Title: Sport events and happiness: Towards the development of a measuring instrument

Abstract

The purpose of this study was to create a measuring instrument to capture happiness in the context of events and test it in the context of two non-mega sport events. Three groups of residents were distinguished (event 1: OSG; event 2: 55+SG; and a control group, unaware of events: CONTR). Residents who did not attend the events were surveyed in public places in order to find out whether the mere hosting of these events had the potential to impact their happiness and well-being. The theoretical construct of Subjective Well-Being was used to develop a survey to measure happiness and well-being holistically. Four components were developed: overall level of happiness (one-item), satisfaction with important domains (three-items), and specific emotions recently experienced (i.e., affect dimensions, eight-items). Exploratory Factor Analyses confirmed one construct for satisfaction; and two constructs for the affect dimensions: positive affect (3 items) and reversed negative affect (5 items). ANOVAs revealed that residents aware of the 55+SG, an “older age” sport event, reported significantly higher levels of overall happiness and satisfaction than the control group. Moreover, the 55+SG showed significantly lower levels of negative emotions than the OSG and control group. The results do not strongly support the notion that different types of events affect residential happiness in different ways. Future research should explore the impacts of other types of sport events on residential happiness and well-being, and account for socio-demographic factors, involvement with the event, and the weather to more precisely discern the impacts of events on residential happiness.

Keywords: Negative affect dimension; Positive affect dimension; Satisfaction; Subjective well-being; Survey development
**Introduction**

One-off sport events are out of the ordinary and can trigger a variety of short- or long-term impacts on host communities such as economic, tourism, social, and sport participation impacts (e.g., Taks, Chalip, & Green, 2015). Event impacts refer to changes caused by a short-term stimulation directly through an event, and may lead to planned and unplanned, tangible and intangible outcomes and legacies for the host community (Preuss, 2007). To date, most of the literature on event impacts and outcomes has focused on mega-sport events (MSE), which are major events, irregular, one-off, large in size and scope, and significant for the host community and beyond (e.g., Gaffney, 2013; Maennig & Porsche, 2008). Furthermore, the majority of these studies have focused on planned and tangible benefits, such as economic, tourism and/or infrastructure impacts. With numerous examples of huge economic losses resulting from hosting MSE (e.g., Kesenne, 2012), there is a shift to examine less tangible benefits, such as social impacts (e.g., Balduck, Maes & Buelens, 2011; Smith, 2014). Moreover, some researchers have recently started to focus on impacts of non-mega sport events (NMSE), as they are more likely to build on the existing resources of a city, and to benefit local people and companies, without generating the same (financial) risks (e.g., Nola & Taks, 2015).

While sport sociologists have focused on social capital and social cohesion as intangible outcomes of sport events (e.g., Gibson et al., 2014; Heere et al., 2013; Misener & Mason, 2006; Smith, 2009; Taks, 2013), sport economists have started to show interest in capturing the value of happiness. However, up until now, research on happiness in the sports realm has focused on measuring the value of well-being and happiness as it relates to sporting activities in general (Rodriguez, Kesenne, & Humphreys, 2011) rather than sport events (Rodriguez-Pose & von Berlepsch, 2014). Indeed, the majority of happiness studies have focused on the link between sport
participation and happiness (e.g., Downward & Rasciute, 2011; Forrest & McHale, 2011; Kavetsos, 2011). Although participation in sport and physical activity has been shown to have a significant positive relationship with happiness (e.g., Huang & Humphreys, 2011), the link between hosting a sport event and happiness is assumed but has received minimal empirical attention (Kavetsos & Szymanski, 2010). Since there has been some indication that hosting a sport event does have an apparent “feel-good” effect on the host community (e.g., Maennig & Porsche, 2008), there is merit for additional empirical investigation of impacts on the happiness and well-being of community residents as a result of hosting a sport event. As stated by Kavetsos and Szymanski (2010), “it would seem to be a much stronger justification for public spending on these events if it could be claimed not that they will make us rich, but that they will make us happy” (p. 160). The purpose of this study was to create a measuring instrument to capture happiness in the context of events and test it in the context of two NMSE. We were specifically interested in surveying residents who did not attend the events, in order to find out whether the mere hosting of events has the potential to impact the happiness and well-being of residents in general.

