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Christmas and Subjective Well-Being: a Research Note

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Abstract According to Holmes and Rahe, *Journal of Psychosomatic Research*, *11*(2), 213–218, (1967), Christmas is a critical life event that may cause feelings of stress that, in turn, can lead to reduced subjective well-being (SWB) and health problems. This study uses a quantitative approach and large-scale survey data to assess whether or not respondents in European countries indicate lower SWB before and around Christmas. Precisely, respondents interviewed in the week before Christmas or at Christmas holidays are compared to respondents who are questioned at other times throughout the year. Moreover, the assumption is tested if religious denomination and religiousness moderate the association between Christmas and SWB. Main findings suggest that the Christmas period is related to a decrease in life satisfaction and emotional well-being. However, Christians, particularly those with a higher degree of religiousness, are an exception to this pattern.

Keywords Life satisfaction · Emotions · Christmas · Holiday · Religion

Subjective Well-Being, Health, and Christmas

At the core of this research is the question whether Christmas can collectively affect subjective well-being (SWB) in European societies. Prior research has provided limited evidence that Christmas may be negatively related to physical and mental health, but research directly addressing SWB is scarce. Statistics from hospitals suggest that deaths per day increase by 22 % in the week before Christmas compared to the annual mean (Keatinge and Donaldson 2004). An increase was shown for respiratory diseases as well as ischemic heart diseases (Keatinge and Donaldson 2004; Kloner 2004; Phillips

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et al. 2004). Further evidence exists for an increase of mental problems and illnesses at Christmas: Friedberg (1990) has argued that dysphoric moods increase around Christmas and a clinical study by Velamoor et al. (1999) indicates higher levels of loneliness on Christmas. Research on suicide attempts and self-harm behaviour illustrates that such behaviours are comparably low during Christmas holidays but peak in the days immediately following Christmas (Bergen and Hawton 2007; Carley 2004; Cullum et al. 1993; Jessen et al. 1999; Masterton 1991; Sansone and Sansone 2011; Zonda et al. 2008; as an exception Barker et al. 2014).

Kloner (2004) suggests several mechanisms that may explain this increase in health issues, amongst others, cold weather, overindulgence, and increased emotional stress. Hairon (2008) also claims that Christmas may be a time of increased stress, family conflict, alcohol misuse, lack of exercise, and financial concerns. The assumption that Christmas might be a stress-related event is not a new one, however. Holmes and Rahe (1967), who developed one of the first scales that aimed to measure stress levels of individuals based on their experience of a number of critical life events, also included Christmas to their scale. Their *Social Readjustment Rating Scale* (SRRS) considers Christmas as one of 43 stress- and health-related life events.[1] According to the SRRS, the stress level potentially induced by Christmas is comparable to "minor violations of the law" or a "change in sleeping habits". Hence, Christmas is a yearly and inescapable source of stress for most people.

Individuals who experience a number of critical events in 1 year are supposed to have a higher level of permanent stress and are considered to be more vulnerable to health issues (Holmes and Rahe 1967).[2] Research has provided ample evidence that individual stress levels predict the probability to contract a disease (Cohen et al. 1991, 1993, 2007; Marsland et al. 2002) or to suffer from severe mental health problems (Langner and Stanley 1963; Tennant 2002; Wang et al. 2009).

Despite the popular notion that health problems around Christmas may occur due to increased levels of stress and reduced emotional well-being, few studies have directly investigated the relation of Christmas with quality of life ratings. Kasser and Sheldon (2002) have assessed well-being at Christmas with regard to several types of activities in the Christmas period and found that socializing with family as well as religious experiences are associated with increased SWB whereas consumption activities are associated with higher stress levels and reduced SWB. Based on a longitudinal student sample, Páez et al. (2014) are able to show that SWB is higher three weeks after Christmas than in the week preceding Christmas. Moreover, they found that participation in ritualised family celebrations at Christmas increase SWB, but experienced conflicts during Christmas are associated with negative affect, reduced life satisfaction and less social well-being. However, both studies are based on rather small and homogeneous samples, so that studies using larger and representative samples are called for (Kasser and Sheldon 2002). Moreover, both studies do not measure SWB

[1] The SRSS consists of 43 stressful life events. It asks respondents to indicate all events they have faced during the previous year. Each event is assigned with a score that is supposed to capture the typical level of stress that comes along with the respective event. For instance, a divorce accounts for a stress level of 73 points and "being fired at work" accounts for 47 points. Christmas is associated with a stress level of 12 points.

