The Italian version of the Thinking About Life Experiences Questionnaire and its Relationship with Gender, Age and Life Events on Facebook

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Abstract - The present study provided a cross-cultural validation of the Thinking About Life Experiences scale-revised (TALE-R) in an Italian sample of Facebook users (N=492; Female=378; Male=114; mean age 26.1) to test for replication and universality of the TALE-R three-factor model. Furthermore, it explored the interrelations among gender, age, the scores at the TALE-R, and the frequency of posting textual/visual information about individuals' life events on Facebook. Results at exploratory and confirmatory factor analysis gave empirical support both of a tripartite model for the functions of autobiographical memory (i.e., directive-behavior, social-bonding, and self-continuity) and measurement invariance of this three-factor model across gender and age. Further results at linear correlation and regression analyses showed that directive-behavior and self-continuity functions of autobiographical memory are significantly related to the ways people use Facebook for personal documentation. Age differences more than gender influence this association. Discussion and conclusion reported both theoretical and empirical implications of the findings of the study.

Keywords: Autobiographical Memory; Facebook; Directive-Behavior, Social-bonding, Self-continuity

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1. INTRODUCTION

Since the 1970s, authors defined the functions of autobiographical memories (AMs) as motivations for thinking and talking about the past and to develop a coherent sense of self, plans, and social relationships with other people (e.g., Alea & Bluck, 2007; Baddeley & Singer, 2008; Bluck & Alea, 2008; Conway, 2005; Kulkofsky, Wang, & Hou, 2010; Rasmussen & Berntsen, 2009). Studies have mostly focused on the theoretical definition of AM functional use and have provided empirical evidence for a tripartite model based on the directive, social, and self-function, respectively (e.g., Bluck & Alea, 2009; Pillemer, 2003). Factorial studies have found the universality of this three-factor model in populations with different cultural backgrounds, gender, and age (e.g., Bluck & Alea, 2009; Harris, Rasmussen, & Berntsen, 2014; Vranić, Jelic & Tonkovic, 2018). However, the authors claim for further cross-cultural studies (e.g., Alea & Wang, 2015). Empirical findings also showed that functions of AMs related to personality factors (e.g., Rasmussen & Berntsen, 2009), psychological well-being (Waters, 2014), marital satisfaction (Alea & Bluck, 2007), and problem-solving strategies (Kuwabara, Rouleau, & Pillemer, 2011). Given people afford social media as useful tools to share their life events often, recent researches explored the relationship between functions of AMs and social media usage (Caci, Cardaci e Miceli, 2019; Seyfi & Soydaş, 2017). However, there are mixed results about gender and age differences both in the literature on functional usage of AMs (e.g., Bluck & Alea, 2009; Vranić et al., 2018) and in that about social media for personal documentation (e.g., Amichai-Hamburger & Vinitzky, 2010; Mendelson & Papacharissi, 2010).

Hence, the present study aims to fill these gaps in the literature. First, it aims at verifying the generalizability of AM functions in the Italian context by a cross-cultural study. The model measurement invariance, across gender and age, has been evaluated too. No studies (to our knowledge) have been performed in Italy, so far. Second, it aims at better deepening the relationships between gender, age, the three different functions of AMs, and the use of social media for sharing life events. In our opinion, demographic variables and individual variations in the functions of AMs might influence online sharing of life events such as textual information about everyday activities, interests, personal opinions on socio-political issues, feelings (Bumgarner, 2007), and publishing photos (Şendeniz, 2015).

The present study used a descriptive, explorative, cross-sectional design with a quantitative approach. Questionnaire data from a convenience sample were first analyzed using exploratory and confirmatory factor analyses. Then, we evaluated the model measurement invariance across gender and age. Finally, we reported findings of linear correlation analyses and hierarchical regression models and discussed results in light of both theoretical and empirical outcomes.