**Sport and Happiness**

Most research analyzing the relationship between sport and happiness is related to *active participation in sport* (e.g., Dewar & Kavussanu, 2011; Downward & Rasciute, 2011; Rodrigues et al., 2011). Most of these studies have used large, secondary data sets from national surveys to assess whether or not there is a significant relationship between participation in sport/physical activity and happiness (e.g., Downward & Rasciute, 2011; Huang & Humphreys, 2011). The majority of these studies have found that there is a significant positive relationship between sport participation and happiness (e.g., Forrest & McHale, 2011; Kavetsos, 2011), however, they also pose the potential bias of reverse causality, whereby it is possible that *happier individuals* are
naturally more apt to participate in physical activity than unhappy individuals (Kavetsos, 2011). To overcome this potential bias, some researchers have investigated the accessibility of sport facilities; many studies have reported that access to nearby sporting facilities is related to higher overall life satisfaction and happiness than those with limited opportunities (e.g., Pawlowski, Breuer & Leyva, 2011). Furthermore, there has also been support for the use of sport/physical activity as an intervention to lower depression, thus increasing overall subjective well-being (Dinas, Koutedakis, & Flouris, 2011). As such, there is general consent in the literature that sport participants are typically happier than non-participants (e.g., Dewar & Kavussanu, 2011; Downward & Rasciute, 2011; Rodrigues et al., 2011).

Findings regarding the relationship between elite sport success and happiness are inconsistent. For example, Hallmann, Breuer, and Kuhnreich (2013) surveyed 2006 individuals residing in Germany and found that 66.2% of Germans felt proud and 65.6% felt happy when elite German athletes were successful by winning medals at a MSE. However, although Kavetsos and Szymanski (2010) also found a positive relationship between relative sporting success and national well-being, this relationship was not significant. Similarly, Kuper and Szymanski (2012) investigated the impact of a national soccer team playing in a major tournament on suicide rates during and after the event. These authors found that suicide rates decreased in the respective country when a national team was playing, and decreased regardless of team success (suicide rates did not increase when a team was eliminated). In contrast, Davis and End (2011) did find that team success had an impact on the well-being of community residents. Specifically, these authors found that the presence of a local National Football League (NFL) team with a high winning percentage had a significantly positive relationship with the overall mood of the residents in the respective city (in other words, success made the residents happier). Similarly, Maennig and Porsche (2008)
claimed that the unexpected success of the German national team at the 2006 World Cup greatly induced a “feel-good” effect in Germany as many residents showed increased support for the team. Thus, although there has been some support for the potential of elite sporting success to positively impact the happiness and well-being of citizens, there are clearly inconsistent findings in this area.

The link between sport events and happiness is even less understood. Few studies have analyzed this relationship, and the majority of these studies have mainly focused on MSE. For example, Kavestos and Szymanski (2010) found that the “feel good effect” resulting from the World Cup was stronger than from the Olympic Games. However, the longevity of this feeling is questioned (Maennig & Porsche, 2008) and little is known about the potential of NMSE to create a comparable feeling of happiness among residents in host communities. Furthermore, there is a clear gap in the event literature: previous studies do not distinguish between event attendees and non-attendees. For example, sport events may impact residential happiness in different ways and degrees based on whether or not these individuals actually spectate the event. For instance, it is possible that hosting a sport event may only positively impact happiness for those individuals who actually attend the event, as these individuals can directly reap benefits such as the sense of belonging and collective celebration created at the event (e.g., Maennig & Porsche, 2008). In contrast, residents who have no affinity with the event and/or do not attend the event may be totally indifferent.

**Measuring Happiness in the Context of Sport Events**

“Subjective Well-Being” (SWB) is often used to capture the notion of happiness and well-being (Diener, 2000). SWB is comprised of four main components: overall life satisfaction, satisfaction with important domains, frequent positive affect emotions, and reversed negative affect emotions. Thus, these four components can serve as a theoretical baseline to measure
happiness. Researchers have used a variety of measures to capture SWB and happiness and many have made recommendations regarding how to most validly and reliably measure this intangible concept. For example, Hopkins and King (2010) used a vignette to contextualize their concept of well-being and happiness, which was followed by participants rating their own level of happiness on the same scale as was used to rate the happiness of the individual described in the vignette. These authors recommended including a vignette to describe a hypothetical individual with a theoretically high level of happiness to overcome interpersonal incomparability, as individuals may differ in their personal understanding of happiness and well-being. Thus, rating the happiness of this hypothetical individual primes the respondent to rate their personal level of happiness in a similar manner.