[2] According to Holmes and Rahe (1967), a score above 150 points is supposed to increase the chance of a major health breakdown by 50 % and scores above 300 are associated with an 80 % increase.

directly at Christmas but rely on retrospective data that were collected about two weeks after Christmas holidays.

This paper investigates Christmas effects on SWB, precisely life satisfaction and emotional well-being, based on large-scale data from 11 European countries (see "Methods" section for details). We will first develop two different views of Christmas which both are prevalent in the culture of affluent Western societies: 1) Christmas as religious ritual and time of charity (with potentially positive effects on SWB) and 2) Christmas as a years' climax of materialist consumption and spending (with potentially detrimental effects on SWB). From these considerations, hypotheses that address effects on SWB are then derived. Finally, in a third step, we will put our hypotheses to a test. Our main findings suggest that Christmas, in particular the pre-Christmas period, is related to reduced life satisfaction and less favourable affective states. However, Christians with a higher degree of religiousness are an exception to this rule.

The Christmas Experience: Sacred or Secular?

Christmas, Religious Worship, Contemplation, and Charity

On the one hand, Christmas is a holy day in Christianity commemorating the birth of Jesus Christ, son of God. The figure of Jesus represents basic Christian values for most Christians worldwide, e.g., compassion, charity, forgiveness, renunciation of violence as well as of indulgence. As a religious celebration, Christmas is closely interconnected with these values. Attending religious services, intensifying prayer, watching nativity plays, donating for poor and needy persons, spending time and exchanging gifts with family and friends may be regarded as ways in which basic Christian values manifest themselves and are reinforced.

If religious beliefs and religiousness are fostered around Christmas, this alone may have positive effects on SWB. Numerous studies have shown so far that religious experience, usually measured by the frequency of attendance at religious services or by religiousness self-ratings, is associated with better mental health and greater SWB (Byrd et al. 2007; Green and Elliott 2010; Keyes and Reitzes 2007; Ellison et al. 2001; Francis and Kaldor 2002; Maltby et al. 1999). This association may be explained by a higher level of social capital and social support that comes along with being part of a religious community (Putnam and Campbell 2010). Being integrated in a religious group may enhance a person's sense of belonging and feeling of appreciation. Fagley (2012) has shown that appreciation is an important predictor of life satisfaction. Moreover, studies have shown that spending money on others promotes happiness (Aknin et al. 2013; Dunn et al. 2008). Donating, helping and caring for others may thus be considered appropriate means of increasing SWB (Oarga et al. 2015; Geenen et al. 2014; for a review: Post 2005).

Christmas, Consumption, Commerce, and Materialism

On the other hand, Christmas has become the year's climax of consumer materialism which stands in sharp contrast to the roots of Christian spiritual and religious values

(Belk 1995). On average, European households spend 265€ on Christmas presents and another 160€ on foods for the holidays (Deloitte and Touche 2014). A Gallup survey in 2014 indicates that Americans are even more free-spending and plan to buy presents worth of 780$ on Christmas.[3] Sales increase dramatically in the pre-Christmas period: Estimations for Germany, for instance, show that in 2013 Christmas shopping accounted for 18 % of all retail sales (Federal Statistical Office 2014: 575). In a paper on the history of Christmas celebrations in the US, Bartunek and Do (2011: 803) conclude that "organized commercialism has become sacred, and the religious experience of Christmas has lost a good deal of its sacred character". The replacement of religion by materialism however, may come at the expense of happiness.

Research on materialism and SWB mostly point to negative effects: Individuals who score higher on materialism and spent more money on material possessions report lower satisfaction with life (Carter and Gilovich 2012; Manolis and Roberts 2012; Richins and Dawson 1992; Roberts and Clement 2007; Van Boven 2005) and lower emotional well-being (Kashdan and Breen 2007). A recent meta-analysis (Dittmar et al. 2014) has demonstrated a mean correlation of $r = -0.19$ between materialism and SWB, thus further buttressing a negative relationship. The negative effect proves to be stable across a variety of SWB measures, for instance, life satisfaction, positive affect, or positive self-appraisals (Dittmar et al. 2014: 907).