1.1. The construct definition of the functions of autobiographical memories

The focus of the functional study of AMs is on the motives that bring people to remember their life events often over long periods rather than on the amount and accuracy of human memory (e.g., Baddeley, 1987; Schachter, 1996). Prior empirical studies demonstrated that AMs serve three main functions: directing future behavior, fostering social connection, and self-definition (Alea & Wang, 2015; Bluck, Alea, Habermas, & Rubin, 2005; Pasupathi, Lucas, & Coombs, 2002; Pillemer, 2003). The directive function is a reflection on AMs that guides present and future thinking, behaviors, goals, problem-solving, and planning (Kuwabara & Pillemer, 2010). The social function is the sharing of one's memories with others to communicate, create social bonding, stimulate empathy (Alea & Bluck, 2003), and make a stable representation of shared experiences (Alea & Bluck, 2007; Bluck, Alea, Habermas, & Rubin, 2005; Fivush, Haden, &

Reese, 2006). The self function is the use of AMs for promoting self coherence, providing material for the self-concept, and telling people who they are (e.g., Bluck & Alea, 2009; Habermas & Bluck, 2000). To measure the people's overall usage of these three functions generalized across concrete autobiographical memories, authors developed the Thinking About Life Experiences Questionnaire (TALE - Alea & Wang, 2015; Bluck, Alea, Habermas & Rubin, 2005). An exploratory factor analysis tested the first 28-items version of the TALE on a sample of 167 American undergraduate students (Bluck et al., 2005). Contrarily to the theoretical tripartite model, results showed a four-factor structure, accounting for 50% of the total variance. Authors labeled factors as Directive, Self-continuity, Nurturing Relationships, and Developing Relationships, respectively. Summarily, results of this first validation study showed a broader conceptualization of the directive function, a more narrowed definition for self functions in the direction of self-continuity and the two distinct scales for the social function, each reflecting by authors different phases of relationships across generations (Bluck et al., 2005). To refine this four-factors model, authors provided for a revised version of the TALE (TALE-R Bluck & Alea, 2009; 2011) dropping some controversial items and testing its factorial structure with both exploratory and confirmatory factor analyses on a larger sample of American young (N=156; Mage=22.54) and older adults (N=150; Mage=73.71). The final 15-items version of the TALE-R corroborated the three-factors structure of the functions of AMs, and factors were labeled as Directive-Behavior, Social-bonding, and Self-continuity, respectively. The TALE-R showed excellent psychometric properties as about construct and convergent validity (Bluck & 2011). Furthermore, the factorial equivalence across age and gender and internal consistency of the subscale items within age and gender groups has also shown. Successive cross-cultural studies tested for generalizability of the TALE-R on samples of Trinidadians (Alea, Bluck, & Ali, 2015), Danes and Germans (Rasmussen & Habermas, 2011; Harris et al., 2014), Japanese (Maki, Kawasaki, Demiray, & Janssen, 2015), and Croatian (Vranić et al., 2018), and results were in line with the tripartite model of the functions of AMs.

However, authors underlined the importance of performing further cross-cultural studies both to reveal the critical role of culture in shaping how people use the past to serve them in the present and future and to validate existing measures and assessment methods on functions of AMs (Alea & Wang, 2015).

1.2. The relationship between the functions of autobiographical memories and social media usage

Under the functional perspective, AMs are records of lived experiences that are constructed and reconstructed in an ever-changing environment to be both accessible and adaptive (Kihlstrom, 2009). Additionally, the autobiographical memory system serves psychosocial functions useful for individuals to adapt, given the complex reality of their everyday environment (Bluck & Liao, 2013). Nowadays, our autobiographical memory system is not only in constant mutual interaction with our real environment but also with social media (Huyssen, 2003). Social media are virtual environments people afford as effective media to share personal life experiences publicly (Bell & Gemmell, 2009; Zhao, Grasmuck, & Martin, 2008; Donath & Boyd 2004; Ellison, Steinfield, & Lampe, 2011). For instance, individuals update their Facebook or Twitter status for presenting their life events synchronically (Ryan & Xenos, 2011). As well, Facebook is a useful and easy tool for personal documentation about people's life events (Sinn & Syn, 2014). Moved both by the need to document their life and by the entertainment value of Facebook itself, people update their statuses whenever their personal information changed (Sinn & Syn, 2014). They also share on Facebook both textual content related to personal information (Bumgarner, 2007) and visual media such as photos for declaring and emphasizing relationships (Salimkhan, Manago, & Greenfield, 2010; Saslow, Muise, Impett, & Dubin, 2013) or flirting (Utz, Muscanell, & Khalid, 2015). Although, the current literature has investigated mostly the retention on social media of concrete autobiographical memories (e.g., Wang et al., 2017) rather than exploring how the functions of AMs are related to life events people post