Other studies that have explored the relationship between sport and happiness have relied on a single-item measure to capture happiness (e.g., Kavetsos & Szymanski, 2011; Davis & End, 2011), which is typically some variation of the question: “Taking all things together, how would you say things are these days – would you say you are happy, quite happy, or not very happy?” (Kavetsos & Szymanski, 2011, p. 160). Although this is a common way to measure happiness, much of this research has received criticism that a single-item measure is not fully comprehensive of the concept (Zhou, 2012). For example, Kaplan, Luchman, and Mock (2013) and Diener (2000) recommended to also include specific well-being measures, in addition to an all-encompassing single-item measure, to more comprehensively determine levels of happiness and well-being, such as levels of satisfaction (Connelly, 2003) and affect dimensions (Kahneman, et al. 2004). A combination of these recommendations was used in the survey design for this study to investigate the impact of hosting sport events on residential happiness and well-being. The events under investigation were two non-mega sport events, and the residents were non-event attendees.
Method

Context

The events under investigation were the Ontario Summer Games (OSG) and the Ontario 55+ Summer Games (55+SG). Both events were hosted in August 2014 and took place two weeks apart. The OSG hosted approximated 3,500 athletes between the ages of 13 and 20 years old. The OSG was a multi-sport event (19 different sports) and was provincially-based (i.e., only athletes from Ontario competed). The 55+SG was also a provincially-based, multi-sport event (18 different sports), however, the athletes were aged 55 years old and above. Furthermore, the 55+SG hosted fewer participants with approximately 1,400 athletes competing. The OSG was hosted in a medium-sized Canadian city; the 55+SG were co-hosted by the same city, in collaboration with a neighboring municipality.

Questionnaire and Measurements

The complete questionnaire consisted of three sections (including 21 questions capturing 90 items): a happiness, an event and a socio-demographic section. The level of involvement with an event (Mutter & Pawlowski, 2014; Shank & Beasley; 1998; section two of the questionnaire), socio-demographic factors (e.g., Kavetsos & Szymanski, 2010; Rodriguez-Pose & von Berlepsch, 2014; section three of the questionnaire), as well as the weather (e.g., Connolly, 2013; Zhou, 2012), have consistently shown to have a predictable relationship with happiness. However, due to limitations of space, these components are not included in this contribution. The focus here is solely on section 1 of the questionnaire: measuring happiness.

A complete description of the survey items used to measure the concept of happiness and well-being with their respective theoretical basis is shown in Table 1. The first item was the vignette, describing an individual with high SWB. This vignette served as a common reference
point for defining “happiness and well-being” to overcome interpersonal incomparability inherent in happiness research (Hopkins & King, 2010). Following the vignette, a single-item question assessing the current overall state of happiness and well-being of the respondent was included to assess the first component of SWB (overall life satisfaction). “Overall happiness and well-being” for both the hypothetical individual described in the vignette, as well as the respondent, was captured using a six-point Likert scale (1 = “Not happy at all” to 6 = “Very happy”). Furthermore, this item was placed after the vignette (as recommended by Hopkins and King, 2010) and as a general well-being question it was placed before specific well-being measures (as recommended by Kaplan et al., 2013). Although a variation of this single-item happiness measure is frequently the sole item included in sport and happiness research, a more holistic understanding and measurement of happiness and well-being was desired for this study. Therefore, following the vignette and the general well-being question, the second component of SWB (satisfaction with important domains) was captured with three items measuring satisfaction with life at home, health status, and employment situation using a four-point Likert scale (1 = “Not at all satisfied” to 4 = “Very satisfied”; Connolly, 2013). The “not applicable” score was replaced with the item means to avoid missing cases. The third and fourth components of SWB (the positive and negative emotions) were captured using measures of affect dimensions (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). This section provided respondents with an opportunity to specify what emotions they had experienced within the last week (i.e., happy, frustrated/annoyed, depressed/blue, hassled/pushed around, warm/friendly, worried/anxious, enjoying myself, tired); each specific emotion was rated on a six-point Likert scale (0= “Not at all” to 6 = “Very much”). The negative affect items were reversed, so that higher scores reveal a greater absence of negative emotions, thus representing higher levels of happiness.
Data Collection

Community residents who did not attend the sport events were approached in two public spaces (e.g., a Mall in the host city; and a major grocery store in the co-host municipality). Data were collected over the course of six days between August 8 and August 28, 2014 (before, during, and after the two events took place). The participants were first asked if they were a resident of Windsor-Essex County and 18 years or older. If they met both of these criteria, they were invited to complete the survey on site. The participants had the option to fill out the survey either electronically (four iPads were made available) or on paper. A Frisbee with the event logo was provided as a small token of appreciation, and at their discretion, participants were entered into a draw to win a $100 cash prize. Most surveys were collected during the six days of on-site data collection (seven questionnaires were electronically submitted on other days by residents who visited the link for the online survey at a location of their convenience).