A variety of explanations for this negative effect were put forward: Sirgy (1998) has argued that materialists are dissatisfied with their standard of living because they compare themselves more often to those who possess more, which may result in feelings of envy and injustice. Others claimed that consumers usually overestimate the rewards that come along with consuming a certain product which leads to disappointment after the purchase (Wilson and Gilbert 2005). Norris and Larsen (2011: 878) claim that one feature of materialist culture is the desire to want more: as soon as we have a particular good, we want another one. In a culture of "wanting more", however, dissatisfaction becomes normalcy. Others put forward the assumption that materialistic lifestyles, centred on the acquisition of possessions and status, can only be pursued at the expense of other basic human needs like relatedness, autonomy, and competence (Dittmar et al. 2014; Tsang et al. 2014). Hence, lower SWB may be the result of poor satisfaction of basic psychological needs. Finally, many people experience the time before Christmas as a period of increased time pressures and social demands, especially the time where gifts are purchased (Miyazaki 1993). Accordingly, Kasser and Sheldon (2002) have found that people who report to have spent a lot of money in the time before Christmas also report higher levels of stress, more negative emotions and lower SWB on Christmas holidays.

Hypotheses

Both rationales summarized above result in different assumptions concerning the effect of Christmas on SWB. The sacred experience of Christmas does not seem to be in line with the stress perspective outlined in the introduction. If peoples' experience of Christmas would be primarily a religious one, stress must not necessarily increase

[3] http://www.gallup.com/poll/178859/americans-initial-christmas-spending-estimate-positive.aspx (06/22/2015).

and even a heightened level of SWB can be assumed, given that religiousness is reinforced. Accordingly, it can be hypothesized that *SWB is higher at Christmas compared to other times of the year* (H#1). However, if a materialist consumer culture dominates the Christmas experience, higher stress levels can be presumed, in particular in the Pre-Christmas period at the peak of commercial activity, which in turn may result in a decline of SWB. In this perspective, *SWB is lower at Christmas compared to other times of the year* (H#2). However, it may also be assumed that the sacred, religious experience of Christmas is more dominant among Christians, and in particular among very religious Christians, whereas the secular, materialist experience is more dominant among atheists and non-Christians. Hence, *the effect of Christmas time on SWB is likely to be moderated by religious affiliation and religiousness* (H#3). Precisely, differences between a) Christians and Non-Christians as well as between b) less religious and very religious Christians will be put to a test in the subsequent analyses.

Methods

Data

The present study uses a quantitative, cross-sectional approach and is based on survey data from the *European Social Surveys* (ESS), particularly Rounds 3 and 6 (ESS 2006, 2012). In both rounds quality of life was a key topic and a set of similar questions was included. Given the high similarity of both waves and the small number of people interviewed at Christmas period (see details below), they were merged for the subsequent analyses. Wave 3 was carried out in 2006/07 and wave 6 was accomplished in 2012/13. Countries were included in the analysis under the conditions that a) they took part in ESS waves 3 and 6, b) at least 50 interviews in this particular country fell into the Christmas period, and c) the countries have been dominated historically by either Catholic or Protestant Christianity. Eleven countries met all of these criteria and were selected for the study, namely Belgium, Estonia, Germany, Hungary, Ireland, Netherlands, Portugal, Slovakia, Spain, Sweden and United Kingdom. The national surveys were conducted as Computer-assisted Personal Interviews (CAPI) with the exception of Slovakia, were a Paper-and-Pencil approach (PAPI) was chosen.

Measuring the Christmas Effect

In both ESS Rounds, the survey period originally was scheduled to last from September 1 until December 31 of the respective year. However, in most of the countries data collection was expanded by weeks or even months. In the 11 countries selected data collection did take place in the Christmas period. For this analysis, all interviews taken in the week before Christmas or during the Christmas holidays (16th - 26th December) are considered as *(Pre-)Christmas interviews* (N=2057). In each country selected at least 50 interviews were realized in this period. A dummy variable was created which separates (Pre-)Christmas interviews from the rest. Moreover, another dummy for *Post-Christmas interviews* (27th - 31st December) was created (N=855) to estimate the possible impact of the holidays on SWB. The Christmas effects are then estimated as the mean difference in SWB between respondents whose interview took place in one of

the two defined Christmas periods (Pre-Christmas, Post-Christmas) compared to those interviews taken at any other time within the survey period, except July and August (N=42,298).[4] Table 1 shows the distribution of the sample by interview date.

Measures for SWB

(1) *Life Satisfaction*. ESS surveys include one of the standard questions for measuring life satisfaction, namely: "All things considered, how satisfied are you with your life as a whole". Respondents could indicate their satisfaction on an 11-point rating scale that ranged from 0 (=extremely dissatisfied) to 10 (=extremely satisfied).

