

Italian and Swedish adolescents: Differences and associations in subjective well-being and psychological well-being (#12884)

1

First submission

Please read the **Important notes** below, and the **Review guidance** on the next page.
When ready [submit online](#). The manuscript starts on page 3.

Important notes

Editor and deadline

Fulvio D'Acquisto / 21 Sep 2016

Files

1 Raw data file(s)

Please visit the overview page to [download and review](#) the files not included in this review pdf.

Declarations

Involves the study of human participants/human tissue.



Please in full read before you begin

How to review

When ready [submit your review online](#). The review form is divided into 5 sections. Please consider these when composing your review:

1. BASIC REPORTING

2. EXPERIMENTAL DESIGN

3. VALIDITY OF THE FINDINGS






4. General comments

5. Confidential notes to the editor

 You can also annotate this **pdf** and upload it as part of your review

To finish, enter your editorial recommendation (accept, revise or reject) and submit.





BASIC REPORTING

-  Clear, unambiguous, professional English language used throughout.
-  Intro & background to show context. Literature well referenced & relevant.
-  Structure conforms to [PeerJ standard](#), discipline norm, or improved for clarity.
-  Figures are relevant, high quality, well labelled & described.
-  Raw data supplied (See [PeerJ policy](#)).

EXPERIMENTAL DESIGN

-  Original primary research within [Scope of the journal](#).
-  Research question well defined, relevant & meaningful. It is stated how research fills an identified knowledge gap.
-  Rigorous investigation performed to a high technical & ethical standard.
-  Methods described with sufficient detail & information to replicate.

VALIDITY OF THE FINDINGS

-  Impact and novelty not assessed. Negative/inconclusive results accepted. *Meaningful* replication encouraged where rationale & benefit to literature is clearly stated.
-  Conclusion well stated, linked to original research question & limited to supporting results.
-  Data is robust, statistically sound, & controlled.
-  Speculation is welcome, but should be identified as such.

The above is the editorial criteria summary. To view in full visit <https://peerj.com/about/editorial-criteria/>

Italian and Swedish adolescents: Differences and associations in subjective well-being and psychological well-being

Danilo Garcia^{Corresp., 1, 2, 3, 4, 5}, Elisabetta Sagone⁶, Maria E De Caroli⁶, Ali Al Nima^{4, 7}

¹ Blekinge Center of Competence, Blekinge County Council, Karlskrona, Sweden

² Department of Psychology, University of Gothenburg, Gothenburg, Sweden

³ Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden

⁴ Network for Empowerment and Well-Being, Gothenburg, Sweden

⁵ Department of Psychology, Lund University, Lund, Sweden

⁶ Department of Educational Sciences, University of Catania, Sicily, Italy

⁷ Blekinge Centre of Competence, Blekinge County Council, Karlskrona, Sweden

Corresponding Author: Danilo Garcia

Email address: danilo.garcia@icloud.com

Background: One important aspect of subjective judgments about one's well-being (i.e., subjective well-being: life satisfaction, positive affect, and negative affect) is that cultural features, such as, ethnicity, religious affiliation, and motivation seem to shape the apprehension of cognitive judgments of the "the ideal life". In this comparative study we examined differences in subjective well-being and psychological well-being between Italian and Swedish adolescents and tested if the relationship between the three constructs of subjective well-being (i.e., satisfaction with life, positive affect, and negative affect) and psychological well-being was moderated by the adolescents' nationality.

Method: Italian ($n = 255$) and Swedish ($n = 277$) adolescents answered to the Satisfaction with Life Scale, the Positive Affect Negative Affect Schedule, and Ryff's Scales of Psychological Well-Being. Differences between samples were tested using a Multiple Analysis of Variance. We also conducted a multiple group analysis (Italy and Sweden) using Structural equation model to investigate the relationship between all three subjective well-being constructs and psychological well-being.

Results: Italian adolescents scored significantly higher in satisfaction with life than Swedish adolescents. Additionally, across countries girls scored significantly higher in negative affect than boys. In both countries all three constructs of subjective well-being were associated to adolescents' psychological well-being. Nevertheless, while the effect of the relationship between affect and psychological well-being was almost the same across countries, life satisfaction was more strongly related to psychological well-being among Swedish adolescents.

Conclusions: The present study shows that there are larger variations between these two cultures in the cognitive construct of subjective well-being than in the affective construct. Accordingly, associations between the cognitive component, not the affective component, of subjective well-being and psychological well-being differ between countries as well.

Submitted to PeerJ
Please do not quote without permission

Italian and Swedish adolescents:

Differences and Associations in Subjective Well-Being and Psychological Well-Being

Danilo Garcia^{1,2,3,4,5*}, Elisabetta Sagone^{6*}, Maria Elvira De Caroli⁶, Ali Al Nima^{1,2}

¹Blekinge Centre for Competence, Blekinge County Council, Karlskrona, Sweden

²Network for Empowerment and Well-Being, Sweden

³Department of Psychology, University of Gothenburg, Gothenburg, Sweden

⁴Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden

⁵Department of Psychology, Lund University, Lund, Sweden

⁶Department of Educational Sciences, University of Catania, Sicily, Italy

Abstract

Background: One important aspect of subjective judgments about one's well-being (i.e., subjective well-being: life satisfaction, positive affect, and negative affect) is that cultural features, such as, ethnicity, religious affiliation, and motivation seem to shape the apprehension of cognitive judgments of the "the ideal life". In this comparative study we examined differences in subjective well-being and psychological well-being between Italian and Swedish adolescents and tested if the relationship between the three constructs of subjective well-being (i.e., satisfaction with life, positive affect, and negative affect) and psychological well-being was moderated by the adolescents' nationality.

