction were examined. There was no significant difference between the direct ($\beta = -.15, p > .05$) and mediation models ($\beta = -.16, p > .05$). It appears that neuroticism and good partner relationships work independently in determining life satisfaction.

The second regression analysis was of the direct effects of neuroticism and the mediating effects of good partner relationships on positive affect. While there was a significant direct effect ($\beta = -.20, p < .05$) for neuroticism, there was no mediation effect ($\beta = -.16, p > .05$) of good partner relationships for positive affect. Neuroticism does not seem to influence partner relationships in the experience of positive affect. Here too, neuroticism and good partner relationships appear to work independently in determining the level of positive affect.

The third regression analysis was of the direct effects of neuroticism and the mediating effects of good partner relationships in predicting depression. Both of these models were highly significant showing both direct ($\beta = .33, p < .001$) and indirect effects ($\beta = .32, p < .001$). What this means is that neuroticism influences levels of depression through both direct and indirect paths. Neuroticism is involved in determining a person’s level of depression. At the same time neuroticism appears to have a negative impact on partner relationships. Having a reduction in partner relationship quality may then lead to experiencing more depression. The mediation model only held for the effects of neuroticism for partner relationships in determining negative affect (depression). It appears that neuroticism and good partner relationships work largely independently in the experience of happiness; with one exception. Neuroticism appears to work with partner relationship quality in determining negative affect; a component of happiness. Levels of negative affect have an impact on the level of happiness.
experienced. This means that neuroticism and partner relationship quality work together only partially, in determining happiness.

![Diagram showing correlations between Neuroticism, Good partner relations, and other measures.]

**Figure 1.** Analyses of mediating effects. Beta weights are reported. The links between Neuroticism age 15 and the three dependent measures show first the direct effect and then the indirect, controlling for Good partner relations (beta direct/beta indirect).

**Discussion**

The question central to this study is whether neuroticism and partner relationship quality are jointly involved in determining happiness. Prior research has demonstrated that a person’s neuroticism level is related to relationship quality and happiness. Likewise partner relationships quality has been shown to affect people’s levels of happiness. I only found one prior study where neuroticism and partner relationship quality were examined together in relation to happiness (Russell & Wells, 1994). The current study is the first that I know of that examines this dynamic using longitudinal methods.

The long-term stability of neuroticism has been previously established (Conley, 1985; Costa & McCrae, 1988; Roberts et al., 2001; Roberts & DelVecchio, 2000). However, one of the questions for this study examines whether adult outcomes can be predicted from adolescent neuroticism. Therefore, it was important to look at the stability of neuroticism from adolescence to midlife. I found a very strong connection between neuroticism in adolescence and adulthood. Not only was neuroticism as a personality trait strongly stable. Indicators of neuroticism in adolescence were also very stable. In other words, those adolescents who had poor self-esteem, poor body perception and sleep problems, continued to experience these problems in midlife. Early neurotic manifestations correlated highly with those in midlife. The current study gives very strong support to prior findings of the long-term stability of neuroticism.

Prior findings have shown that concurrent neuroticism is predictive of partner relationship quality (Möller, 2004) and happiness (Argyle & Lu, 1990; DeNeve, 1999; DeNeve & Cooper, 1998; Headey & Wearing, 1989; Vittersø & Nilsen, 2002). In this study, adolescent as well as concurrent neuroticism were related to partner relationship quality in adulthood. These findings are contrary to those found previously, where only adult neuroticism was related to partner relationship quality (Möller, 2004). The difference is how neuroticism was defined. Previously only the personality trait neuroticism was looked at. In this study I examined a neurotic dimension that extends not only to personality measures, but
also neurotic indicators. Neuroticism appears to be highly related to the presence of neurotic manifestations such as poor self-esteem, body image and sleep quality. Therefore a neurotic dimension was used in predictions of partner relationship quality and life-satisfaction. This cluster of manifestations was a very good predictor of both partner relationship quality and life satisfaction. The presence of neuroticism in mid-adolescence appears to influence the quality of partner relationships, and the level of happiness experienced in adulthood.

Whether a person is happy or not is highly related to both their level of neuroticism and the quality of their partner relationships. In prior cross-sectional research, partner relationship quality was found to be important to people’s experience of happiness (Russell & Wells, 1994). As in the present study they found both direct and indirect effects of neuroticism on happiness. People who were high on neuroticism were unhappy. In addition, experiencing neuroticism has a negative impact on marriage quality. In turn, low marriage quality was found to influence how happy people were. This is also what I found. However, contrary to the prior study, chronic neuroticism was more important than partner relationship quality in predicting happiness.

One explanation for the differences in findings may be the varied measures between the two studies and the research methods used. Through the use of longitudinal data, patterns of behaviour can be examined over time. I was able to look beyond concurrent neuroticism effects and found a long-term pattern of neuroticism effecting partner relationships and happiness. Another explanation is that instead of looking at just personality, I also looked at neuroticism as a dimension. This enabled me to look at other aspects manifested in neuroticism such as self-esteem, body perception and sleep quality in relation to partner relationships and happiness. While a person’s personality and partner relationship quality are important, the level of neuroticism appears to be most important for experiencing happiness. The reason for this is that neuroticism seems to affect happiness through two routes. Neuroticism appears to have a direct influence on happiness levels; as well as an indirect impact through the influence on partner relationship quality.