(2) *Emotional Well-being*. In both ESS waves respondents were asked to indicate the frequency of certain emotional states during the last week. In a first step, a measure for positive emotions was calculated that includes the reported frequencies with which the respondents a) were happy, b) enjoyed life, c) had lots of energy and d) felt calm and peaceful. In a second step, a similar measure for negative emotions was calculated. This measure is based on the frequencies with which respondents a) felt depressed, b) felt lonely, c) felt sad and d) felt anxious. The two scales for negative and positive affective states vary between 1 (=never felt that way) und 4 (=always felt that way), hence higher values indicate more frequent positive (negative) emotions. Both affect scales are substantially negatively correlated (r= −.55) which means that persons who report more positive emotions generally report less negative emotions and vice versa. In light of this substantial correlation, positive and negative emotions were not treated independently. Instead, the measure for emotional well-being was calculated as the difference between the frequency of positive affect and the frequency of negative affect. Our final measure thus captures the affective balance in the week prior to the survey. Its values can range from +3 (=always positive and no negative emotions) to −3 (always negative and no positive emotions) with 0 pointing to an equilibrium of positive and negative affect. Similar measures have been used in prior research (Nawijn et al. 2010; Sanjuan 2011; Schimmack et al. 2002; Suh et al. 1998).

Analytical Approach

Linear regression models were calculated which include a set of control variables which, according to the literature on SWB, also predict life satisfaction and emotional well-being. These control variables include age, gender, completed years of full-time education, unemployment, religious denomination, children at home and a subjective health measure. A full description of these variables is given in Table 2. Particularly subjective health is an important control variable because cold weather in December

[4] A marginal number of N=73 interviews were conducted in July and August. It was decided to exclude these interviews from the analyses because July and August are the peak months of Europe's summer holiday season and this may be associated with increased subjective well-being amongst respondents. Although the exclusion of these 73 cases has no influence on the results, it still seems the proper way to handle the data.

Table 1 Interview dates in the pre-Christmas and post-Christmas period

Interview date	N	Period	Interview date	N	Period
Sep 1–Dec 15	28,218	Reference Group	December 24	18	(Pre)Christmas
December 16	249	(Pre)Christmas	December 25	17	(Pre)Christmas
December 17	308	(Pre)Christmas	December 26	70	(Pre)Christmas
December 18	346	(Pre)Christmas	December 27	252	Post-Christmas
December 19	327	(Pre)Christmas	December 28	231	Post-Christmas
December 20	289	(Pre)Christmas	December 29	205	Post-Christmas
December 21	204	(Pre)Christmas	December 30	127	Post-Christmas
December 22	146	(Pre)Christmas	December 31	40	Post-Christmas
December 23	83	(Pre)Christmas	Jan 1 – Jun 30	14,080	Reference Group

may lead to a higher prevalence of colds, flu or other related diseases which also affects SWB. Including a subjective health measure statistically accounts for the shared variance of subjective health and SWB and is thus a rather conservative approach for assessing the Christmas effect on life satisfaction and emotional well-being. Additionally, fixed effects for country differences are included in the models. These effects account for mean differences in life satisfaction and emotional well-being at the country level. Numerous studies have shown that such differences exist (e.g., Kuppens et al. 2008; Mutz and Kämpfer 2013; Schyns 2002), however explaining country differences is not in the scope of this study. Moreover, robust standard errors were calculated which account for possible homoscedasticity in the data due to its multilevel structure (White 1980).

One of the initial assumptions of this study was that *religious affiliation* is likely to be a moderator for the Christmas effect on SWB (H#3). This assumption is put to a test by including interaction effects that estimate SWB at Christmas for Christians separately. Precisely, we calculated a first dummy variable which includes individuals with a Christian religious affiliation who were interviewed in the Christmas period (N=1072). A second set of dummy variables comprises a) Christians with low religiousness interviewed in the (Pre-)Christmas period (N=588) and b) Christians with a high degree of religiousness interviewed in the (Pre-)Christmas period (N=460). Religiousness values were based on the respondents' self-ratings.