Method: Italian ($n = 255$) and Swedish ($n = 277$) adolescents answered to the Satisfaction with Life Scale, the Positive Affect Negative Affect Schedule, and Ryff's Scales of Psychological Well-Being. Differences between samples were tested using a Multiple Analysis of Variance. We also conducted a multiple group analysis (Italy and Sweden) using Structural equation model to investigate the relationship between all three subjective well-being constructs and psychological well-being.

Results: Italian adolescents scored significantly higher in satisfaction with life than Swedish adolescents. Additionally, across countries girls scored significantly higher in negative affect than boys. In both countries all three constructs of subjective well-being were associated to adolescents' psychological well-being. Nevertheless, while the effect of the relationship between affect and psychological well-being was almost the same across countries, life satisfaction was more strongly related to psychological well-being among Swedish adolescents.

Conclusions: The present study shows that there are larger variations between these two cultures in the cognitive construct of subjective well-being than in the affective construct. Accordingly, associations between the cognitive component, not the affective component, of subjective well-being and psychological well-being differ between countries as well.

Keywords: Adolescents, Italy, Life satisfaction, Positive Affect, Negative Affect, Psychological well-being, Subjective Well-Being, Sweden

Introduction


Researchers in the field of Positive Psychology are interested in protective factors of healthy human development (Seligman, 2002). Among these factors, both *subjective well-being* and *psychological well-being* are considered as interrelated psychological characteristics involved in positive human functioning, such as, resilience and hardiness (Seligman & Csikszentmihalyi, 2014; Fredrickson, 2001; Folkman & Moskowitz, 2000). Subjective well-being is composed of life satisfaction, positive affect, and negative affect (Diener, 1984). Life satisfaction entails the cognitive part of subjective well-being and is the person's evaluation of her/his life a whole in relation to her/his ideal life (Diener, 1984) and also with reference to relevant sources accessible at the time of the evaluation (see Schimmack, Diener & Oishi, 2002). Positive affect entails a person's tendency to feel positive states, such as, enthusiastic, active, and alert, while negative affect the tendency to feel distress and unpleasurable engagement, such as, anger, disgust, guilt, and fear (Watson et al., 1988). Among Swedish adolescents, for example, high levels of positive affect in combination with low levels of negative affect (i.e., a self-fulfilling affective profile) are characterized by high levels of energy, optimism, self-esteem, optimism, internal locus of control, and low levels of stress (Archer et al., 2007, 2008). More recently, among Italian adolescents, Di Fabio and Bucci (2015) demonstrated that high school students with a self-fulfilling profile scored higher on life satisfaction, self-esteem, life meaning, and optimism than students with any other type of affective profile. Thus showing that the affective construct of subjective well-being is associated to similar positive outcomes across Swedish and Italian cultures during adolescence.

Psychological well-being is also considered a major factor for optimal human functioning (Ryff & Keyes, 1995; Ryff & Singer, 1998), occasionally investigated as a predictor variable or

an antecedent of individual positive development, but also as the outcome of high levels of subjective well-being (Ryff, 2013). The elements of psychological well-being are represented by *self-acceptance* (i.e., acceptance of the self, self-actualization, optimal functioning, and maturity), *positive relations with the others* (i.e., the ability to express feelings of empathy and affection for all human beings and to be able of greater love and friendship, and identification with others), *autonomy* (i.e., independence and regulation of behavior through internal locus of control), *environmental mastery* (i.e., the ability to create environments suitable to healthy conditions), *purpose in life* (i.e., a sense of goal directedness and intentionality), and, finally, *personal growth* (i.e., the realization of one's potentialities, underlining the value of new challenges at different moments of one's own life). Psychological well-being has been studied among adolescents in relation to other constructs such as resilience and hardiness (Kobasa, Maddi & Kahn, 1982; Masten et al., 1999; Sagone & De Caroli, 2014; De Caroli & Sagone, 2016), adaptive coping strategies and sense of coherence (Pallant & Lae, 2002), and in relation to subjective well-being operationalized as affective profiles (Garcia & Siddiqui, 2009ab; Garcia, Nima & Kjell, 2014).

Among Swedish adolescents and young adults, for example, psychological well-being has been associated to all three constructs of subjective well-being, essentially showing that high levels of positive affect, low levels of negative affect, and high levels of life satisfaction lead to high levels of psychological well-being (Garcia & Siddiqui, 2009ab; Garcia & Archer, 2012; Garcia, Nima & Kjell, 2014). Accordingly, more recently, among Italian adolescents, it was noted that individuals with the self-fulfilling profile reported higher resilience (in detail, sense of humor, competence, adaptability, and engagement) and psychological well-being (in terms of full autonomy, sense of purpose in life, and self-acceptance) than adolescents with any other type

of affective profile (De Caroli & Sagone, 2016). In some other studies, psychological well-being has showed significant correlations to other measures of well-being, such as, sense of vitality (Ryan & Frederick, 1997) and optimism (Scheier, Carver & Bridges, 2001).