Participants

A total of 618 questionnaires were returned (488 electronically and 130 paper surveys). Only responses submitted from residents of the host county (n=468 or 89%) were taken into account for the purpose of this study. Of the 468 total participants, 447 were usable for further analysis. Almost 40% (n=217) of the participants were residents from the major city which hosted both events (Windsor); 29% were from the municipality that co-hosted the 55+SG, and the remaining 31% were from the surrounding municipalities and towns. The majority of respondents were women (59%), and the average age of respondents was 37 (SD = 17). Three groups of respondents were distinguished: (1) aware of the OSG taking place in the host community (n=220), (2) aware of the 55+SG taking place (n=57), and the control group (unaware of any event taking place; n=170). There were no significant differences between the three groups of participants in
regards to distribution of gender. However, the respondents for the 55+SG were, not surprisingly, significantly older (M=53, SD = 17) than the two other groups of participants (F(2,444)=35.63, p <.001).

**Data analysis**

Means and standard deviations were calculated for all happiness variables. Exploratory Factor Analysis (EFA; Principal Component Analysis with Varimax rotation) was applied to test the convergent validity of the ‘satisfaction with important domains’ and ‘affect dimension’ constructs, as they included three and eight items, respectively. Inter-reliability (Cronbach’s Alpha scores) was also tested for the multi-item constructs. Criterion validity was tested by calculating Pearson correlations between the single-item and multiple-item happiness constructs (Field, 2009). Lastly, a series of ANOVAs were run to test for potential significant differences in reports of happiness levels between the three groups of community residents (OSG, 55+SG, and control group). Post Hoc Tukey tests (corrected for homogenous subsets) were performed to specifically locate any significant differences found between the groups.

**Results**

**Descriptive Statistics, Reliability and Validity of the Measurement tools**

Table 2 provides descriptive statistics for all happiness variables, and includes the validity and reliability scores of the multi-item constructs. The results show a higher overall score for HAP_Sam (M=5.26, SD=0.71) compared to HAP_You (M=4.88, SD = 0.91). The participants scored high, with average scores over 3 on a 4-point scale, regarding their satisfaction with their lives at home, their health status and their employment situation. The scores for the positive affect items (SWB_Pos) tended to be higher than the average scores for the reversed negative affect items (SWB_Neg_R).
The results of the EFA for the ‘satisfaction with important domains’ variable (SATIS) revealed one factor with an acceptable Eigenvalue of 1.77, explaining 59% of the variance. The resulting alpha score of 0.65 is under the recommended cut-off point of 0.7. However, Kline (as cited by Fields, 2009) indicates that values below 0.7 are still acceptable when dealing with psychological constructs, “because of the diversity of the constructs being measured” (p. 675).

The results of the EFA conducted for the ‘affect dimension’ variables revealed two components: a reversed negative affect dimension (Eigenvalue=3.01, VE=34% after rotation) and a positive affect dimension (Eigenvalue=1.81, VE=26% after rotation). Table 2 shows the factor loadings after rotation. The items in component 1 represent the reversed negative affect dimension (SWB_Neg_R), while component 2 represents the positive affect dimension (SWB_Pos). Cronbach’s alpha’s were acceptable with scores of 0.79 and 0.76 respectively. Based on these findings, three new constructs were created for the multi-item variables: overall satisfaction (SATIS; average score of three items); SWB_Pos (average score of three positive affect items) and SWB_Neg_R (average score of five reversed negative affect items).

The correlation matrix between the happiness constructs is presented in Table 3. The correlations between the vignette and the four remaining personal happiness variables, although significant, are rather low. All other personal happiness variables show positive and significant correlations (p<.001), indicating that the variables measured similar feelings of happiness and well-being. Note however, a fairly low correlation of r=0.20 (p<.001) between the positive and the reversed negative affect items. The correlations support criterion validity of the constructs.