Findings

Descriptive Results

Descriptive statistics regarding the sample are provided in Table 2. Descriptive results reveal that life satisfaction is on average at M=6.90 with Hungarians reporting the lowest satisfaction with life (M=5.52) and Swedes indicating the highest life satisfaction (M=7.85). Emotional well-being scores average at M=1.22, which means that respondents have generally reported more positive emotions than negative emotions. From the 11 countries included, Hungary has again the lowest emotional well-being

Table 2 Sample and variable descriptions

Variable name	Variable description	Univariate statistics
Life satisfaction	"All things considered, how satisfied are you with your life as a whole?" Response categories: 0=extremely dissatisfied … 10=extremely satisfied.	M=6.90 SD=2.19
Emotional well-being	Difference score of positive emotions and negative emotions. Positive emotions: "Please tell me how much of the time during the past week a) you felt happy, b) you enjoyed life, c) you had a lot of energy, d) you felt calm and peaceful." Negative emotions: "Please tell me how much of the time during the past week a) you felt depressed, b) you felt lonely, c) you felt sad, d) you felt anxious." Response categories: 1=none or almost none of the time … 4=all or almost all of the time. The final measure has a value range from −3 (only negative emotions) to +3 (only positive emotions).	M=1.22 SD=1.05
Age	Age of the respondent in years. Original values.	M=47.3 SD=18.4
Gender	Gender of the respondent. Response categories: 1=female, 0=male	female=53.6 % male=46.4 %
Level of education	Highest level of education completed, according to ISCED levels. Values: 1=less than lower secondary, 2=lower secondary, 3=lower tier upper secondary, 4=upper tier upper secondary, 5=advanced vocational, 6=lower tertiary (B.A. level), 7=higher tertiary (M.A. level).	M=2.98 SD=2.18
Children at Home	Respondent lives with child(ren) in household. Response categories: 1=yes, 0=no	yes=40.0 % no=60.0 %
Unemployment	Respondent is unemployed. Variable includes unemployed persons who are looking for a job as well as those not looking actively for a job. Response categories: 1=yes, 0=no	yes=7.0 % no=92.9 %
Christian denomination	"Do you consider yourself as belonging to any particular religion?" Variable includes persons who self-identify as "Roman Catholic" or "Protestant". Categories: 1=Christian affiliation, 0=other/no religious affiliation.	Christian=47.4 %, non-Christian=52.6 %
Religiousness	"Regardless of whether you belong to a particular religion, how religious would you say you are?" Response categories: 0=not at all religious… 10=very religious. The dummy variable "High religiousness" includes all Christians (see above) with a religiousness self-rating ≥6. The dummy variable "Low religiousness" includes Christians with a religiousness self-rating <6.	High religiousness=58.1 %, Low religiousness=41.9 % (in per cent of all Christians)
Subjective Health	"How is your health in general?" Response categories: 1=very bad … 5=very good.	M=3.78 SD=0.91
Pre-Christmas interview	Respondent surveyed between December, 16 and December, 26 of the respective year.	yes=4.7 % no=95.3 %
Post-Christmas interview	Respondent surveyed between December, 27 and December, 31 of the respective year.	yes=1.9 % no=98.1 %

(M=0.48) while Ireland scores highest (M=1.51). At the individual level, the correlation between life satisfaction and emotional well-being is r=0.46, indicating that emotional well-being and life satisfaction ratings are closely connected (e.g., Kuppens et al. 2008; Mutz and Kämpfer 2013; Suh et al. 1998).

Results of the Regression Analyses

More important, however, is the question if the Christmas period has a measurable influence on SWB. Results are provided in Tables 3 and 4. For each outcome variable, the first regression model shows the general Christmas effect (model I) whereas additional models (II and III) estimate separately the effects for Christians (vs. Non-Christians) and for less religious and very religious Christians (vs. Non-Christians), respectively.

Table 3 Christmas effects on life satisfaction

	Satisfaction with life					
	I		II		III	
	b	β	*b*	β	*b*	β
Age	−0.04**	−.389	−0.04**	−.385	−0.04**	−.376
Age (squared)	0.001**	.468	0.001**	.453	0.001**	.438
Gender (female vs. male)	0.04*	.010	0.03	.006	0.01	.002
Level of education	0.05**	.053	0.05**	.053	0.05**	.053
Children at home	0.06*	.012	0.05*	.010	0.04*	.010
Unemployment	−1.23**	−.147	−1.21**	−.145	−1.21**	−.145
Subjective health	0.75**	.319	0.74**	.318	0.74**	.318
Christian denomination[1)]	–	–	0.23**	.053	–	–
Christians, low religiousness[2)]	–	–	–	–	0.04	.007
Christians, high religiousness[2)]	–	–	–	–	0.37**	.075
Pre-Christmas Interview	−0.12*	−.011	−0.19**	−.018	−0.21**	−.020
Post-Christmas Interview	0.04	.002	0.03	.002	0.03	.002
IA Pre-Christmas Interview* Christian Denomination	–	–	0.14	.010	–	–
IA Pre-Christmas Interview* Christian, low religiousness	–	–	–	–	0.14	.007
IA Pre-Christmas Interview* Christian, high religiousness	–	–	–	–	0.23*	.011
R^2	0.218		0.220		0.223	