One important aspect of the subjective well-being constructs (i.e., life satisfaction, positive affect, and negative affect) is that cultural features, such as, ethnicity, religious affiliation, and motivation seem to shape the  appension of “the ideal life” (Tsai, Knutson, and Fung, 2006; Tsai, Miao, and Seppala, 2007; Scollon et al., 2009). In other words, we could expect larger variations between cultures in the cognitive construct of subjective well-being than in the affective construct. If so, associations between the subjective well-being constructs and psychological well-being might differ between countries as well.

Purpose of the study

The main purposes of this study were (1) to analyze differences in subjective well-being and psychological well-being between Italian and Swedish adolescents and (2) to test if the relationships between the three aspects of subjective well-being (i.e., satisfaction with life, positive affect, and negative affect) and psychological well-being were moderated by the adolescents’ nationality.

Method

Ethical Statement

After consulting with the university’s ~~the~~ Network for Empowerment and Well-Being’s Review Board and according to law (2003: 460, section 2) concerning the ethical research involving humans we arrived at the conclusion that the design of the present study (e.g., all participants’ data were anonymous and will not be used for commercial or other non-scientific purposes) required only verbal consent from participants. For the Italian sample, researchers followed the

125 Ethical Code for Italian psychologists (L. 18.02.1989, n.56) and DL for data privacy (DLGS
126 196/2003); Ethical Code for Psychological Research (March 27, 2015) by AIP (Italian
127 Psychologists Association). For the Italian sample also only verbal consent was needed.

128 *Participants*

129 The data was collected at two high schools in ~~the Eastern of Sicily, Italy~~ (N = 255, 107 boys and
130 148 girls, *mean* age 16.19 years *SD* 1.75 years) and two high schools in ~~the West of~~ Sweden (N =
131 277, 166 boys and 111 girls, *mean* age 18.11 years *SD* 0.59 years). The sampling procedure of
132 schools was based on convenience. Teachers and parents were informed about the nature of the
133 study. The school nurse from each school was contacted by the researchers and informed about
134 the study in case any of the students needed counseling. Participants were informed that the
135 study examined how pupils think about their lives in different situations. They were ensured
136 anonymity and informed that participation was voluntary; they had consent from their teachers to
137 participate. The study was conducted in the participants' own classrooms in groups of 20 to 30
138 pupils; the questionnaires were distributed on paper. The entire procedure, including debriefing,
139 took approximately 30 minutes.

140 *Measures*

141 The Satisfaction With Life Scale (Pavot & Diener, 2008) assesses the cognitive component of
142 subjective well-being (i.e., life satisfaction) and consists of 5 items (e.g., "In most of my ways
143 my life is close to my ideal") that require a response on a 7-point Likert scale (1 = *strongly*
144 *disagree*, 7 = *strongly agree*). Both the Swedish and the Italian versions of this instrument have
145 been previously used in these cultures (e.g., Fahlgren, Nima, Archer & Garcia, 2015; Sagone &
146 De Caroli, 2015). In the current study, this measure had a *Cronbach's* $\alpha = .85$ in the Italian
147 sample and .93 in the Swedish sample.

The Positive Affect and Negative Affect Schedule (Watson, Clark & Tellegen, 1988) assesses the affective component of subjective well-being by requiring participants to indicate on 5-point Likert scale to what extent (1 = *very slightly*, 5 = *extremely*) they generally experienced 20 adjectives describing affective states (10 positive affect and 10 negative affect) within the last few weeks. The positive affect scale includes adjectives such as “strong”, “proud”, and “interested”; and the negative affect scale includes adjectives such as “afraid”, “ashamed”, and “nervous”. The Swedish and Italian versions have been used in previous studies (e.g., Schütz, Archer & Garcia, 2013; De Caroli & Sagone, 2016) and demonstrated acceptable internal consistency in the present study: *Cronbach’s α* was .77 for positive affect and .79 for negative affect in the Italian sample and .86 for positive affect and .85 for negative affect in the Swedish sample.

Ryff’s Scales of Psychological Well-Being - short version (Clarke, Marshall, Ryff and Wheaton, 2001) comprises 18 items with a 6-point Likert (1 = *strongly disagree*, 6 = *strongly agree*), 3 items for each of the 6 dimensions: self-acceptance (e.g., “I like most aspects of my personality”), personal growth (e.g., “For me, life has been a continuous process of learning, changing, and growth”), purpose in life (“Some people wander aimlessly through life, but I am not one of them”), environmental mastery (e.g., “I am quite good at managing the responsibilities of my daily life”), autonomy (e.g., “I have confidence in my own opinions, even if they are contrary to the general consensus”), and positive relations with others (e.g., “People would describe me as a giving person, willing to share my time with others”). The Swedish and Italian versions have been used in previous studies (e.g., Garcia, Jimmefors, Mousavi, Adrianson, Rosenberg & Archer, 2015; De Caroli & Sagone, 2016). In the present study, we used the whole scale as one general measure of psychological well-being. The *Cronbach’s α* for

this psychological well-being composite were .68 for the Italian sample and .79 for the Swedish sample.