online. Only two recent studies (to our knowledge) analyzed the associations between the functional usage of AMs ad social media (i.e., Seyfi & Soydaş, 2017; Caci, Cardaci, & Miceli, 2019). Results of both studies support the idea that all the directive, social, and self functions of AMs are directly associated with Facebook usage, and, in turn, the functional use of AMs is related to different types of life events people record online. Specifically, the study of Seyfi and Soydaş (2017) aimed at exploring how the sharing on Facebook of childhood photographs reflects the functions of AMs. Results of qualitative analyses about semi-structured interviews showed that when Facebook users post photographs on Facebook, the recollections in the autobiographical memory directly influence their self-concept, past or present relationships, and also guide their behaviors. However, the self-function has the most effective power in supporting the tendency of people to share on Facebook pictures about their childhood. Similarly, the study of Caci, Cardaci, and Miceli (2019) demonstrated that the self function of AMs mediates the relationship between personality traits and the use of Facebook as a repository for life events. By performing a path analysis on questionnaire data coming from a sample of Facebook users (N=193), it was found that personality traits such as extraversion, openness, neuroticism, and conscientiousness are significant direct predictors of textual and visual information people post on Facebook. As well extraversion and openness are positive precursors of the directive, self, and social functions of AMs, measured by TALE-R, whereas neuroticism predicts directive and self-functions, and conscientiousness is a definite precursor of the directive function. However, the self-continuity function is a crucial mediator between personality traits (i.e., extraversion, neuroticism, or openness) and the frequency of photos uploaded on Facebook for collecting life events. In their conclusions, authors claim for further studies aimed at analyzing the effect of positive vs. negative content both on textual and visual information people post on their Facebook profiles (Caci et al., 2019).

1.3. Gender and age differences in the functional use of autobiographical memories and social media usage

Overall, cross-cultural studies aimed at analyzing gender and age differences in the functional use of AMs reported mixed results. Some studies have evidenced no gender differences (Bluck & Alea, 2009; Harris et al., 2014), whereas others have drawn women to use more than men their AMs for self-continuity, and social-bonding (Maki et al., 2015) or for directive-behavior purposes (Vranić et al., 2018). Similarly, Bluck & Alea (2009) have shown no age difference in using AMs for the social function but have described middle-aged adults as more heavy users of AMs for self and directive purposes. Differently, Vranić et al. (2018) have shown that young-adult use AMs more frequently than middle-aged adults for social-bonding and directive-behavior purposes; whereas, both young-adult and middle-aged adult are likely to use AMs to serve the self function.

Inconsistent results about the role of gender and age in textual or visual sharing practices online are also reported. No gender or age differences in the number of information uploaded to Facebook have emerged (e.g., Amichai-Hamburger & Vinitzky, 2010). However, some studies described young adult women to post mostly textual information with positive themes (Mendelson & Papacharissi, 2010), to present more selfies (Kapidzic & Herring, 2015), to share photos of themselves relaxing with friends (Mendelson & Papacharissi, 2010), or to change their profile image more frequently than men (Strano, 2008; Tifferet & Vilnai-Yavetz, 2014). Since gender and age biases in their study, Caci et al. (2019) suggested to better define the role of gender and age differences in the relationship between functions of AMs and Facebook use for sharing life events, too.

1.4. The current study

The first goal of this study is to provide a cross-cultural validation in the Italian population of the TALE-R (Bluck & Alea, 2011), both evaluating the generalizability of the functional

approach to AMs and understanding the cultural variations in the everyday use of AMs. We expect to find in our independent sample of Italian Facebook users the similar three-factor structure related to directive-behavior, social-bonding and self-continuity functions evidenced by prior works (e.g., (Bluck & Alea, 2011), and the measurement invariance of this tripartite model, across gender and age, in line with the literature mentioned above (e.g., Vranić et al., 2018) (Hypothesis 1).