ESS Waves 3+6. Countries included: Belgium, Estonia, Germany, Hungary, Ireland, Netherlands, Portugal, Slovakia, Spain, Sweden and United Kingdom. Linear regression analyses with fixed effects for country differences and robust standard errors (Huber/White). 1) Christian denomination: Dummy variable that includes respondents with formal affiliation in the Roman-Catholic or Evangelic church. 2) Dummy variables that include Christians with high/low religiousness, according to religiousness self-ratings (see Table 1)

IA Interaction effect

Significance: */**=p<.05/.01

Table 4 Christmas effect on emotional well-being

	Affect balance					
	I		II		III	
	b	β	*b*	β	*b*	β
Age	0.001	.014	0.001	.017	0.001	.018
Age (squared)	0.000	.034	0.000	.024	0.000	.022
Gender (female vs. male)	−0.18**	−.089	−0.19**	−.091	−0.19**	−.092
Level of education	0.03**	.060	0.03**	.060	0.03**	.060
Children at home	0.04*	.019	0.04*	.018	0.04*	.018
Unemployment	−0.29**	−.073	−0.29**	−.071	−0.29**	−.071
Subjective health	0.46**	−.405	0.46**	−.405	0.46**	−.405
Christian denomination[1)]	–	–	0.07**	.033	–	–
Christians, low religiousness[2)]	–	–	–	–	0.06**	.022
Christians, high religiousness[2)]	–	–	–	–	0.08**	.034
Pre-Christmas Interview	−0.21**	−.039	−0.25**	−.047	−0.24**	−.046
Post-Christmas Interview	−0.09**	−.010	−0.09**	−.010	−0.09**	−.010
IA Pre-Christmas Interview* Christian Denomination	–	–	0.08*	.011	–	–
IA Pre-Christmas Interview* Christian, low religiousness	–	–	–	–	0.08	.008
IA Pre-Christmas Interview* Christian, high religiousness	–	–	–	–	0.07	.007
R^2	0.230		0.231		0.231	

ESS Waves 3+6. Countries included: Belgium, Estonia, Germany, Hungary, Ireland, Netherlands, Portugal, Slovakia, Spain, Sweden and United Kingdom. Linear regression analyses with fixed effects for country differences and robust standard errors (Huber/White). 1) Christian denomination: Dummy variable that includes respondents with formal affiliation in the Roman-Catholic or Evangelic church. 2) Dummy variables that include Christians with high/low religiousness, according to religiousness self-ratings (see Table 1)

IA Interaction effect

Significance: */**=p<.05/.01

Regarding *life satisfaction*, interviewees in the (Pre-)Christmas period indicate significantly lower satisfaction with life compared to respondents surveyed at other times of the year. The size of the effect, however, is rather small (b= −0.12, p<.05, model I). Interaction effects with religious denomination (model II) do not point to significant differences (b=0.14, p=.13). However, the positive coefficient suggests that Christians may be somewhat happier around Christmas compared to non-Christians. More striking are the differences detected for Christians with a high degree of religiousness (model III). This group sets apart from non-Christians and less religious Christians with a significantly higher degree of life satisfaction around Christmas (b=0.23, p<.05). Hence, whereas life satisfaction among non-Christians and less religious Christians declines in the (Pre-)Christmas period, it remains rather stable among very religious Christian believers. In the Post-Christmas period, no significant effects are found. In the aftermath of Christmas, respondents report a level of life satisfaction comparable to the annual mean.

Analyses for *emotional well-being* yield similar main effects, but differ with regard to interaction effects. First, a significant negative effect for the (Pre-)Christmas period can be demonstrated ($b = -0.21$, $p < .01$, model I). Hence, respondents surveyed in the (Pre-)Christmas period report a less favourable affective balance compared to respondents surveyed in other periods of the year. In the (Pre-)Christmas time positive emotions dominate over negative emotions to a lesser degree. Christians differ in their affective balance significantly from non-Christians, but only by a small margin ($b = 0.08$, $p < .05$, model II): Interviewees with Christian denomination indicate a more positive affective balance at Christmas compared to non-Christians. However, the absolute value of the negative main effect is greater than the absolute value of the positive interaction effect, so that emotional well-being in Christians is not higher at Christmas compared to other periods of the year. Christians are not immune to the Christmas decline in emotional well-being, but they seem to be less affected. This result holds true for less religious as well as very religious Christians (model III). The differentiation regarding the religiousness of Christian interviewees do not yield any significant results. However, a small but significant Post-Christmas effect is shown ($b = -0.09$, $p < .01$) in all models, indicating that directly after Christmas holidays emotional well-being is still less positive than on a typical day outside of the Christmas period.