Results

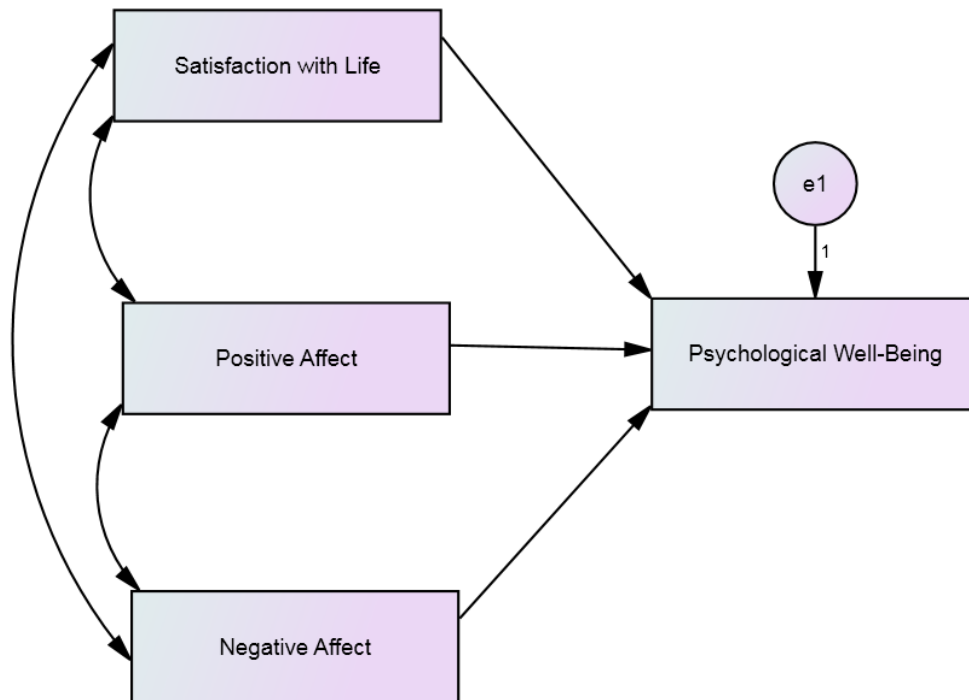
We conducted one Multivariate Analysis of Variance using age as covariate in order to investigate differences between Italian and Swedish adolescents. Specifically, we used country (Italy-Sweden) and gender (male-female) as the independent factors, age as the covariate, and the different constructs of subjective well-being (satisfaction with life, positive affect, and negative affect) and the psychological well-being composite as the independent variables. We used age as a covariate since the significant difference in age between samples ($age\ mean_{Italy} = 16.19 \pm 1.75$, $age\ mean_{Sweden} = 18.11 \pm 0.59$) and the fact that levels of affectivity and psychological well-being fluctuate with age (see Ryff, 1989).

Both gender ($F(4,519) = 4.84$; $p < .01$, $Wilks' Lambda = .96$) and country ($F(4,519) = 3.49$; $p < .01$, $Wilks' Lambda = .97$) had a significant effect on satisfaction with life and negative affect. Italian adolescents ($M = 4.62$, $SD = 1.26$) scored significantly higher in satisfaction with life ($F(1,522) = 6.85$; $p < .01$) than Swedish adolescents ($M = 4.30$, $SD = 1.56$). Additionally, girls ($M = 2.38$, $SD = .67$) scored significantly higher in negative affect ($F(1,522) = 13.75$; $p < .001$) than boys ($M = 2.17$, $SD = .62$). The interaction of country and gender was no significant ($F(4,519) = .76$; $p = .552$, $Wilks' Lambda = .99$), thus, the difference in life satisfaction between countries was consistent across genders and the difference in negative affect between girls and boys was consistent across countries. No other significant differences were found.

The second analysis was a multiple group Structural Equation modeling to test if the relationship between the three constructs of subjective well-being (i.e., satisfaction with life, positive affect, and negative affect) and psychological well-being was moderated by individuals'

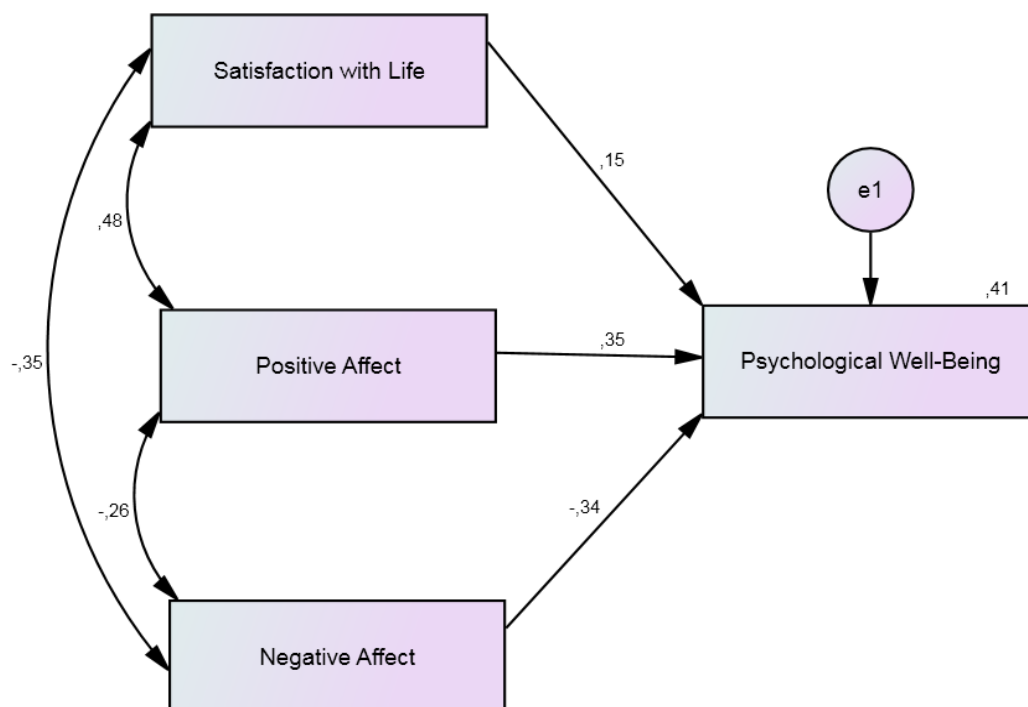
nationality. In other words, we used country as the moderator, all three subjective well-being constructs as the independent variables, and psychological well-being as the dependent variable (see Figure 1). This model showed a *goodness of fit index* = 1.00, a *comparative fit index* = 1.00, an *incremental fit index* = 1.00, and *normed fit index* = 1.00. Thus, indicating that the model is a good-fitting model.

