

# The Effect of Critical Changes and Gender on Adolescents' Subjective Well-Being: Comparisons Across 8 Countries

Carme Montserrat · Tamar Dinisman ·  
Sergiu Bălțătescu · Brîndușa Antonia Grigoraș ·  
Ferran Casas

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**Abstract** The aim of this article is to explore adolescents' subjective well-being (SWB) in relation to critical changes in their lives during the last year in 8 countries: Brazil, England, Israel, Romania, South Africa, Spain, Uganda and the US. Furthermore, interactions between gender and critical changes are also examined. Data collection was conducted between 2011 and 2012 with 12 year-old boys and girls, as part of the ISCWeB project. Number of changes experienced was measured using five possible changes (moved house, changed local area, changed school, living in another country for over a month and change in the parents or carers they live with). The adolescents were then divided into three groups according to the amount of changes: 'had not experienced any change', 'had experienced 1–2 changes', and 'had experienced three or more changes'. SWB was evaluated using satisfaction with five different life domains: school, material conditions, leisure time, oneself and social relationships

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C. Montserrat (✉) · F. Casas  
Research Institute on Quality of Life, University of Girona, Plaça Sant Domènec, 9, 17071 Girona, Spain  
e-mail: carme.montserrat@udg.edu

F. Casas  
e-mail: ferran.casas@udg.edu

T. Dinisman  
Coordinator of the International Survey of Children's Well-Being (ISCWeB), Via Antonio Stoppani, 12,  
Milan 20129, Italy  
e-mail: tdinisman@gmail.com

S. Bălțătescu  
Department of Sociology and Social Work, University of Oradea, Universitatii Str. No. 1, Oradea,  
Romania  
e-mail: bsergiu@uoradea.ro

B. A. Grigoraș  
Faculty of Sociology and Social Work, "Babeș-Bolyai" University, B-dul 21 Dec. 1989, No. 128,  
Cluj-Napoca, Romania  
e-mail: brindusa\_grigoras@yahoo.com

along with the children's overall life satisfaction. The findings indicate the negative effect of critical changes on adolescents' SWB in most countries, with the exception of Uganda. The findings concerning the interaction between gender and critical changes show the complexity of the impact of gender, emphasizing the variation across life domains and cultures.

**Keywords** Subjective well-being (SWB) · Critical life changes · Cross-country research · Gender · Adolescents

## 1 Introduction

Subjective well-being (SWB) is a construct that includes cognitive components (overall life satisfaction or satisfaction with specific domains) and affective components (positive and negative affects). Satisfaction is an assessment made by individuals based on a long term evaluation of their lives. Happiness is the result of a balance between positive and negative affect (Bradburn 1969) and it seems to be more influenced by immediate experiences (Keyes et al. 2002).

Broadly speaking, children and adolescents' own voices have often been forgotten in studies of well-being. There has traditionally been reluctance among social scientists to accept children's self-reported information as reliable (Casas 1998). However, in recent decades, there has been an increasing amount of research into children's well-being, with the development and testing of psychometric instruments (Ben-Arieh et al. 2014). Although a significant number of studies exist in the scientific literature regarding critical changes in children's lives, rarely do they focus on the impact of these changes on children and adolescents' well-being from their point of view. This article will attempt to narrow this gap by exploring adolescents' SWB in 8 countries in relation to critical changes in their lives.

### 1.1 Subjective Well-Being and Critical Changes in Adolescents' Lives

Stability, or the lack of critical changes in children and adolescents' lives, has an overwhelming importance in their development, for both those who are living in natural families or in foster care. As Harden (2004) observes, across studies the authors discussed different dimensions of this stability. However, all these stability types were found to contribute to the well-being of children: stability of family structure (Tolnay and Crowder 1999), stability of dwelling (i.e. not moving from a foster house to another) (Rubin et al. 2007), continuity of attachments and activity types for foster care children (Fong et al. 2006).

For the purpose of this article, we understand critical changes in adolescents' lives to be those related to their immediate world: their family structure (divorce, death of a parent, entering the care system, among others), moving to another school, another house or another country. These changes could impact very significantly on a child's life in either a positive or negative sense. In addition, some of these changes can be related to stability, a key factor in children's lives.

Knowledge is scarce regarding children and adolescents' SWB according to critical changes in their lives - change of carers, school, home, or country, for example, except

for a few recent studies. Dinisman et al. (2012) showed that stability appears as a key factor in the SWB of adolescents surveyed in their study in Spain: those who have suffered fewer changes of parent or carer, home, school or local area, report significantly higher well-being than those who have undergone more changes (i.e. those living in single-parent families or in out-of-home care). Similarly, using the General Index of Children's Subjective Well-Being, Grigoras (2013) found changes in their lives to be associated with lower levels of SWB, particularly changes involving parents and having several alternative homes at the same time. The results showed that children who had not experienced any change in the past year regarding their house, school, local area, country, parents or caregivers, reported a level of SWB significantly higher than those who had experienced two or more changes in their lives. Bălătescu (2008) found that important negative personal and family life events in the last year (parents getting divorced or separating, a family member being arrested or convicted of a crime, parents going abroad, breaking up with a girlfriend/boyfriend) were detrimental to Romanian adolescents' (15–18 years) life satisfaction.

Also, in a survey on a large sample of young English children, the findings revealed the same significant negative association between changes children had experienced in the last year (in family structure, moving house, changing school, changing local area) and their SWB; the strongest negative association was found with changes relating to the adults with whom they live (Rees et al. 2010). In the same way, it has been recently shown that a lack of stability in foster and residential care disrupts the well-being of children in care. Children who experienced numerous placement changes and disruptions are more likely to present negative outcomes while in care and after leaving care (Montserrat et al. 2013; Sinclair et al. 2007). We should note, however, that the direction if this relationship needs to be further explored: it may be that children who have more problematic behaviours are those who are moved around more often (in residential care).

Lewis (2006) stated that there had been relatively little analysis of children's position in the context of changing families and Brannen and O'Brien (1996) went further, declaring that the focus should be children in families rather than families with children. In this sense, Main and Besemer (2014) stated that the study of child material deprivation – that it is more a child-focused measure - provides more information regarding child poverty than the study of only income poverty.

Family structure is also likely to significantly influence children's economic well-being, single mother families having higher rates of poverty than married-couple families (McCall and Percheski 2010). On the other hand, research findings on child well-being across OECD countries (Chapple 2009) have indicated that a small association exists between child well-being and the single-parent family structure. Partnership disruption is also associated with psychological distress, financial difficulties and important changes in individual living conditions, and therefore its subsequent impact on children. On the other hand, children who have experienced a high level of parental conflict generally show improved levels of well-being after the divorce of their parent than those remaining in high-conflict families (Flaquer 2014).

Waldfoegel et al. (2010) have also stated that family instability seems to matter more than family structure for children's cognitive and health outcomes. Their results show that children raised by stable single or cohabiting parents are at less risk than those raised by unstable single or cohabiting parents. There appears to be some evidence that

the number of changes in family structure is important (Wu 1996). Stable housing improves child well-being in terms of health, developmental, and academic outcomes compared to those living in precarious housing conditions (Torrico 2009). Economic security and safe, stable, affordable housing are critical to the well-being of all children (Courtney et al. 2004).