**Happiness Effect of Non-mega Sport Events**

The results of the ANOVAs revealed some significant differences in ratings of happiness and well-being (see Table 4). There were no significant differences between the three groups of
participants in their rating of the abstract concept of happiness (i.e., vignette), which means that they all had a similar understanding of the concept (Hopkins & King, 2010). Significant differences were apparent for their personal levels of happiness (HAP_You), satisfaction with important domains (SATIS) and affect dimensions (SWB_Pos; SWB_Neg_R). Specifically, the respondents of the 55+SG group reported significantly higher scores than the control group on two variables (HAP_You, and SATIS), and reported significantly higher scores than the OSG and the control group for SWB_Neg_R, thus displaying a higher level of overall SWB.

**Discussion**

The purpose of the vignette (HAP_SAM) was to familiarize the respondents with the abstract concept of “happiness” (Hopkins & King, 2010) before self-assessing their happiness as a way to provide a common frame of reference for all respondents. It is therefore not surprising that the correlations between the vignette and the three remaining personal happiness variables, although significant, are rather low. For the same reason, we expected no significant differences for the vignette assessments between different groups, which was confirmed, as all three groups of participants appeared to understand and rate the happiness of the hypothetical individual in the same way. The results of the EFA showed that although a unidimensional factor emerged for the three survey items that purported to measure ‘satisfaction with important domains,’ the alpha score of this construct was rather low, and thus, the inter-reliability of the items in this construct is rather low. This is perhaps not so surprising given that the three realms under consideration, namely home, health and employment, are not necessarily connected (e.g., Connolly, 2003). The EFA conducted for the ‘affect dimensions’ revealed two factors, and the resulting alpha levels were above acceptable minimum levels (SWB_Neg_R = 0.79; SWB_Pos = 0.76). Thus, the survey
items employed for each affect dimension have sufficient inter-reliability to measure the respective constructs.

The results showed that residents aware of the 55+SG reported significantly higher levels of SWB than the control group. However, only one significant difference was apparent between OSG and 55+SG. Thus, the results do not necessarily support the notion that different types of NMSE affect happiness in different ways. They do demonstrate, a tendency that people interested in an “older age” events, are older in age, and display higher levels of happiness when compared to a control group of unaware residents. However, this finding does not allow us to conclude whether (older) people are more interested in events because they are happier or whether (older) people are happier because of the events (see also Kavetos, 2011 in the context of the relationship between happiness and sport participation). The results also showed a tendency that the community residents who were aware of the sport events reported higher levels of happiness and well-being than residents who were unaware of any event taking place at the time of data collection. However, a multi-variate approach, bringing more variables relevant to happiness into the analyses, is essential before being able to draw final conclusions. For instance, it is possible that residents who were aware of an event taking place showed higher levels of happiness and well-being than those unaware simply because they were proud that their community had the resources to support such events. Perhaps the sport events themselves did not trigger enhanced happiness, but rather feelings of pride and satisfaction with the fabric of their community explained the higher levels of reported happiness. Thus, it may be valuable to measure residents’ perceptions of their community in general to discern whether the specific event itself provides emotional benefits, or whether the ability to support such events (sport or otherwise) is enough to increase happiness and well-being. Future research should also take into account participants’ individual level of involvement with
the event (Mutter & Pawlowski, 2014; Shank & Beasley; 1998), socio-demographic variables (e.g., Downward & Rasciute, 2010, Rodriguez-Pose & von Berlepsch, 2014), and weather conditions during the event (Connolly, 2013) to discern event impacts more accurately. Future research should also consider assessing the happiness of host residents longitudinally to assess the potential lasting impact the event has on happiness (Maennig & Porsche, 2008).

As the two sport events under investigation in this study were similar in terms of being multi-sport and provincially-based in nature, it is possible that they impacted happiness and well-being in similar ways. It is also possible that these types of NMSE may be too small to trigger a substantial “good feel factor” to stimulate residents’ feelings of happiness, as opposed to MSE such as the FIFA World Cup (e.g., Kuper & Szymanski, 2012; Maennig & Porsche, 2008). This study should be repeated for a greater variety of events to determine which types of events are the most beneficial to the happiness and well-being of host residents.