Generally it has to be noted that (Pre-)Christmas time has a higher negative influence on emotional well-being than on life satisfaction. This conclusion can be drawn from the standardized regression weights (β), whose absolute value is twice as high for emotional well-being compared to life satisfaction. On a conceptual level, emotional well-being is regarded as the short-term and rather fluctuating aspect of SWB, whereas life satisfaction refers to more stable and mostly cognitive evaluations of life achievements (Schimmack 2008). Hence, from a theoretical perspective, the result that the Christmas effect is more pronounced for emotional well-being and less pronounced for life satisfaction is highly plausible.

The effects of the control variables are rather unsurprising and correspond to findings of previous studies: Education, children at home and Christian denomination are associated with slightly higher levels of life satisfaction and emotional well-being. Strong negative effects on both dependent variables are detected for unemployment and strong positive effects go along with better subjective health. Age has a negative, but non-linear effect on life satisfaction, but not on emotional well-being.[5] Gender does not correlate with life satisfaction, but emotional well-being is lower in females compared to males.

Summary and Conclusions

Based on a large scale, cross-sectional data set from 11 European countries, this study has shown that respondents surveyed in the period shortly before or at the Christmas holidays generally report lower life satisfaction and lower emotional well-being compared to respondents whose interview took place outside of the Christmas period. These findings are in line with the stress perspective on Christmas, hence Hypothesis

[5] The curvilinear age effect suggests that life satisfaction is generally declining over the life-course. However, at younger ages the relative decline in life satisfaction per year is larger than in older age groups.

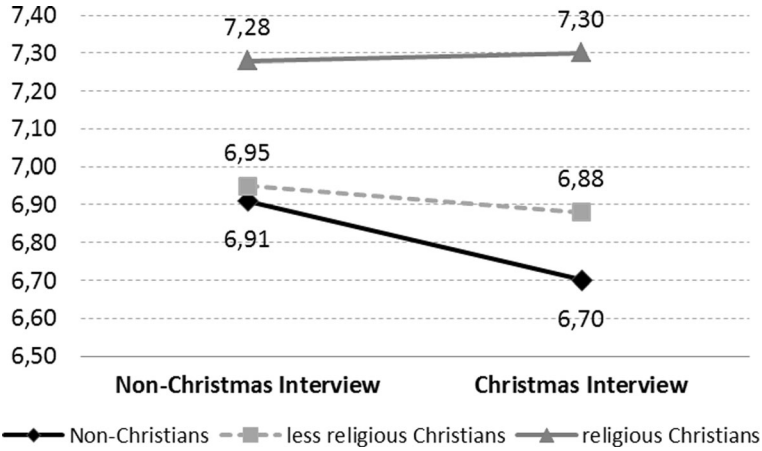

Fig. 1 The Christmas effect on life satisfaction among very religious Christians, less religious Christians, and non-Christians, according to Table 3, model III

#2. In this perspective reduced SWB at Christmas is a result of perceived time pressure, social obligations and, maybe, financial concerns which are inherent in the materialist consumer culture that surrounds Christmas nowadays. In the aftermath of Christmas, subjective well-being is not particularly positive, but again converging to its annual mean level. This finding may suggest that it is particularly the Pre-Christmas hustle and not the Christmas holiday itself that has caused the short-term decline in well-being. Moreover, this study also demonstrated that Christian religious affiliation moderates the way in which Christmas is experienced, buttressing hypothesis #3. Results indicate that religious Christians do not suffer from reduced life satisfaction in the time before Christmas (Fig. 1). In this regard, religious Christians deviate from the general pattern in a remarkable, but plausible way. Moreover, the Christmas decline in terms of emotional well-being is less pronounced in Christians compared to non-Christians (Fig. 2). Hence, both findings consistently show that Christian religious affiliation is a protective factor against the general decline in SWB around Christmas. It is less clear however, if this protection comes along with Christian affiliation per se or if it needs to be combined with high religiousness.