According to the literature presented above, changes in children and adolescents' lives seem to have a complex relationship with their well-being. Thus, we need a systematic approach to this problem, including children and adolescent's perceptions and views.

## 1.2 Subjective Well-Being and Gender

Findings related to gender and children's SWB do not appear to be consistent. Some previous life satisfaction studies revealed no significant differences between boys and girls in life satisfaction domains (Huebner et al. 2006; Seligson et al. 2003) and that overall life satisfaction is unrelated to gender in children and adolescents (Gilman and Huebner 2003; Huebner 2004; Proctor et al. 2009). On the other hand, Bradshaw et al. (2011) found that SWB tended to be worse for girls than boys.

It seems that the diversity in findings can be explained, to some extent, by the life domain in question and the type of measurement. In a sample of Spanish adolescents aged 12 to 16, there appears to be a significant relationship between learning-related satisfaction and gender. In the sense girls expressed more satisfaction than boys, and also with interpersonal relationships, whereas boys expressed significantly higher satisfaction with materialistic and knowledge-related values (Casas et al. 2004). A few years later, the same author and his collaborators studied Spanish school attending children with a mean age of 12, (Casas et al. 2013b) and found significant differences between girls and boys when measuring life satisfaction domains using multi-item scales, girls being more satisfied than boys, while no differences were found when using overall indicators of life satisfaction. In the same age group, a study on Romanian school adolescents found significant differences in gender regarding some aspects and domains of their lives: girls were more satisfied with their schools, grades and local police while boys displayed higher life satisfaction scores in regard to self-image, the use of time, the things they want to be good at, and self-confidence (Grigoras 2013). In addition, findings from an English study on young people's well-being showed that girls are less satisfied with their life compared to boys, especially in regard to the way they look and self-confidence (Rees et al. 2010). In their study of German adolescents aged 11–16, Goldbeck et al. (2007) also found a significant gender effect on life satisfaction during adolescence and that the gender effect increases with age. In this case, boys consistently reported more life satisfaction than girls across almost all age groups; the main effects of gender were demonstrated on both general life satisfaction and health-related life satisfaction. The explanation for this difference offered by the authors consists of a more critical self-perception among girls given their more dramatic physical changes during puberty and conflict with exaggerated cultural norms in regard to beauty; making girls are more imbalanced in the physical and emotional aspects of well-being than boys. It can be pointed out that feminist psychologists such as Gilligan (1982) explained the decline in life satisfaction among adolescent girls due to society's messages to girls.

Similar differences were found by Casas et al. (2013a) in a comparison between Spanish and Romanian 13 to 16-year-old adolescents. However, in this study girls were found to be more satisfied with school- and relationship-related indicators of satisfaction. This may be explained by their better grades compared to boys and also their socio-centric orientation.

### 1.3 International Perspective

Broadly speaking, there is not much research comparing different countries in the subject of SWB. According to Ben-Arieh et al. (2014), the critical points to be taken into account when considering child well-being in a cross-cultural perspective are as follows: (i) Childcare practices vary widely around the world; (ii) There is limited empirical evidence regarding the outcomes of most cultural practices for understanding their impact on child well-being in particular cultural contexts; (iii) The available evidence relevant to the causes and consequences of well-being is largely limited to Western cultures (Henrich et al. 2010), which is 10 % of the world child population; (iv) Differences in children's experiences thought to lead to well-being may be highly contested in different cultural contexts.

Great variations are found among different areas. Some studies on SWB have been conducted with children aged 8 and above using the Multidimensional Students' Life Satisfaction Scale (Huebner 1994), which functions well in different cultural contexts (Casas et al. 2000). Cummins' (1998) Personal Well-Being Index has also been used successfully with 12–16 year-olds in some countries, including Romania, Brazil, Spain, Algeria, Argentina, Chile (Casas et al. 2011), and Australia (Tomyn and Cummins 2011). Children's life satisfaction was also studied in relation to values in cross-cultural research conducted in Brazil, India, South Africa, Norway, and Spain and cultural differences were also found (Coenders et al. 2005).

Our research involved data from 8 countries around the world – Brazil, England, Israel, Romania, South Africa, Spain, Uganda and the US. Table 1 displays differences in demographic and socioeconomic data across countries involved in the study presented here.

Van der Gaag et al. (2012) have shown the situation of most children living in poorer countries, and this may be the same in countries like Uganda. Most of the children live with a wider family group, including relatives, but the household structure changes all the time as family members die, parents separate or siblings leave home. They found that between 2002 and 2009, such changes were experienced by 88 % of households in Ethiopia, 81 % in Vietnam, 45 % in Andhra Pradesh, India, and 81 % in Peru. Although family networks are very important, families are also constantly coping with changes and a lot of difficulties when they are poor, and this could be the case for Uganda

### 1.4 The Research Question

The purpose of this article is twofold. First, the article will explore adolescents' SWB in relation to critical changes in their lives during the last year (change of carers, school, house, local area and country) in 8 countries (Brazil, England, Israel, Romania, South Africa, Spain, Uganda and the US). Second, interaction between gender and critical changes in relation to SWB will also be assessed.

**Table 1** Comparison of the eight countries. 2012

	Population	Population aged 0–14 (% of total)	GPD per capita	Mortality rate, under-5 (per 1000 live births)	Net enrolment rate. Secondary	Universal health coverage <sup>a</sup>
UK	63,227,526	18 %	38,514	5	98 %	Yes
Spain	46,217,961	15 %	29,195	5	95 % (2011)	Yes
Romania	21,326,905	15 %	14,037	12	82 % (2009)	Yes <sup>b</sup>
Israel	7,907,900	28 %	33,250 (2011)	4	98 %	Yes
South Afri- ca	51,189,307	30 %	7508	45	–	Yes
Uganda	36,345,860	49 %	547	69	–	No
USA	313,914,040	20 %	49,965	7	89 %	No
Brazil	198,656,019	25 %	11,340	14	–	Yes

Source <http://data.worldbank.org>

<sup>a</sup> “World Social Security Report 2010/11: Providing Coverage in Times of Crisis and Beyond”

<sup>b</sup> Although, due to budget cuts and bribery, it is estimated that a third of medical expenses are, in some cases, supported by the patient