**Conclusion**

This study allowed for the measurement of happiness in different forms by employing survey items based on the theoretical concept of SWB. The results provide some support for the use of the survey items employed in this study to measure the concept of happiness and well-being in the context of sport events. Except for the “satisfaction with important domains” construct, all other constructs showed acceptable levels of reliability and validity. Thus, future research should consider using these measurement instruments when investigating if sport events affect happiness and emotional feelings of SWB. Additional use of these measures will provide further indication of the validity and reliability of these survey items in a sport event context.

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References


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<table>
<thead>
<tr>
<th><strong>Statement Item</strong></th>
<th><strong>Theory</strong></th>
<th><strong>Survey Question (#)</strong></th>
</tr>
</thead>
</table>
| **Vignette**      | ✓ Describe a state of high SWB  
✓ Overcome the arbitrariness and interpersonal incomparability present in happiness research | Based on the description below, please rate Sam’s presumed level of happiness: |
| (1 item)          |            | “Sam is an outgoing person who enjoys having a secure career, loving home, and good health. Sam is frequently cheerful and rarely upset regardless of what is going on. Overall, Sam is satisfied with his/her life.” |
| [HAP_Sam]         |            | (1=0 Not at all Happy; 2=Unhappy; 3=Somewhat Unhappy; 4=Somewhat happy; 5=Happy; 6=Very Happy) |
| **Current overall happiness** | ✓ Assess current state of SWB  
✓ Most widely used item in happiness research  
✓ Assess the first component of SWB (overall life satisfaction) | Taking all aspects of your life into account, please select your current overall level of happiness: |
| (1 item)          |            | (1=0 Not at all Happy; 2=Unhappy; 3=Somewhat Unhappy; 4=Somewhat happy; 5=Happy; 6=Very Happy) |
| [HAP-You]         |            | Rate your current level of satisfaction with each of the following domains: |
|                   |            | ➢ Life at home
➢ Health status
➢ Employment situation |
| [SATIS]           |            | (1=Not at all Satisfied; 2=Not Satisfied; 3=Satisfied; 4=Very Satisfied; 5=Not Applicable) |
| **Satisfaction with important domains** | ✓ Assess current level of satisfaction with health status, home life, and employment situation  
✓ Assess the second component of SWB (high satisfaction with important domains) | |
| (3 items)         |            | |
| **Affect dimensions** | ✓ Collect data related to specific emotions  
✓ Allow participants to more clearly define their state of well-being in the past week  
✓ Assess the third and fourth components of SWB (high frequency of positive affect, low levels of negative affect) | How have you generally felt during the past week? Rate each feeling on the scale below: A rating of 0 means that you did not experience that feeling at all. A rating of 6 means that you frequently experienced that feeling during the past week. |
| (8 items)         |            | Happy; Frustrated/annoyed; Depressed/blue; Hassled/pushed around; Warm/friendly; Worried/anxious; Enjoying myself; Tired |

*Note. [1](#) This question was placed after the vignette (Q#2) as recommended by Hopkins and King (2010). This general well-being question was also placed prior to the statement items comprising specific measures of well-being as recommended by Kaplan et al. (2004).*
Table 2: Happiness Items and Multi-Item Constructs (Averages, SD, EFA, Cronbach’s Alpha).