As showed in Figure 2 and 3 and, subsequently, in Table 1, in both countries all three constructs of subjective well-being were associated to adolescents' psychological well-being. We tested if the regression weights were significantly different across groups (Italian and Swedish adolescents). The result showed that there was a significant difference on level model between the unconstrained/original model and constrained model (with all constrained regression weights on psychological well-being). In other words, nationality moderated at least one of the paths. In further analyses (path by path), we found that the effect of the relationships between positive affect and psychological well-being and between negative affect and psychological well-being were not significantly different between countries. The relationship between life satisfaction and psychological well-being, on the other hand, differed significantly between countries. This relationship was significantly stronger among Swedish adolescents (see Table 2).



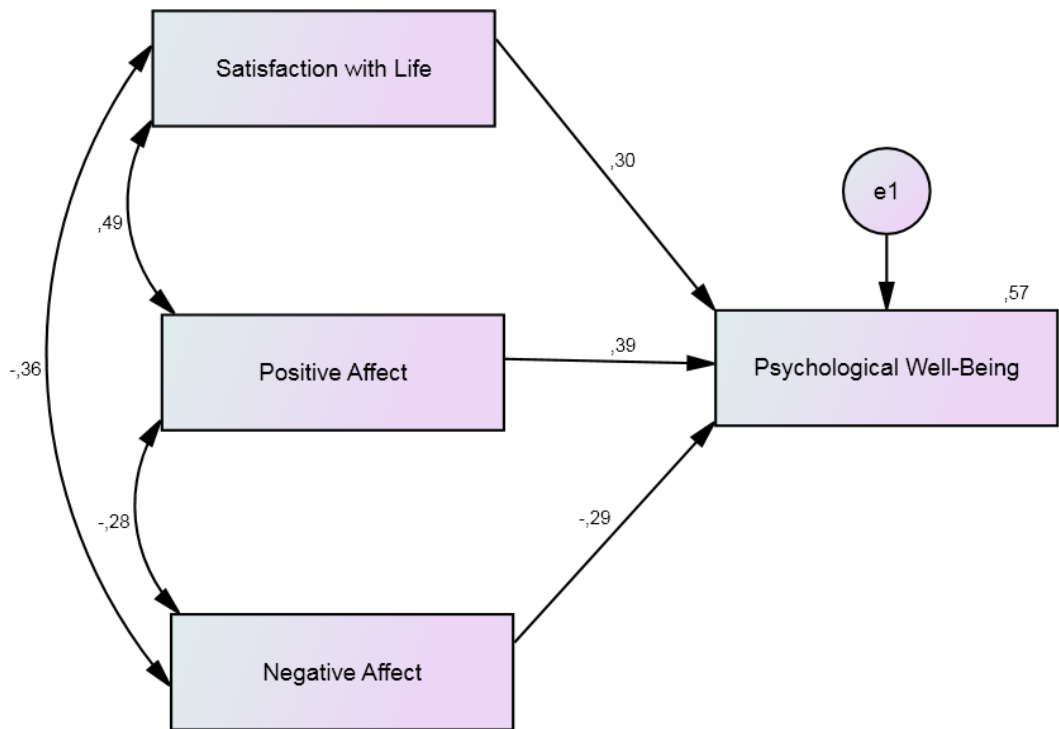
210

211 Figure 1. Hypothesized structural equation model of the relationship between all three subjective well-being
 212 constructs as the independent variable and psychological well-being as the dependent variable.



213

214 Figure 2. Structural equation model showing all correlations between Italian adolescents' ($N = 255$) subjective well-
215 being and psychological well-being, along the standardized parameter estimates.



216
217 Figure 3. Structural equation model showing all correlations between Swedish adolescents' ($N = 275$) subjective
218 well-being and psychological well-being, along the standardized parameter estimates.

219 Table 1. Results of the structural equation model using all three subjective well-being constructs
220 as the predictors of Italian ($N = 255$) and Swedish adolescents' ($N = 275$) psychological well-
221 being.