## 2 Methods

### 2.1 Sample and Procedures

The present study consists of a range of eight countries: Brazil, England, Israel, Romania, South Africa, Spain, Uganda and the US. All data were collected as part of the ISCWeB project between winter 2011 and winter 2012. The current paper focuses on the data collected from 12-year-olds. The samples were based on school adolescents and therefore the majority of them are from the same age groups. Most of the samples were the result of convenience-sampling. In *Brazil*, 60 public and private schools from the Metropolitan Area of Porto Alegre and cities of different areas of the Rio Grande do Sul State (i.e. Santa Cruz do Sul, Rio Grande, Passo Fundo and Santa Maria) were sampled, all classes in the appropriate grade were surveyed in each of the schools. In *England*, random stratified cluster sampling was used. The list of all mainstream secondary schools was divided into five equally sized strata on the basis of the percentage of adolescents in each school who were entitled to free school meals; in each stratum, a number of schools was then randomly selected to obtain sufficient sample size. In each of these schools one class was then randomly selected. The *Israeli* sample used a quota sampling method with two categories: Jewish schools and Arab public schools. The final sample consists of 24 schools (20 Jewish and 4 Arab) in several main locations, including urban and rural communities. In each of the selected schools all adolescents in the applicable grade were asked to take part in the survey. The *Romanian* sample includes a total of 32 public schools in Cluj County that were sampled from both rural and urban areas, in each of the schools two classes were randomly selected. The *South African* sample consists of 15 schools from the

geographical region of the Western Cape. A two-stage stratified random sampling protocol was used and the schools were stratified according to their location within specific Education Management District Councils using socio-economic status and income level as defining variables. In each of the sampled schools all pupils in the relevant grade were selected to participate. The *Spanish* sample is a representative sample of first-year students in compulsory secondary education, stratified by Autonomous Region. In total, data were collected from 143 schools, stratified by public, mixed-funded and private non-subsidized, and by rural, semi-urban and urban areas. Two classes were randomly selected from each of the participating schools. In *Uganda*, 19 schools from East Uganda supported by Build Africa were included in the sample, and all adolescents in the appropriate age were invited to participate. In the *US*, data were collected from 6 school districts in rural areas of the state of South Dakota, all students in the relevant grade were asked to participate.

The original English questionnaire was translated into the language spoken by children in each of the countries, and was pre-tested to ensure the adolescents' understanding beforehand. After giving their informed consent, the pupils completed the self-administered survey during class time. In accordance with ethical guidelines of the participating countries, an active parental consent was required in Brazil, South Africa and Uganda, a passive parental consent was obtained in Israel, Romania and US, and in England and Spain consent from the school's director was adequate.

Due to missing data we were unable to classify the number of changes for 552 of the adolescents (4.2 %) (26 from Brazil, 32 from England, 152 from Israel, 12 from Romania, 65 from South Africa, 205 from Spain, 28 from Uganda, and 32 from the US), and the gender of a further 21 adolescents (0.2 %) (2 from Brazil, 9 from England, 1 from Romania, 1 from South Africa, 2 from Uganda, and 6 from the US); they were therefore not included in the study. The final sample comprised 12,473 adolescents (977 from Brazil, 1100 from England, 846 from Israel, 1341 from Romania, 936 from South Africa, 5522 from Spain, 1005 from Uganda, and 746 from the US), with a mean age of 12.12 ( $SD=0.61$ ).

## 2.2 Instruments

*The number of changes* was assessed using five items, each item referring to a different possible change: moved house, changed local area, changed school, living in another country for over a month and change in the parents or carers they live with. The adolescents were asked to indicate whether or not they had experienced any of these changes in the past year (0 = 'no', 1 = 'yes'). Based on a combined scale adolescents were divided into three groups: 'had not experienced any changes', 'had experienced 1–2 changes', and 'had experienced three or more changes'.

*SWB* was measured using 11 satisfaction items for five different life domains: school (two items, e.g. 'How satisfied are you with the school you go to?'), material things and residence (two items, e.g. 'All the things you have'), leisure time (two items, e.g. 'How you use your time'), oneself (two items, e.g. 'The freedom you have') and social relationships (three items, e.g. 'the people you live with'). These items are part of the ISCWeB questionnaire, which includes adapted psychometric scales to measure children's SWB ([www.isciweb.org](http://www.isciweb.org)). 11-point scales have been used in all satisfaction

items, with 0 denoting ‘completely dissatisfied’, 5 ‘neither dissatisfied nor satisfied’ and 10 ‘completely satisfied’.

In addition, the adolescents’ *overall life satisfaction* was measured using a short adapted 5-item version of the Student Life Satisfaction Scale SLSS (Huebner 1994). The original scale contains 7 items, with good internal reliability ( $\alpha=.82$ ), as reported in the original study; however, past research with children and adolescents has also made use of a shortened 5-item version (see, for example: Dinisman et al. 2012,  $\alpha=.80$ ). A five-point Likert scale was used, which ranged from 0 = ‘strongly disagree’ to 4 = ‘very much agree’, and the combined scale showed good internal reliability for the entire sample ( $\alpha=.82$ ), and for most countries (Brazil:  $\alpha=.82$ , England:  $\alpha=.87$ , Israel:  $\alpha=.83$ , Romania:  $\alpha=.81$ , South Africa:  $\alpha=.75$ , Spain:  $\alpha=.81$ , USA:  $\alpha=.88$ ), with the exception of Uganda ( $\alpha=.61$ ); an index was therefore created as the mean of all 5 items. However, any results of this index with the data from Uganda should be interpreted with caution.

### 2.3 Analysis

Due to the notable differences in the size of the group of adolescents who have had more than three changes and the other two groups, in order to assess the differences between the three groups of adolescents in relation to the items on SWB we initially performed both parametric (i.e. one-way ANOVA) and non-parametric analyses (i.e. Kruskal–Wallis test). However, because the results were similar and due to the desire to test the hypothesis of interaction between gender and number of changes, which is not possible with non-parametric tests, only the results of the parametric analyses are presented here. Post hoc pairwise comparison analyses with Tukey HSD test were conducted, except when the data did not meet the homogeneity of variances assumption, when Dunnett’s T3 was used instead. To explore the interaction between gender and number of changes in the adolescents’ SWB, a two-way ANOVA (number of changes x gender) was used.

## 3 Findings

### 3.1 Background Characteristics

Table 2 groups the adolescents according to the number of changes they have undergone and according to participating countries. As can be seen, in most of the countries the majority of adolescents (more than 63 %) had not experienced any changes in the previous year and about a quarter experienced one or two changes, with the exception of Spain, South Africa and Uganda, where the percentage is much smaller (50 % and less) among the first group and much higher (more than 43 %) among the second. As expected, the percentage of adolescents who experienced three or more changes is small in most countries, except for Brazil, South Africa and the US, where the percentage is above 10 %.

As can also be seen in Table 2, in all countries the percentage of girls who had not experienced a change in the last year was higher than that of boys, and in most of the



**Table 2** Number of changes and Gender distribution across countries

	No changes (%)			1–2 changes (%)			3+ changes (%)			Total (%)	
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
Brazil	46.9	53.1	63.5	43.3	56.7	25.8	51.4	48.6	10.7	46.5	53.5
Israel	42.8	57.2	65.7	53.8	46.2	27.7	62.5	37.5	6.6	47.2	52.8
England	37.3	62.7	67.1	49.3	50.7	24.4	52.1	47.9	8.5	41.5	58.5
Romania	46.9	53.1	72.8	54.5	45.5	21.6	61.3	38.7	5.6	49.4	50.6
South Africa	45.1	54.9	37.2	46.1	53.9	43.8	48.9	51.1	19.0	46.3	53.7
Spain	48.4	51.6	50.2	50.5	49.5	43.2	51.4	48.6	6.6	49.5	50.5
Uganda	47.7	52.3	36.5	53.0	47.0	55.2	45.8	54.2	8.3	50.4	49.6
USA	47.5	52.5	64.3	48.3	51.7	23.3	52.2	47.8	12.3	48.3	51.7

countries boys are more prone to having more than three changes, with the exception of South Africa and Uganda.