<table>
<thead>
<tr>
<th>Construct/ Items</th>
<th>M</th>
<th>SD</th>
<th>FL</th>
<th>EV</th>
<th>%VE</th>
<th>α</th>
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</thead>
<tbody>
<tr>
<td>HAP_Sam&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>5.26</td>
<td>0.71</td>
<td></td>
<td></td>
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<tr>
<td>HAP_You&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>4.88</td>
<td>0.91</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>SATIS&lt;sup&gt;(b)&lt;/sup&gt;</td>
<td>3.16</td>
<td>0.58</td>
<td>1.77</td>
<td>59</td>
<td>59%</td>
<td>0.65</td>
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<tr>
<td>Life at home</td>
<td>3.31</td>
<td>0.68</td>
<td>0.77</td>
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<tr>
<td>Health Status</td>
<td>3.15</td>
<td>0.72</td>
<td>0.79</td>
<td></td>
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<tr>
<td>Employment situation</td>
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<td>0.85</td>
<td>0.75</td>
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<td></td>
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<tr>
<td>SWB_Neg_R&lt;sup&gt;(c)&lt;/sup&gt;</td>
<td>3.67</td>
<td>1.25</td>
<td>3.01</td>
<td>34</td>
<td>34%</td>
<td>0.79</td>
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<tr>
<td>Frustrated/annoyed-R</td>
<td>3.16</td>
<td>1.64</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Depressed/Blue-R</td>
<td>4.43</td>
<td>1.69</td>
<td>0.78</td>
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<td>Hassled/pushed around-R</td>
<td>4.74</td>
<td>1.62</td>
<td>0.71</td>
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<tr>
<td>Worried/anxious-R</td>
<td>3.53</td>
<td>1.77</td>
<td>0.77</td>
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<td></td>
<td></td>
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<tr>
<td>Tired-R</td>
<td>2.51</td>
<td>1.77</td>
<td>0.62</td>
<td></td>
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<tr>
<td>SWB_Pos&lt;sup&gt;(c)&lt;/sup&gt;</td>
<td>4.48</td>
<td>1.05</td>
<td>1.81</td>
<td>26</td>
<td>26%</td>
<td>0.76</td>
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<tr>
<td>Happy</td>
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<td>1.23</td>
<td>0.85</td>
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<td></td>
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<tr>
<td>Warm/friendly</td>
<td>4.45</td>
<td>1.26</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoying myself</td>
<td>4.45</td>
<td>1.31</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. <sup>(a)</sup> = average on a scale from 1 to 6; <sup>(b)</sup> = average on a scale from 1 to 4; <sup>(c)</sup> = average on a scale from 0 to 6; FL = factor loading for SATIS, rotated factor loading in the case of the SWB; EV = Eigenvalues; VE= variance explained; α = Cronbach’s Alpha.
### Table 3: Correlation Matrix of the Happiness Items and Multi-Item Constructs (n=447)

<table>
<thead>
<tr>
<th></th>
<th>HAP_YOU</th>
<th>STATIS</th>
<th>SWB_Pos</th>
<th>SWB_Neg_R</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAP_SAM</td>
<td>0.17***</td>
<td>0.13**</td>
<td>0.14**</td>
<td>0.10*</td>
</tr>
<tr>
<td>HAP_YOU</td>
<td>0.63***</td>
<td>0.48***</td>
<td>0.36***</td>
<td></td>
</tr>
<tr>
<td>STATIS</td>
<td></td>
<td>0.52***</td>
<td>0.31***</td>
<td></td>
</tr>
<tr>
<td>SWB_Pos</td>
<td></td>
<td></td>
<td></td>
<td>0.20***</td>
</tr>
</tbody>
</table>

*Note. *=p<.05; ** = p < .01; *** = p < .001*
Table 4: Level of Overall Happiness according to the Type of Event (Anova; Post Hoc Tukey test corrected for homogenous subsets)

<table>
<thead>
<tr>
<th></th>
<th>OSG respondents (n=220)</th>
<th>55+SG (n=57)</th>
<th>Control Group (n=170)</th>
<th>F(2, 444)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M          (SD)</td>
<td>M            (SD)</td>
<td>M         (SD)</td>
<td></td>
</tr>
<tr>
<td>HAP_Sam</td>
<td>5.21 (0.67)</td>
<td>5.44 (0.85)</td>
<td>5.27 (0.71)</td>
<td>2.485ns</td>
</tr>
<tr>
<td>HAP_You</td>
<td>4.93 (0.87)</td>
<td><strong>5.19(a)</strong> (0.90)</td>
<td>4.71 (0.94)</td>
<td>7.022**</td>
</tr>
<tr>
<td>SATIS</td>
<td>3.18 (0.56)</td>
<td><strong>3.33(a)</strong> (0.54)</td>
<td>3.09 (0.59)</td>
<td>3.967 *</td>
</tr>
<tr>
<td>SWB_Pos</td>
<td>4.56 (1.05)</td>
<td>4.49 (1.15)</td>
<td>4.39 (1.00)</td>
<td>1.353Bs</td>
</tr>
<tr>
<td>SWB_Neg_R</td>
<td>3.60(b) (1.27)</td>
<td><strong>4.14</strong> (1.06)</td>
<td>3.61(b) (1.26)</td>
<td>4.736**</td>
</tr>
</tbody>
</table>

Note.  
*ns* = not significant; * = p < .05; ** = p < .01  
a is significantly different from control group  
b is significantly different from 55+SG  
**Bold:** indicates significant findings