Predictor	Outcome	β	SE	B	P
A. Italian Adolescents					
Satisfaction with life	Psychological well-being	.15	.02	.06	<.001
Positive affect		.35	.05	.30	<.001
Negative affect		$R^2 = .41$	-.34	.04	-.28
B. Swedish Adolescents					

Satisfaction with life	Psychological well-being $R^2 = .57$.30	.02	.12	<.001
Positive affect		.39	.04	.37	<.001
Negative affect		-.29	.04	-.26	<.001

222

223 Table 2. Results of the compare nested models using *Chi-square* difference test.

Model	DF	Chi ² difference	P
All constrained regression weights on psychological well-being	3	9.53	.02
Constrained regression weight satisfaction with life on psychological well-being	1	4.12	.04
Constrained regression weights positive affect on psychological well-being	1	1.24	.27
Constrained regression weights negative affect on psychological well-being	1	.17	.68

224 Note. Unconstrained model has $Chi^2 = 0.00$, $df=0.00$.

225 Discussion

226 The purpose of this study was twofold: (1) to analyze differences in subjective well-being and
 227 psychological well-being between Italian and Swedish adolescents and (2) to test if the
 228 relationships between the three aspects of subjective well-being (i.e., satisfaction with life,
 229 positive affect, and negative affect) and psychological well-being were moderated by the
 230 adolescents' nationality. At a general level, the results were straightforward: Italian adolescents
 231 experience their life as satisfying and more close to their ideal and girls in both countries
 232 experience more negative emotions. No differences were found with regard to positive emotions
 233 or psychological well-being.

The gender differences here have actually been found earlier and are substantially supported across the literature. Females usually score higher in characteristics related to negative emotionality, such as, neuroticism, anxiety, depression, and rumination (see among others Ellis, 2011; Hyde, Mezulis, & Abramson, 2008; Johnson & Whisman, 2013; Twenge & Nolen-Hoeksema, 2002; Bodas & Ollendick, 2005; De Bolle, De Fruyt, McCrea, Löckenhoff et al., 2015; Hopcroft & McLaughlin, 2012; McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005). Interestingly, gender differences in neuroticism, which is almost synonymous with negative affect (Tellegen, 1993), do not reach their full strength until around age 14 (De Bolle, De Fruyt, McCrea, Löckenhoff et al., 2015). Which was the age of the youngest participants in the present study. That being said, although gender differences in negative affect states and traits are present across nations in most studies, these differences seem to depend on which level of gender equity is practiced (Schmitt, Long, McPhearson, O'Brien, Remmert & Shah, 2016). Although counter-intuitive, gender differences in negative emotionality are larger in relatively high gender egalitarian cultures (Schmitt, Long, McPhearson, O'Brien, Remmert & Shah, 2016). Since we did not find any interactions between gender and nationality, our results implicitly suggest that Italy and Sweden might be relatively alike in gender equality. This is, however, beyond the scope of the present study and we suggest it as an interesting venue for future studies.

We did also found that affectivity is equally related to psychological well-being across both nations, while life satisfaction was significantly more strongly related to psychological well-being among Swedish adolescents than among Italian adolescents. Firstly, this demonstrated how affectivity and life satisfaction are different constructs of subjective well-being (cf. Diener, 1984)—one addressing more of biological part (i.e., emotions) and the other

more of a psychological part (i.e., cognition). That being said, in order to have a biopsychosocial model of subjective well-being, we lacked a social component for the subjective well-being measure used here. It is plausible that such a construct is differently associated to psychological well-being among different cultures (cf. Markus & Kitayama, 1991). Future studies should investigate this further. Harmony, for example, has recently being suggested as a cognitive construct that expands or complements life satisfaction (Kjell, Daukantaite, Hefferon & Sikström, 2016). However, because it is a construct related to the sense of balance and flexibility that an individual experiences in relation to the world or her/his life (cf. Li, 2008ab), harmony is more likely a social component of subjective well-being, which in turn is more of a cognitive global construct of well-being, since it is mostly measured through self-reports (see Garcia, 2016). Secondly, the differences in associations among adolescents from these two nations between life satisfaction and psychological well-being are in line with the fact that cultural features, such as, ethnicity, religious affiliation, and motivation seem to shape the apprehension of “the ideal life” (Tsai, Knutson, and Fung, 2006; Tsai, Miao, and Seppala, 2007; Scollon et al., 2009).

Limitations and final remarks

The cross-sectional design and the self-report design of the present study limit our conclusions. Additionally, a more valid measure of psychological well-being would allowed us to scrutinize the sub-scales. The different aspects of psychological well-being like self-acceptance, purpose in life and/or positive relations with other might vary between adolescents from Sweden and Italy (cf. Markus & Kitayama, 1991). In sum, the present study shows that there are larger variations between these two cultures in the cognitive construct of subjective well-being than in the affective construct. Accordingly, associations between the cognitive component, not the affective

component, of subjective well-being and psychological well-being differ between countries as well.