### 3.2 Differences According to Number of Changes and Interaction with Gender

#### 3.2.1 School

Two items were used to measure adolescents' SWB in school. Differences among the three groups of adolescents in their *satisfaction with the school they go to* were found in England ( $F[2,1100] = 14.60, p < 0.001, \eta^2 = .026$ ), Spain ( $F[2,5464] = 5.20, p = 0.006, \eta^2 = .002$ ) and the US ( $F[2,745] = 10.97, p < 0.001, \eta^2 = .029$ ). In these countries, as shown in Table 3, adolescents who had experienced more than three changes were significantly less satisfied with their school than adolescents who had not experienced any changes. In the US and in England adolescents who had experienced 1–2 changes were also less satisfied than those who had not experienced any. When the interaction between gender and number of changes was tested, such interaction was found in Spain ( $F[5,5461] = 4.60, p = 0.010, \eta^2 = .002$ ). While there were no differences between the three groups regarding girls ( $F[2,2764] = 1.72, ns$ ), boys who had experienced more than three changes in the past year were the least satisfied with the school they go to compared to boys who had experienced 1–2 changes and those who had not experienced any ( $M = 8.20, SD = 2.50; M = 8.71, SD = 1.91; M = 8.76, SD = 1.79$ , respectively) ( $F[2,2697] = 6.91, p = 0.001, \eta^2 = .005$ ).

In regard to *satisfaction with classmates*, differences were found in Spain ( $F[2,5462] = 14.18, p < 0.001, \eta^2 = .005$ ), where adolescents who had experienced more than three changes were less satisfied with their classmates than those who had experienced 1–2 changes and adolescents who had not experienced any. Differences were also found in the US ( $F[2,741] = 4.66, p = 0.010, \eta^2 = .012$ ); however, in the US adolescents who had experienced 1–2 changes were the least satisfied and significantly less satisfied than adolescents who had not experienced any.

The picture is clarified somewhat when interactions between gender and number of changes are tested, as interaction was found in both Spain ( $F[5,5459] = 3.34, p = 0.035$ ,

**Table 3** Satisfaction with school and material conditions by countries

	School M (SD)		Material conditions M (SD)	
	The school you go to	Your classmates	All the things you have	House or flat where you live
<b>Brazil</b>				
No changes	8.70 (1.9)	7.97 (2.1)	9.17 (1.3)	8.82 (1.7)
1–2 changes	8.76 (2.1)	7.80 (2.6)	8.94 (1.7)	8.63 (2.1)
3+ changes	8.64 (2.2)	7.89 (2.3)	8.53 (2.2)	8.34 (2.4)
Total	8.71 (2.0)	7.92 (2.2)	9.04 (1.6)	8.72 (1.9)
<b>Israel</b>				
No changes	7.20 (2.9)	8.00 (2.4)	9.39 (1.2)	9.16 (1.6)
1–2 changes	6.86 (3.2)	7.66 (2.7)	9.24 (1.5)	8.95 (2.0)
3+ changes	6.42 (3.4)	8.45 (2.1)	8.76 (1.7)	8.18 (2.6)
Total	7.06 (3.0)	7.94 (2.5)	9.30 (1.4)	9.04 (1.8)
<b>England</b>				
No changes	8.30 (1.9)	7.77 (2.0)	9.12 (1.3)	8.88 (1.6)
1–2 changes	7.83 (2.4)	7.51 (2.3)	8.84 (1.8)	8.41 (2.2)
3+ changes	7.14 (2.9)	7.11 (2.7)	8.6 (1.8)	8.46 (2.0)
Total	8.08 (2.2)	7.65 (2.2)	9.01 (1.5)	8.73 (1.8)
<b>Romania</b>				
No changes	8.68 (2.0)	8.54 (2.1)	9.18 (1.3)	9.14 (1.6)
1–2 changes	8.54 (2.3)	8.50 (2.0)	9.05 (1.5)	9.18 (1.7)
3+ changes	8.35 (2.1)	8.12 (2.3)	8.84 (1.5)	8.97 (2.0)
Total	8.63 (2.1)	8.51 (2.1)	9.13 (1.4)	9.14 (1.7)
<b>South Africa</b>				
No changes	8.44 (2.4)	7.60 (2.4)	8.85 (1.84)	8.60 (2.1)
1–2 changes	8.34 (2.5)	7.17 (2.8)	8.54 (2.3)	8.67 (2.1)
3+ changes	7.96 (2.6)	7.03 (2.8)	8.12 (2.4)	7.87 (2.8)
Total	8.31 (2.5)	7.31 (2.6)	8.58 (2.2)	8.49 (2.3)
<b>Spain</b>				
No changes	8.91 (1.7)	9.15 (1.5)	9.37 (1.2)	9.21 (1.5)
1–2 changes	8.93 (1.8)	9.08 (1.6)	9.25 (1.5)	9.11 (1.7)
3+ changes	8.61 (2.2)	8.68 (2.04)	9.00 (1.9)	8.75 (2.1)
Total	8.90 (1.7)	9.09 (1.6)	9.25 (1.4)	9.13 (1.6)
<b>Uganda</b>				
No changes	7.41 (3.3)	6.53 (2.67)	4.48 (2.8)	6.86 (2.8)
1–2 changes	7.61 (3.1)	6.51 (2.7)	4.56 (2.9)	6.76 (2.8)
3+ changes	7.54 (3.3)	6.77 (2.4)	5.24 (3.0)	7.11 (2.8)
Total	7.53 (3.2)	6.54 (2.7)	4.59 (2.9)	6.82 (2.8)
<b>USA</b>				
No changes	8.47 (2.0)	8.04 (2.1)	9.15 (1.3)	8.78 (1.6)
1–2 changes	7.66 (2.8)	7.47 (2.5)	9.19 (1.3)	8.56 (2.0)
3+ changes	7.63 (2.7)	7.67 (2.4)	9.16 (1.3)	8.20 (2.2)
Total	8.18 (2.3)	7.86 (2.2)	9.16 (1.3)	8.65 (1.8)

All variables - range: 0–10

$\eta^2=.001$ ) and the US ( $[5,732] = 3.83, p=0.022, \eta^2=.010$ ). In Spain, while girls who had experienced more than three changes were the least satisfied with their classmates compared to girls who had experienced 1–2 changes and those who had not experienced any ( $M=8.70, SD=2.09; M=9.19, SD=1.52; M=9.15, SD=1.45$ , respectively) ( $F[2,2762] = 7.67, p<0.001, \eta^2=.006$ ), boys who had experienced more than three changes were less satisfied than boys who had not experienced any ( $M=8.67, SD=2.00; M=9.16, SD=1.50$ , respectively); however, unlike the girls, boys who had experienced 1–2 changes ( $M=8.96, SD=1.67$ ) were also less satisfied than boys who had not experienced any ( $F[2,2697] = 9.53, p<0.001, \eta^2=.007$ ). In the US, there were no differences between the three groups regarding boys ( $F[2,355] = 0.46, ns$ ), and girls who had experienced 1–2 changes were less satisfied than girls who had not experienced any changes in the past year ( $M=7.19, SD=2.45; M=8.29, SD=1.93$ , respectively), and no differences were found with those who had experienced more than three changes ( $M=7.93, SD=1.98$ ) ( $F[2,377] = 9.23, p<0.001, \eta^2=.047$ ).