A further aim of the study is to analyze if people with different functional use of AMs, as measured by the TALE-R Italian version, vary the amounts of textual/visual information about their life events on Facebook. As well, we evaluated also the role of positive vs. negative topics of life events they share on Facebook. Specifically, we used the frequency of the Facebook status updating (FSU), the frequency of positive (POS) or negative (NEG) topics of the Facebook status updating, and the number of photos uploaded online (PU) as measures of life events. We expect to found a definite influence of demographic variables such as gender and age in the association between functions of AMs and Facebook usage (Hypothesis 2). Moreover, we have also the following expectations:

- People using their AMs for self-continuity purposes will be more active on Facebook in sharing information about their life events then people moved by social-bonding or directive-behavior function of AMs, coherently with prior works (i.e., Seyfi & Soydaş, 2017; Caci et al., 2019) (Hypothesis 3).
- The relationship among all the three functions of AMs and the amount of textual or visual information about life events would be stronger for women than for men, consistently with literature (e.g., Vranic et al., 2018; Mendelson & Papacharissi, 2010) (Hypothesis 4).
- The relationship among all the three functions of AMs and the amount of textual or visual information about life events would be stronger for middle-aged than young adult people, considering that nowadays middle-aged people are more involved then young in

using Facebook (Bosak & Park, 2018) (Hypothesis 5).

- The relationship among all the three functions of AMs and life events with positive themes would be stronger for middle-aged than for young adult women (Hypothesis 6).

2. METHOD

2.1. Participants

Four hundred and ninety-two Facebook users (378 females; 114 males; Mage 26.1; SD= 0.4; range: 18-68) took part in the study. Table 1 reports demographic characteristics of participants and data about Facebook usage, also considering gender and age distribution. As regards age distribution, participants were divided into two cohorts based on total sample age median value (Median=21.0 yr.) and named each young adults (18-30, 47.9% women, mean age 21.4) and middle-aged adults (31-68, 47% women, mean age 44.7). Potential participants were recruited online, accessing a flyer with a brief explanation of the study and a URL link. The link allowed admittance to the participant information sheet and a confidential online survey via the researchers' University's page. All participants were Facebook users, respecting our inclusion criterion for the sample composition. No monetary compensation or another kind of gratification for participating in the study has given. To complete the survey, participants employed 15 minutes on average.

Table 1 about here

2.2. Materials and Procedure

This study adopted the ethical guidelines approved by the Ethical Principles for Conducting Research with Human Participants and the Italian Data Protection Authority. All participants gave written consent about the anonymity of data handling after reading a study information sheet, according to the Declaration of Helsinki. Data were automatically collected when

participants filled online an electronic version of the assessment instrument consisting of demographic questions (i.e., gender, age, education, occupation) and the two following measures.

2.2.1. Thinking About Life Experiences Scale-Revised (TALE-R)

TALE-R is a 15-item questionnaire developed by Bluck and Alea (2011), aimed at assessing the Directive-Behavior (DBF), Self-Continuity (SCF), and Social-Bonding functions (SBF) of AMs as individuals' motivations for thinking and talking about the past. It comprises three subscales, each consisting of five items related to one of the three functions. Participants rate items on a 5-point scale (1 = Rarely, 5 =Very frequently). To ensure fidelity with the original English version of the instrument, we followed the standard guidelines for the process of cross-cultural adaption of self-report measures (Beaton, Bombardier, Guillemin, & Ferraz, 2000). Thus, we developed an Italian version by process of independent back-translation and discussion with Italian-English bilinguals. We computed the total score averaging scores obtained by participants for each of the items of the DBF, SCF, and SBF subscales. Higher scores indicated higher levels of DBF, SCF, and SBF of AMs.