Findings of the present study are in line with the Christmas study conducted by Kasser and Sheldon (2002), who demonstrated in a small sample of US-Americans living in Illinois that consumption activities come along with reduced SWB at Christmas whereas religious experiences were associated with enhanced SWB at Christmas. Although measures on such activities were not collected in the present study it is highly plausible that individuals with Christian affiliation and a strong sense of religiousness celebrate Christmas differently than the majority of non-Christians. It can be assumed that these individuals are less prone to get absorbed by the consumerism that precedes the holidays.[6] It is an interesting question however, if this deviance from the general rule is due to the religious experience or instead a more inward-

[6] Support of this notion is provided by the Kasser and Sheldon study (2002: 324), when they argue that materialistic strivings involve more stressful experiences and distract people from the ‚true meaning' of the season.

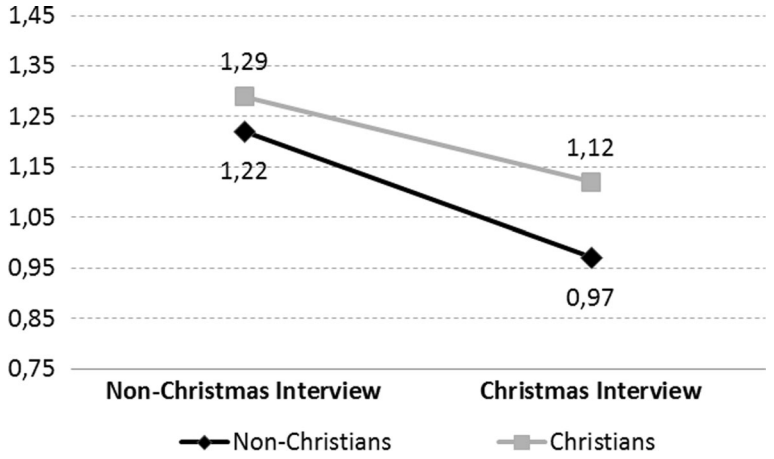

Fig. 2 The Christmas effect on emotional well-being among Christians and non-Christians, according to Table 4, model II

oriented, contemplative way to celebrate Christmas. If the latter is true, gains and losses in SWB are not caused by religion itself but by the way Christmas is celebrated.

The Christmas study from Páez et al. (2014) found that Christmas holidays increase SWB. At first sight, this seems to contradict the results at hand. However, Páez and colleagues collected their data in the week before Christmas and again three weeks after Christmas. Thus, it is likely that the initial level of SWB in their sample was particularly low as they scheduled their first measurement in the stressful week preceding Christmas. Hence, the more positive SWB values measured three weeks after Christmas may reflect a normalization of well-being in the aftermath of Christmas rather than an exceptionally high level. If this is true, the results of the two studies would complement and not contradict each other.

Of course, the present study also has some limitations. One limitation is the small number of interviews that were conducted directly at Christmas holidays. Therefore, the operational definition of "Christmas time" in this study did also include the week before Christmas Eve. This week may be particularly stressful as many Christmas presents are purchased in this week. According to consumer research by Ernst and Young, 27 % of all Christmas presents in Germany are purchased in the last two weeks before Christmas.[7] In other European countries similar patterns are likely to be found. Hence, the negative Christmas effect on SWB may largely apply to the pre-Christmas period, but must not necessarily prevail at Christmas Eve. Another limitation is that no valid measures for perceived stress are included in the ESS data. This is the reason why the assumed mechanism – declines in SWB at Christmas are due to increased stress levels – could not be tested directly. Although this mechanism was put forward in this study, it is not the only way the demonstrated Christmas effect may be explained. An experimental study (Schmitt et al. 2010) has shown that the mere presence of Christmas symbols can reduce mood and well-being among non-Christian religious groups, for instance Sikh and Buddhists. Furthermore, this study can also demonstrate that these

[7] http://www.de.ey.com/Publication/vwLUAssetsPI/EY_Studie_-_Weihnachtsgeschaeft_2014/$FILE/EY-Weihnachtsgeschaeft-2014.pdf (06/22/2015).

negative effects are mediated by reduced feelings of inclusion. The authors argue that individuals feel better in environments "that they perceive as inclusive of their identities" (Schmitt et al. 2010: 1019). However, it is questionable if this argument can be applied in the present case. In the ESS data used here, the majority of non-Christians are atheists without a religious denomination. Individuals with a non-Christian denomination, who may indeed feel less included into the dominant Christmas culture in European countries, are hardly represented in the data.

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