### 3.2.2 Material conditions

The adolescents' satisfaction with material living conditions was measured using two items. Differences between the three groups of adolescents in terms of their *satisfaction with the things they have* were found in Brazil ( $F[2,972] = 8.31, p<0.001, \eta^2=.017$ ), England ( $F[2,1096] = 7.02, p=0.001, \eta^2=.013$ ), Israel ( $F[2,765] = 5.26, p=0.005, \eta^2=.014$ ), South Africa ( $F[2,854] = 6.24, p=0.002, \eta^2=.014$ ) and Spain ( $F[2,5441] = 13.89, p<0.001, \eta^2=.005$ ). As Table 3 shows, in all these countries adolescents who had experienced more than three changes were less satisfied with the things they have than those who had not experienced any changes in the past year. Only in Spain adolescents who had experienced 1–2 changes were also less satisfied than those who had not experienced any changes. Interaction between gender and number of changes was found in Brazil ( $F[5,969] = 4.00, p=0.019, \eta^2=.008$ ). While there were no differences between the three groups in regard to boys ( $F[2,450] = 1.85, ns$ ), girls who had experienced more than three changes in the past year were less satisfied with the things they have than girls who had not experienced any changes, and no differences were found with those who had experienced 1–2 changes ( $M=8.02, SD=2.67; M=9.11, SD=1.34; M=8.94, SD=1.70$ , respectively) ( $F[2,519] = 9.61, p<0.001, \eta^2=.036$ ).

In the second variable, *satisfaction with the house or flat where they live*, differences between the groups were found in England ( $F[2,1020] = 6.69, p=0.001, \eta^2=.013$ ), Israel ( $F[2,835] = 9.61, p=0.001, \eta^2=.017$ ), South Africa ( $F[2,924] = 7.97, p<0.001, \eta^2=.017$ ), Spain ( $F[2,5450] = 13.49, p<0.001, \eta^2=.005$ ) and the US ( $F[2,739] = 4.33, p=0.013, \eta^2=.012$ ). In all of these countries, with the exception of England, adolescents who had experienced three changes and more were less satisfied with the house or flat that they live in, compared to those who had not experienced any changes in the past year. Additionally, in South Africa and Spain, adolescents who had experienced more than three changes were also less satisfied than those who had experienced 1–2 changes. The picture is somewhat different in England, where adolescents who had experienced 1–2 changes were the least satisfied and this difference was significant compared to those who had not experienced any changes in the past year. No interactions between gender and number of changes were found for this variable.

### 3.2.3 Leisure time

As we have already stated, two variables were used to evaluate adolescents' satisfaction with their leisure time. Differences between the groups in the adolescents' *satisfaction with how they use their time* were found in Brazil ( $F[2,972] = 3.03, p=0.049, \eta^2=.006$ ) and Israel ( $F[2,837] = 3.86, p=0.021, \eta^2=.009$ ). In both countries, as shown in Table 4, adolescents who had experienced more than three changes in the past year were less satisfied than those who had not experienced any. An interaction between gender and number of changes was found in Israel ( $F[5,834] = 6.00, p=0.003, \eta^2=.014$ ) and Spain ( $F[5,5443] = 3.12, p=0.044, \eta^2=.001$ ). In Israel, while there were no differences between the three groups regarding boys ( $F[2,392] = 2.75, ns$ ), girls who had experienced more than three changes in the past year were the least satisfied with how they use their time compared to girls who had experienced 1–2 changes and those who had not experienced any ( $M=7.38, SD=3.32; M=9.05, SD=1.81; M=8.82, SD=1.79$ , respectively) ( $F[2,442] = 6.84, p=0.001, \eta^2=.030$ ). In Spain, the picture was similar. While boys did not differ ( $F[2,2698] = 0.79, ns$ ), girls who had experienced more than three changes in the past year were less satisfied with how they use their time than girls who had experienced 1–2 changes, and no differences were found with those who had not experienced any changes ( $M=8.41, SD=2.11; M=8.76, SD=1.68; M=8.65, SD=1.69$ , respectively) ( $F[2,2745] = 3.59, p=0.028, \eta^2=.003$ ).

Differences between the three groups of adolescents with regards to their *satisfaction with what they do in their free time* were found in Uganda ( $F[2,996] = 3.31, p=0.037, \eta^2=.007$ ). Interestingly, the differences in Uganda were somewhat distinct, as adolescents who had experienced more than three changes were more satisfied with what they do in their free time than adolescents who had not experienced any changes, those being the least satisfied. An interaction between gender and number of changes was found in Brazil ( $F[5,968] = 3.63, p=0.027, \eta^2=.007$ ). While there were no differences between the three groups in regard to boys ( $F[2,449] = 0.47, ns$ ), girls who had experienced more than three changes in the past year were the least satisfied with how they use their time compared to girls who had experienced 1–2 changes and those who had not experienced any ( $M=7.63, SD=3.06; M=8.59, SD=2.09; M=8.65, SD=2.02$ , respectively) ( $F[2,519] = 5.00, p=0.007, \eta^2=.019$ ).

### 3.2.4 Oneself

Two items were used to measure the adolescents' SWB with oneself. Differences between the three groups of adolescents regarding their *satisfaction with the freedom they have* were found in Brazil ( $F[2,968] = 4.66, p=0.010, \eta^2=.010$ ), South Africa ( $F[2,910] = 6.07, p=0.002, \eta^2=.013$ ) and Uganda ( $F[2,1001] = 5.17, p=0.006, \eta^2=.010$ ). As Table 4 shows, in Brazil and South Africa adolescents who had experienced more than three changes were less satisfied than those who had not experienced any changes. In South Africa, they were also less satisfied than adolescents who had experienced 1–2 changes. By contrast, in Uganda adolescents who had experienced three or more changes were more satisfied with the freedom they have than those who had not experienced any changes in the past year. No interactions between gender and number of changes were found for this variable.