Another aspect of this study was whether having good partner relationships would either interact with, or buffer the effects of neuroticism in determining happiness. However, there did not appear to be either interaction or moderating effects. The effects of neuroticism on happiness do not appear to be buffered by good partner relationships. What I did find were mediating effects. This finding supports prior longitudinal and cross-sectional research in which neuroticism influenced happiness indirectly through marriage quality (Heller et al., 2004). Neuroticism that people experienced appeared to reduce the quality of their partner relationships (Möller, 2004; Kelly & Conley, 1987; Russell & Wells, 1994). People who then experienced poorer partner relationships seemed less happy (Russell & Wells, 1994). This was partially supported by the current study. There were no overall mediation effects for happiness. Instead neuroticism mediated one component, negative affect. Levels of neuroticism were found to mediate partner relationship quality which in turn affected levels of depression. So, what this means is that a person with neurotic tendencies may act in a way that negatively influences their relationship. Having poorer relationship quality may then influence the person’s level of negative effect. It appears that neuroticism and good partner relationships work largely independently in experiencing happiness; with the exception of negative affect. Therefore, experiencing chronic neuroticism appears to have negative effects on relationship quality. As well as both direct and indirect negative effects on happiness.

There are a couple of potential limitations of this study. One is the small sample size. This may affect the ability to generalize from the results of this study. However, the characteristics of the people in this sample are thought be representative of Swedish people in general. Another potential limit is that the two adult sleep measures had a low correlation. This may possibly reduce the reliability of this measure. However, two sleep measures are
still better than one in providing an overall indication of sleep quality. In this instance current sleep problems, as well as those within the last year are measured. This provides a better estimate of sleep disturbances in mid-age than a concentration on one of them. A final potential limitation is that the information comes from a single source; self-report. It is very likely that partners, family and friends would perceive the individual’s personality, relationship quality and happiness levels differently than the individual. However, self-reports are more important to happiness research than information gained from other sources. This is because experiencing happiness is highly subjective.

The strengths of this study outweigh the limits. What makes this study so special is the longitudinal design. Especially important is the large time-span covering 22 years and the utilization of a birth to midlife cohort. This enabled me to look at changes over time and to investigate the relationships between the various aspects. As stated above, this sample is thought to be representative of Swedish people in general. Something remarkable about this study is the relatively low participant dropout considering the long time-span. An additional strength is the high validity and reliability of the measures used.

The findings of this study have implications for prevention and intervention research. This area of research is important for several reasons. One is that neuroticism has been linked with depression, anxiety and a host of other mental health problems. Changing personality is not likely, so cognitive behavioural approaches may be important. That is, changing thinking and behavioural patterns. Another reason is that good partner relationships are important to the physical and mental health of both partners as well as their levels of happiness. I propose that cognitive and behavioural approaches be examined for improving marriage quality and levels of happiness.

As previously discussed, not much can be done to change personality. So any changes need to occur through other processes. In this study, neuroticism was found to influence both the cognitive and affective components of happiness. One way that neuroticism may affect happiness is through its influence on the social environment. People have been found to form their environments based on their personalities (Buss, 1987; Buss, 1991; Saudino, Pedersen, Lichtenstein, McClearn & Plomin, 1997). This means that neurotics tend to experience more negative life events (Magnus et al., 1993). One way that this might occur is by influencing the family climate. People high on neuroticism tend to use negative communication and behaviours in their relationships (Caughlin et al., 2000; Donnellan, Conger & Bryant, 2004). People who want to improve their partner relationship quality and levels of happiness cannot just be less neurotic. Instead the key to improving marriage quality and happiness levels might be through actively changing behaviour (Sheldon & Lyubomirsky, 2006). This is because changing behavioural and thinking patterns are within people’s control.

Maybe it is possible to consciously change these patterns. More specifically people may be able to change how they think, act and perceive themselves and others. This in turn may influence how they feel. Longitudinal analyses on the effects of constructive thinking mediating the effects of personality show promise (Harris & Lightsey, Jr., 2005). While personality is resistant to change, people can actively change behaviour. Changes in these areas would likely have an effect on how people feel. Other possible effects would be on the manifestations of neuroticism. People who feel better about themselves and others likely would experience increases in self-esteem, body perception and sleep better. These people would surely have improved relationships and feel happier. Research into whether, and how, personality influenced behaviour patterns can change would be beneficial for the fields of prevention and treatment; as well as whether these changes might be lasting.

Adaptation processes have been shown in prior research to return people to set baseline levels for personality and happiness (Fujita & Diener, 2005; Lucas, Clark, Georgellis & Diener, 2003; Suh, Diener & Fujita, 1996). However, changes in marital status and quality
have been shown to exact long-term changes in happiness levels for some people (Lucas et al., 2003). The adaptation processes work against change. However, change is not impossible. I think that people wanting to change need to continuously work on developing and maintaining positive behaviours and attitudes. I suspect that when these new behaviours are not maintained, the neurotic manifestations, lower marriage quality and reduced happiness levels will return.

*I would like to thank my supervisors Håkan Stattin and Margaret Kerr without whom this paper would not have been possible. Thank you.*
References