References

- Archer T, Adolfsson B, Karlsson E. 2008. Affective personality as cognitive-emotional presymptom profiles regulatory for self-reported health predispositions. *Neurotoxicity Research* **14**:21-44 DOI 10.1007/BF03033573
- Archer T, Adrianson L, Plancak A, Karlsson E. 2007. Influence of affective personality on cognition-mediated emotional processing: Need for empowerment. *European Journal of Psychiatry* **21**:248-262.
- Bodas J, Ollendick TH. 2005. Test anxiety: A cross- cultural perspective. *Clinical Child and Family Psychology Review* **8**:65–88.
- Clarke PJ, Marshall VM, Ryff CD, Wheaton B. 2001. Measuring psychological well-being in the Canadian study of health and aging. *International Psychogeriatrics* **13**:79-90.
- De Bolle M, De Fruyt F, McCrae RR, Löckenhoff CE, Costa PT, Jr., et al.2015. The emergence of sex differences in personality traits in early adolescence: A cross-sectional, cross-cultural study. *Journal of Personality and Social Psychology* **108**:171 – 185.
- De Caroli ME, Sagone E. 2016. Resilience and psychological well-being: differences for affective profiles in Italian middle and late adolescents. *Revista INFAD de Psicologia* **1**:149-160 DOI 10.17060/ijodaep.2016.n1.v1.237
- Di Fabio A, Bucci O. 2015. Affective profiles in Italian high school students: life satisfaction, psychological well-being, self-esteem, and optimism. *Frontiers in Psychology* **6**:1310 DOI 10.3389/fpsyg.2015.01310
- Diener E. 1984. Subjective well-being. *Psychological Bulletin* **95**:542–575.

- 303 Ellis L. 2011a. Identifying and explaining apparent universal sex differences in cognition and
304 behavior. *Personality and Individual Differences* **51**:552–561.
- 305 Falhgren E, Nima AA, Archer T, Garcia D. 2015. Person-Centered Osteopathic Practice:
306 Patients’ Personality (Body, Mind, and Soul) and Health (Ill-Being and Well-Being).
307 *PeerJ* **3**:e1349 DOI 10.7717/peerj.1349.
- 308 Folkman S, Moskowitz JT. 2000. Positive affect and the other side of coping. *American*
309 *Psychologist* **55**:647-654.
- 310 Fredrickson BL. 2001. The role of positive emotions in positive psychology: The broaden-and-
311 build theory of positive emotions. *American Psychologist* **56**:218-226 DOI
312 10.1037/0003-066X.56.3.218.
- 313 Garcia D. 2016. A Biopsychosocial Model of Subjective Well-Being: Affcctivity, Life
314 Satisfaction, and Harmony. Manuscript in press.
- 315 Garcia D, Nima AA, Kjell ONE. 2014. The affective profiles, psychological well-being, and
316 harmony: Environmental mastery and self-acceptance predict the sense of a harmonious
317 life. *PeerJ* **2**:e259 DOI 10.7717/peerj.259
- 318 Garcia D, Archer T. 2012. Adolescent life satisfaction and well-being. *Journal of Alternative*
319 *Medicine Research* **4**:271-279.
- 320 Garcia D, Jimmefors A, Mousavi F, Adrianson L, Rosenberg P, Archer T. 2015. Self-regulatory
321 Mode (Locomotion and Assessment), Well-Being (Subjective and Psychological), and
322 exercise behavior (Frequency and Intensity) in Relation to High School Pupils’ Academic
323 Achievement. *PeerJ* **3**:e847 DOI 10.7717/peerj.847

- Garcia D, Siddiqui A. 2009a. Adolescents' psychological well-being and memory for life events: influences on life satisfaction with respect to temperamental dispositions. *Journal of Happiness Studies* **10**:387-503
- Garcia D, Siddiqui A. 2009b. Adolescents' affective temperaments: life satisfaction, interpretation, and memory of events. *The Journal of Positive Psychology* **4**:155-167.
- Hopcroft RL, McLaughlin J. 2012. Why is the sex gap in feelings of depression wider in high gender equity countries? The effect of children on the psychological well-being of men and women. *Social Science Research* **41**:501–513.
- Huebner ES, Dew T. 1996. The interrelationships of positive affect, negative affect, and life satisfaction in an adolescent sample. *Social Indicators Research* **38**:129-137 DOI 10.1007/BF00300455.
- Hyde JS, Mezulis AH, Abramson LY. 2008. The ABCs of depression: Integrating affective, biological, and cognitive models to explain the emergence of the gender difference in depression. *Psychological Review* **115**:291 – 313.
- Johnson DP, Whisman MA. 2013. Gender differences in rumination: A meta-analysis. *Personality and Individual Differences* **55**:367–374.
- Kjell ONE, Daukantaité D, Hefferon D, Sikström S. 2016. The Harmony in Life Scale Complements the Satisfaction with Life Scale: Expanding the Conceptualization of the Cognitive Component of Subjective Well-Being. *Social Indicators Research* **126**:893-919. DOI: 10.1007/s11205-015-0903-z.
- Kobasa SC, Maddi SR, Kahn S. 1982. Hardiness and health: a prospective study. *Journal of Personality and Social Psychology* **42**:168-177 DOI 10.1037/0022-3514.42.1.168.
- Li C. 2008a. The ideal of harmony in ancient chinese and greek philosophy. *Dao* **7**:81–98.