**Table 4** Satisfaction with leisure time and oneself by countries

	Leisure time M (SD)		Oneself M (SD)	
	How you use your time	What you do in your free time	The freedom you have	Yourself
<b>Brazil</b>				
No changes	8.16 (1.9)	8.76 (1.9)	7.86 (2.4)	8.68 (2.0)
1–2 changes	8.13 (2.3)	8.64 (2.1)	7.39 (3.0)	8.48 (2.2)
3+ changes	7.61 (2.6)	8.31 (2.5)	7.19 (3.1)	8.25 (2.6)
Total	8.09 (2.1)	8.68 (2.0)	7.67 (2.6)	8.59 (2.1)
<b>Israel</b>				
No changes	8.80 (1.8)	9.08 (1.7)	9.02 (1.8)	9.28 (1.6)
1–2 changes	8.63 (2.2)	9.10 (1.8)	9.02 (1.7)	9.04 (2.0)
3+ changes	8.07 (2.4)	8.52 (2.4)	8.66 (2.4)	8.77 (2.4)
Total	8.71 (1.9)	9.05 (1.8)	9.00 (1.8)	9.18 (1.8)
<b>England</b>				
No changes	8.04 (1.8)	8.41 (1.8)	8.36 (2.0)	7.88 (2.2)
1–2 changes	7.95 (2.2)	8.48 (2.0)	8.09 (2.3)	7.97 (2.5)
3+ changes	7.70 (2.2)	8.24 (2.1)	7.96 (2.6)	7.84 (2.4)
Total	7.99 (1.9)	8.41 (1.9)	8.26 (2.1)	7.90 (2.3)
<b>Romania</b>				
No changes	8.83 (1.6)	9.29 (1.4)	9.04 (1.8)	9.23 (1.5)
1–2 changes	8.78 (1.8)	9.23 (1.4)	8.82 (2.2)	9.16 (1.6)
3+ changes	8.66 (1.6)	9.08 (1.6)	8.72 (2.4)	9.27 (1.8)
Total	8.81 (1.7)	9.26 (1.4)	8.98 (1.9)	9.22 (1.6)
<b>South Africa</b>				
No changes	8.08 (2.1)	8.62 (2.0)	8.03 (2.6)	9.05 (1.9)
1–2 changes	8.23 (2.2)	8.57 (2.2)	8.22 (2.4)	9.06 (2.1)
3+ changes	7.89 (2.5)	8.20 (2.3)	7.4 (2.8)	9.08 (1.8)
Total	8.11 (2.2)	8.52 (2.2)	7.99 (2.6)	9.06 (1.9)
<b>Spain</b>				
No changes	8.72 (1.7)	9.12 (1.5)	8.50 (2.1)	9.06 (1.6)
1–2 changes	8.73 (1.7)	9.06 (1.6)	8.56 (2.1)	9.00 (1.7)
3+ changes	8.58 (2.1)	8.97 (1.8)	8.52 (2.4)	8.51 (2.5)
Total	8.71 (1.7)	9.08 (1.6)	8.53 (2.1)	8.99 (1.7)
<b>Uganda</b>				
No changes	7.57 (2.4)	7.45 (2.6)	6.53 (2.8)	7.78 (2.5)
1–2 changes	7.49 (2.4)	7.63 (2.6)	6.92 (2.8)	7.62 (2.4)
3+ changes	7.54 (2.8)	8.24 (2.3)	7.57 (2.7)	7.63 (3.0)
Total	7.52 (2.5)	7.61 (2.6)	6.83 (2.8)	7.68 (2.5)
<b>USA</b>				
No changes	8.25 (1.7)	8.85 (1.7)	8.32 (2.1)	8.71 (2.0)
1–2 changes	7.94 (2.1)	8.61 (2.0)	8.14 (2.4)	8.37 (2.6)
3+ changes	8.13 (1.9)	8.86 (1.6)	7.96 (2.6)	8.31 (2.5)
Total	8.16 (1.8)	8.79 (1.7)	8.24 (2.3)	8.58 (2.2)

All variables - range: 0–10

Differences between the three groups of adolescents with regards to their *satisfaction with 'yourself'* were found in Spain ( $F[2,5396] = 16.19, p < 0.001, \eta^2 = .006$ ). Adolescents who have experienced three or more changes were the least satisfied compared to those who had experienced 1–2 changes and those who had not experienced any. Additionally, interaction between gender and number of changes was found in Israel ( $F[5,821] = 3.23, p = 0.040, \eta^2 = .008$ ) and Uganda ( $F[5,979] = 3.44, p = 0.032, \eta^2 = .007$ ). In both countries, while there were no differences between the three groups in regard to boys ( $F[2,385] = 2.03, ns; F[2,496] = 0.48, ns$ , respectively) differences were found regarding girls ( $F[2,436] = 4.60, p = 0.011, \eta^2 = .021; F[2,483] = 3.14, p = 0.044, \eta^2 = .013$ , respectively). In Israel, girls who had experienced more than three changes in the past year were the least satisfied with themselves compared to girls who had experienced 1–2 changes and those who had not experienced any ( $M = 8.10, SD = 2.64; M = 9.19, SD = 1.64; M = 9.23, SD = 1.58$ , respectively). However, in Uganda, girls who had not experienced any changes in the past year were more satisfied with themselves than girls who had experienced 1–2 changes, with no differences compared to those who had experienced more than 3 changes ( $M = 8.08, SD = 2.41; M = 7.49, SD = 2.46; M = 7.58, SD = 2.81$ , respectively).

### 3.2.5 Interpersonal Relationships

Three items were used to measure the adolescents' SWB with regards to interpersonal relationships. Differences between the three groups of adolescents in their *satisfaction with the people they live with* were found in England ( $F[2,1085] = 4.30, p = 0.014, \eta^2 = .008$ ), Israel ( $F[2,834] = 15.96, p < 0.001, \eta^2 = .037$ ) and Spain ( $F[2,5462] = 35.48, p < 0.001, \eta^2 = .013$ ). As can be seen in Table 5, in all three countries adolescents who had not experienced any changes in their lives were the most satisfied. In Israel, these adolescents were significantly more satisfied with the people they live with than both adolescents who had experienced 1–2 changes and those who had experienced more than three changes. In Spain, differences were also found between these two last groups. Rather differently, however, in England adolescents who had experienced 1–2 changes were the least satisfied, differing significantly from those who had not experienced any changes. No interactions between gender and number of changes were found for this variable.

In the second variable, *satisfaction with friends*, differences between the three groups of adolescents were found in South Africa ( $F[2,908] = 4.70, p = 0.009, \eta^2 = .010$ ) and Spain ( $F[2,5453] = 10.23, p < 0.001, \eta^2 = .004$ ). In both countries, as shown in Table 5, adolescents who had experienced more than three changes were those least satisfied with their friends. However, while in Spain the differences were significant compared to adolescents who had not experienced any change and those who had experienced 1–2 changes, in South Africa differences were significant only with the latter. When interaction between gender and number of changes was tested, such interaction was found in the US ( $F[5,735] = 5.12, p = 0.006, \eta^2 = .014$ ). While there were no differences between the three groups in regard to boys ( $F[2,356] = 1.93, ns$ ), girls who had experienced 1–2 changes in the past year were less satisfied with their friends than those who had not experienced any changes, with no differences compared to those who had experienced more than 3 changes ( $M = 8.66, SD = 1.76; M = 9.20, SD = 1.17; M = 8.72, SD = 1.61$ , respectively) ( $F[2,379] = 6.26, p = 0.002, \eta^2 = .032$ ).

Quite diverse differences between the three groups of adolescents were found regarding their *satisfaction with the people who live in their area*. These differences were found in England ( $F[2,1094] = 4.68, p=0.009, \eta^2=.008$ ) and Uganda ( $F[2,1000] = 4.74, p=0.009, \eta^2=.009$ ). In England, adolescents who had experienced more than three changes were less satisfied with the people in their area than those who had not experienced any changes in their lives. Here too, differences in Uganda were quite unique; adolescents who had not experienced any changes were significantly less satisfied with the people in their area than the other two groups of adolescents. No interactions between gender and number of changes were found for this variable.

### 3.2.6 Overall Life Satisfaction

The adolescents' overall life satisfaction was measured using SLSS-5 index. Differences between the three groups of adolescents were found in most of the countries: Brazil ( $F[2,913] = 7.37, p=0.001, \eta^2=.016$ ), England ( $F[2,1032] = 6.02, p=0.003, \eta^2=.012$ ), Israel ( $F[2,792] = 7.67, p<0.001, \eta^2=.019$ ), Romania ( $F[2,1243] = 6.80, p=0.001, \eta^2=.011$ ), South Africa ( $F[2,772] = 11.02, p<0.001, \eta^2=.028$ ), and Spain ( $F[2,5124]=32.91, p<0.001, \eta^2=.013$ ). In the vast majority of the countries (i.e. Brazil, England, Israel, South Africa and Spain), as can be seen in Table 5, adolescents who had experienced three or more changes reported lower overall life satisfaction than those who had not experienced any. In Spain and South Africa, they also had lower overall life satisfaction than adolescents who had experienced 1–2 changes, and in Brazil, England and Romania the overall life satisfaction of those who had experienced 1–2 changes was also lower than adolescents who had not experienced any.

Furthermore, interaction between gender and number of changes was found in South Africa ( $F[5,769] = 5.17, p=0.006, \eta^2=.013$ ) and the US ( $F[5,706] = 3.38, p=0.035, \eta^2=.009$ ). In both countries, while there were no differences between the three groups in regard to boys ( $F[2,356] = 2.69, ns; F[2,341] = 0.34, ns$ , respectively) differences were found regarding girls ( $F[2,413] = 13.70, p<0.001, \eta^2=.062; F[2,365] = 5.98, p=0.003, \eta^2=.032$ , respectively). In South Africa, girls who had experienced more than three changes in the past year had the lowest overall life satisfaction compared to girls who had experienced 1–2 changes and those who had not experienced any ( $M=2.43, SD=1.02; M=2.95, SD=0.83; M=3.03, SD=0.73$ , respectively). Similarly, in the US, the overall life satisfaction of girls who had experienced more than three changes was lower than girls who had not experienced any changes ( $M=2.79, SD=0.98; M=3.18, SD=0.82$ , respectively) and the overall life satisfaction of those who had experienced 1–2 changes was also lower than those who had not experienced any changes ( $M=2.90, SD=0.85$ ).

## 4 Discussion

As predicted, for most of the variables and most of the countries (with the notable exception of Uganda), the number of critical changes in adolescents' lives was negatively associated with the adolescents' satisfaction. Uganda was the sole case where a higher number of changes in the past year was associated with greater well-being. In

**Table 5** Satisfaction with oneself and overall life satisfaction by countries

	Interpersonal relationships M (SD)		Overall life satisfaction M (SD)	
	The people you live with <sup>1</sup>	Your friends <sup>1</sup>	The people who live in your area <sup>1</sup>	SLSS-5 <sup>2</sup>
<b>Brazil</b>				
No changes	9.23 (1.59)	8.87 (1.65)	7.16 (2.67)	3.05 (0.72)
1–2 changes	8.98 (1.96)	8.78 (2.01)	7.08 (2.92)	2.88 (0.90)
3+ changes	8.90 (1.91)	8.61 (2.15)	6.64 (3.27)	2.78 (0.85)
Total	9.13 (1.73)	8.82 (1.81)	7.08 (2.80)	2.98 (0.79)
<b>Israel</b>				
No changes	9.62 (1.06)	8.72 (1.95)	8.07 (2.52)	3.49 (0.70)
1–2 changes	9.25 (1.63)	8.62 (1.84)	7.68 (2.86)	3.36 (0.74)
3+ changes	8.70 (2.26)	8.65 (1.97)	7.85 (2.44)	3.11 (0.91)
Total	9.46 (1.37)	8.69 (1.92)	7.95 (2.62)	3.43 (0.73)
<b>England</b>				
No changes	8.71 (1.56)	8.83 (1.65)	7.70 (2.20)	3.14 (0.73)
1–2 changes	8.36 (1.94)	8.60 (1.74)	7.58 (2.47)	3.00 (0.82)
3+ changes	8.50 (1.79)	8.59 (1.85)	6.91 (2.96)	2.91 (0.79)
Total	8.61 (1.68)	8.75 (1.69)	7.60 (2.35)	3.08 (0.76)
<b>Romania</b>				
No changes	9.50 (1.31)	8.77 (1.77)	8.46 (1.97)	3.33 (0.68)
1–2 changes	9.39 (1.44)	8.75 (1.86)	8.41 (2.25)	3.16 (0.71)
3+ changes	9.29 (1.64)	8.75 (1.66)	8.15 (2.22)	3.20 (0.66)
Total	9.47 (1.36)	8.76 (1.78)	8.43 (2.05)	3.28 (0.69)
<b>South Africa</b>				
No changes	8.77 (2.12)	8.11 (2.35)	6.96 (2.80)	3.06 (0.74)
1–2 changes	8.77 (2.02)	8.26 (2.28)	6.99 (2.91)	2.92 (0.84)
3+ changes	8.62 (2.32)	7.60 (2.71)	6.75 (3.08)	2.66 (0.97)
Total	8.74 (2.19)	8.08 (2.40)	6.93 (2.90)	2.93 (0.84)
<b>Spain</b>				
No changes	9.50 (1.29)	9.34 (1.33)	8.26 (2.18)	3.30 (0.71)
1–2 changes	9.30 (1.60)	9.25 (1.45)	8.19 (2.32)	3.26 (0.74)
3+ changes	8.84 (2.10)	8.98 (1.94)	8.05 (2.53)	2.95 (0.93)
Total	9.37 (1.50)	9.28 (1.43)	8.22 (2.26)	3.26 (0.74)
<b>Uganda</b>				
No changes	7.48 (2.59)	6.97 (2.80)	6.07 (2.79)	2.07 (0.82)
1–2 changes	7.67 (2.51)	7.03 (2.76)	6.53 (2.69)	2.18 (0.78)
3+ changes	7.88 (2.45)	7.30 (2.83)	6.90 (2.72)	2.14 (0.85)
Total	7.62 (2.53)	7.03 (2.78)	6.39 (2.74)	2.13 (0.80)
<b>USA</b>				
No changes	9.00 (1.70)	8.90 (1.50)	8.06 (2.10)	3.21 (0.76)
1–2 changes	8.84 (1.74)	8.80 (1.80)	8.10 (2.49)	3.06 (0.87)
3+ changes	8.59 (2.03)	8.54 (1.91)	7.80 (2.54)	3.03 (0.91)
Total	8.91 (1.75)	8.83 (1.63)	8.04 (2.26)	3.15 (0.80)

<sup>1</sup> Range: 0–10, <sup>2</sup> Range: 0–4



the case of SWB in school, differences were found in England, Spain and the US between those who had experienced no change and those who had experienced changes. Generally speaking, adolescents' school integration suffers when they move from one school to another. Our results seem to confirm previous findings from the US that moving from one school to another decreases academic performance (Gruman et al. 2008) and also from the study of Montserrat et al. (2013).