- 347 Li C. 2008b. The philosophy of harmony in classical confucianism. *Philosophy Compass* **3**:13.
- 348 Markus HR, Kitayama S. 1991. Culture and the self: Implications for cognition, emotion, and
- 349 motivation. *Psychological Review* **98**:224–253. DOI:10.1037/0033-295X.98.2.224.
- 350 Masten AS, Hubbard JJ, Gest SD, Tellegen A, Garmezy N, Ramirez M. 1999. Competence in the
- 351 context of adversity: pathways to resilience and maladaptation from childhood to late
- 352 adolescence. *Development and Psychopathology* **11**:143-169.
- 353 McCrae RR, Terracciano A, & 78 Members of the Personal- ity Profiles of Cultures
- 354 Project.2005. Universal features of personality traits from the observer’s perspective:
- 355 Data from 50 cultures. *Journal of Personality and Social Psychology* **88**:547–561.
- 356 Norlander T, Johansson A, Bood SA. 2005. The affective personality: its relation to quality of
- 357 sleep, well-being and stress. *Social Behavior and Personality* **33**:709-722
- 358 Pallant JF, Lae L. 2002. Sense of coherence, well-being, coping and personality factors: Further
- 359 evaluation of the sense of coherence scale. *Personality and Individual Differences* **33**:39-
- 360 48
- 361 Pavot W, Diener E. 2008. The Satisfaction With Life Scale and the emerging construct of life
- 362 satisfaction. *The Journal of Positive Psychology* **3**:137-152 DOI
- 363 10.1080/17439760701756946
- 364 Ryan RM, Frederick CM. 1997. On energy, personality and health: Subjective vitality as a
- 365 dynamic reflection of well-being. *Journal of Personality* **65**:529-565 DOI
- 366 10.1111/j.1467-6494.1997.tb00326.x
- 367 Ryff CD, Keyes C. 1995. The structure of psychological well-being revisited. *Journal of*
- 368 *Personality and Social Psychology* **69**:719-727.
- 369 Ryff CD, Singer B. 1998. The contours of positive human health. *Psychological Inquiry* **9**:1-28.

- Ryff CD, Singer B. 2003. Flourishing under fire: Resilience as a prototype of challenged thriving. In: Keyes CLM, & Haidt J. eds. *Flourishing: Positive psychology and the life well-lived*. Washington, DC: American Psychological Association, 15-36. <http://dx.doi.org/10.1037/10594-001>
- Ryff CD. 1989. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology* **57**:1069–1081 <http://dx.doi.org/10.1037/0022-3514.57.6.1069>
- Ryff CD. 2013. Psychological Well-being revisited: Advances in the Science and Practice of Eudaimonia. *Psychotherapy and Psychosomatics* **83**:10-28 DOI 10.1159/000353263
- Sagone E, De Caroli ME. 2014. Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia – Social and Behavioral Sciences*, **141**:881-887 DOI 10.1016/j.sbspro.2014.05.154
- Sagone E, De Caroli ME. 2015. Positive Personality as a Predictor of High Resilience in Adolescence. *Journal of Psychology and Behavioral Science* **3**:45-53 DOI 10.15640/jpbs.v3n2a6.
- Scheier MF, Carver CS, Bridges MW. 2001. Optimism, pessimism, and psychological well-being. In: Chang EC. ed., *Optimism and pessimism: Implications for theory, research, and practice*. Washington, DC: American Psychological Association, 189-216.
- Schimmack U, Diener E, Oishi S. 2002. Life-satisfaction is a momentary judgement and a stable personality characteristic: the use of chronically accessible and stable sources. *Journal of Personality* **70**:345-384 DOI 10.1111/1467-6494.05008.

- 391 Schmitt DP, Long AE, McPhearson A, O'Brien K, Remmert B, Shah SH. 2016. Personality and
392 gender differences in global perspective. *International Journal of Psychology*. DOI:
393 10.1002/ijop.12265.
- 394 Schütz E, Archer T, Garcia D. 2013. Character Profiles and Adolescents' Self-reported Affect.
395 *Personality and Individual Differences* **54**:841–844 DOI 10.1016/j.paid.2012.12.020.
- 396 Scollon CN, Howard AH, Caldwell AE, Ito S. 2009. The role of ideal affect in the experience
397 and memory of emotions. *Journal of Happiness Studies* **10**:257–269 DOI:
398 10.1007/s10902-007-9079-9
- 399 Seligman MEP, Csikszentmihalyi M. 2014. Positive Psychology: An Introduction. In:
400 Csikszentmihalyi M. ed. *Flow and the Foundations of Positive Psychology*. Springer
401 Netherlands, 279-298. DOI 10.1007/978-94-017-9088-8_18
- 402 Seligman MEP. 2002. *Authentic Happiness: Using the New Positive Psychology to Realize Your*
403 *Potential for Lasting Fulfillment*. New York, NY: Free Press.
- 404 Tellegen A. 1993. Folk concepts and psychological concepts of personality and personality
405 disorder. *Psychological Inquiry* **4**:122-13.
- 406 Tsai JL, Knutson B, Fung HH. 2006. Cultural variation in affect valuation. *Personality processes*
407 *and Individual Differences* **90**:288-307 DOI 10.1037/0022-3514.90.2.288
- 408 Tsai JL, Miao FF, Seppala E. 2007. Good feelings in Christianity and Buddhism: Religious
409 differences in ideal affect. *Personality and Social Psychology Bulletin* **33**:409-421 DOI
410 10.1177/0146167206296107.
- 411 Twenge JM, Nolen-Hoeksema S. 2002. Age, gender, race, socioeconomic status, and birth
412 cohort difference on the children's depression inventory: A meta-analysis. *Journal of*
413 *Abnormal Psychology* **111**:578–588.

414 Watson D, Clark LA, Tellegen A. 1988. Development and validation of brief measures of
 415 positive and negative affect: the PANAS scales. *Journal of Personality and Social*
 416 *Psychology* **54**:1063-1070.