Satisfaction with material conditions was also related to number of changes in adolescents' lives in around half of the countries included in the analysis. These results can mostly be explained by the association between critical changes and family socio-economic status (see also McCall and Percheski 2010). Either family changes are triggered by material conditions (e.g. deprivation leads to divorce) or family changes may lead to deprivation (e.g. single parent families as a result of the parents' divorce). According to Main and Besemer (2014) children who are lacking physical resources – those for survival or for meeting social norms – are associated with negative outcomes.

Leisure time is the life domain least associated with life events, significant differences between levels of leisure satisfaction being found in only two of the countries. Uganda is again atypical: here we found the opposite relationships – those who had more changes in their lives were more satisfied with the way they spend their time. The general picture is that adolescents and families have enough resources to enjoy leisure activities irrespective of the recent changes in their lives. Thus, leisure is among the activities that most facilitate social inclusion. Similarly to leisure time, satisfaction with the freedom they have and satisfaction with 'yourself' was associated with life changes in only a few countries. Self-evaluation is also a domain that facilitates social inclusion: complex mechanisms of self-regulation in adolescents (mediated by gender) seem to lead to these results.

The issue of instability may affect some children and adolescents' life domains as relationships (see Dinisman et al.; 2012; Sinclair et al. 2007; Waldfogel et al. 2010). Satisfaction with relationships (for example, the people they live with, friends, and the people in their area) was associated with number of changes in some of the countries. The same pattern appears: those with no or few recent critical changes in their lives were more satisfied. This may also fit a reverse causality model: conditions in the lives of adolescents (and presumably in their families) who were more unsatisfied changed to a higher measure, as a response to dissatisfaction. Further research may illuminate these relationships.

Finally, the most frequent association was found between the number of critical changes in adolescents' lives and their overall life satisfaction. In the vast majority of the countries, those who had experienced these changes in the past year were less satisfied. From a methodological point of view, this is explainable by the fact that overall satisfaction is measured by summing up evaluations of the most important domains (Andrews and Withey 1976). As a result, life satisfaction as a whole will correlate with the sum of critical changes in one's lives to a greater degree than any of the particular domains.

A psychological explanation is suggested by Cummins' homeostasis of well-being theory (Cummins 2003; Tomy and Cummins 2011b): a larger number of critical changes in children's lives will act as stressors resulting in an alteration (towards low levels) of the homeostatic set-point of their SWB. On the contrary, when changes are not numerous, self-regulation mechanisms maintain a high level of SWB in children.

We should also note that the differences in domain satisfaction associated with critical changes in adolescents' lives are observed more in nations with advanced economies (OECD-member) in the sample (the US, Spain, England and Israel), while in more eastern countries such as Romania differences only appear in the case of overall satisfaction, and in Uganda differences were found in the opposite direction. One explanation may be that in more individualistic countries adolescents are more aware of what the critical changes in their lives bring, and respond more negatively. This should also be tested on a larger sample.

In contrast to the tendency found in other countries, in Uganda it is apparent that adolescents who had experienced changes in the past year are prone to higher SWB. Namely, changes are a rather positive factor in the lives of adolescents in Uganda. This finding highlights the significance of assessing SWB in light of the cultural context and circumstances of each country. Thus, it also emphasizes the great importance of maintaining a cross-cultural perspective and comparative research, especially with non-western countries (Ben-Arieh et al. 2014; Henrich et al. 2010), and the caution required when making hypotheses regarding what is good or harmful to children's SWB in different countries.

Uganda is considered a low-income developing country (\$547 GDP per capita) (<http://data.worldbank.org>). It has a high percentage of adolescents below the age of 15 and ranked 94 on the Child Development Index for 2000–2006 (Save the Children 2008). Although recent efforts have reduced poverty and child mortality by half and increased school attendance among primary-age children, serious challenges still remain in the education and health care systems that prevent children from accessing good education and health care (<http://data.worldbank.org>). Thus, it may well be that changes experienced by the adolescents in our research (e.g. changes of school, local area, etc.) were changes for the better in their life conditions and circumstances, and hence improved their SWB. Taking into consideration that adolescents in Uganda are also prone to changes in their household structure (Van der Gaag et al. 2012), further research should focus on the influence of changes in carers to explore whether this also has a positive effect on the children's SWB. Another explanation can be found in the characteristics of the current sample. The adolescents in our sample came from schools supported by Build Africa, which is a UK development charity that works with communities in remote and vulnerable regions in Uganda. Build Africa focuses on improving the quality of primary school education and the livelihood opportunities for communities around the schools (<http://www.build-africa.org/who-we-are/where-we-work/uganda>). Therefore, moving to a school or community supported by Build Africa may involve a great change in adolescents' lives that can contribute to increased SWB. In addition, although these findings were consistent across most life domains and the translation into the local language was carefully tested, there is also the possibility that these distinctive findings are the result of methodological flaws (e.g. difficulty in understanding the questions), therefore, future research should include other similar countries and other parts of Uganda to determine whether this finding is unique.

Our findings concerning the interaction between gender and critical changes reflect the complexity documented in the literature regarding gender and SWB and may contribute to understanding the mixed results (Casas et al. 2004, 2013b; Gilman and Huebner 2003; Proctor et al. 2009). The fact that diverse interactions with gender were

found for each of the countries according to life domain on the one hand reinforces the assumption that the effect of gender depends on the type of life domain, and on the other hand provides further demonstration that, at least when it comes to interacting with critical changes, the effect of gender may also vary according to culture and country. For example, interactions were found with regards to material things and leisure time in Brazil, while in Israel interactions were found with regards to leisure time and oneself, in the US with regards to school, interpersonal relationships and overall life satisfaction and in Romania and England no interactions were found at all. The questions of whether gender differences are dependent on culture and some life domains are more prone to gender differences need further investigation.

That said, our research indicates that girls are more affected by critical changes than boys. With the exception of the gender differences found with regards to school in Spain, all of the interactions show that the impact of critical life changes on adolescents' SWB was stronger for girls than for boys. This may be explained by different coping mechanisms used by boys and girls. Previous studies on adolescents from different backgrounds have demonstrated that girls report and internalize stressors more than boys, especially interpersonal ones with family and friends, and consequently they are more prone to developing depressive symptomatology (Flook 2011). When it comes to critical changes, the stressors accompanying the change perhaps have more impact on girls and bring with them a decline in SWB.

School was the only domain where significant interactions between gender and critical changes were found for both girls and boys in terms of their SWB. Given the central position of school in children's lives, it may be that in this particular life domain boys' ability to cope with critical changes and the stress deriving from them decreases, resulting in a decline in their SWB.

Our research has some limitations. First, in some cases there were notable differences between the size of the group of adolescents who had experienced more than three changes and the other two groups; although parametric and non-parametric analyses showed similar results, our results should be interpreted with caution, particularly with regards to the interaction analysis, as we employed only parametric tests. Although research is large scale and comprising 8 countries, most of the samples were based on convenience-sampling; in future research representative samples should be used. A more accurate approach would be to correlate satisfaction with a given life domain with critical changes in these particular domains (e.g. school) and not only with the number of changes for all domains. At the moment, these findings show the potential of comparison between different countries and contribute to a better knowledge on adolescents' SWB focusing on critical changes and gender.

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