2.2.2. Facebook Life Events Checklist

To have a measure of the ways people collect their life events on Facebook using textual or visual information, we developed an apposite instrument, named Facebook Life Events Checklist. It requested participants to focus on their Facebook usage and depict the specific actions they performed daily, in a week, and the last year in order to manage the following data:

- *The frequency of Facebook Status Updating* (FSU) on average per day (1= Rarely; 5 = Very frequently).
- *The themes of textual information participants share on Facebook*. In this section, we ask participants the question: "Thinking back to your Facebook status updating in the

last year, what did they refer to?". To answer, they need to rate on a 5-point Likert scale (1= Rarely; 5 = Very frequently) 18-items about positive vs. negative life events, we derived by Dupuis, Khadeer, and Huang (2017). Examples of items about life events with positive themes are job promotion or a new job; feeling happy; major accomplishment in an academic, sport, or work setting; or vacation. Whereas, examples of items about adverse life events are asking for support and prayers, feeling stressed, and dealing with a stressful situation, and so on. Two scores related to positive (POS) and negative themes (NEG) were computed by averaging the scores obtained by the participants for each of the 18-items of this section. Higher scores indicated higher levels of POS or NEG life events posted by participants on their Facebook profiles.

- *The frequency of Photos Uploaded on Facebook* (PU) in a week (1 = Rarely, 5 =Very frequently).
- *The themes of visual information participant share on Facebook*. In this section, we ask participants the question: "Thinking back to the photos you uploaded in the last year, what did they refer to?". Also, in this case, participants were requested to rate each of the following seven themes we derived by Houghton, Joinson, Caldwell, and Marder (2013): myself, friend, life events, family, scene, objects, and animals on a 5-point Likert scale (1 = Rarely, 5 =Very frequently). We computed scores for every single topic. Higher scores indicated higher numbers of photos related to the specific theme. Recent statistical data showed that Facebook users are more engaged in the daily activity of updating status then on posting photos (source: The Social Skinny), and thus supported the variability in the time-frequency (daily vs. in a week) between Facebook Status Updating and Photo uploaded subscales. As well, we choose to evaluate the topics of textual or visual information "in the last year" since we requested participants to recollect their life events summarily by memory, and not by directly accessing their Facebook application. This last choice was in order to respect the legal constraints about

the privacy setting of participants' Facebook profiles.

2.3. Statistical analyses

Preliminary analyses checked data for outliers, missing values, and compliance with the statistical assumptions. To reach the study aim one about the cross-cultural validation of the 15-items Italian version of TALE-R, an exploratory factor analysis (EFA) was performed on data. Eigenvalues and scree plots were used as criteria to determine the number of factors. Additional analyses evaluated gender and age differences on the scores obtained by all participants at each of the three TALE-R subscales by performing a factorial 2X2 multivariate analysis of variance (MANOVA). Then, the structural factorial model derived by EFA was tested by computing a confirmatory factor analysis (CFA) on a subsample of participants, randomly selected by the whole sample as suggested by literature (e.g., Cabrera-Nguyen, 2010; Costello & Osborne, 2005). Given the ordinal nature of the data and sample size, for the estimation of parameters, we used the weighted least squares method (WLSM). To identify the scale of measurement models in CFA, we fixed one of the factor loadings to a value of 1 for each factor. Evaluation of goodness-of-fit to the sample data was determined based on general criteria for adequacy assessment proposed by Hu and Bentler (1999): Comparative fit index (CFI), Adjusted goodness of fit index (AGFI), and Root of means square error of approximation (RMSEA). CFI and AGFI values > .90 and .95 were considered benchmarks for an acceptable and proper fit, respectively; and RMSEA values of < .08 and .06 were benchmarks for acceptable and a good fit, respectively. Analyses of multiple-group CFA (MGCFA) were conducted to evaluate measurement invariance of the 15-items Italian version of the TALE-R factor structure. Items were treated as continuous indicators. We tested whether the measure operated similarly across Gender (men and women) and Age (young adults and middle-aged adults). We followed the measurement invariance procedures outlined by Brown (2014). Therefore, we conducted invariance testing via comparison of a series of models with increasing constraints: baseline

configural model (no constraints), metric model (factor loadings constrained across the groups), and scalar model (factor loadings and item intercept constrained across the groups). Configural invariance is supported if the same unconstrained factor structure simultaneously fit for the split groups yields a good fit. After testing configural invariance, we examined metric and scalar invariance. The fit of the metric/scalar model and the configural model were compared in terms of their $\chi 2$ values. A non-significant increase in the $\chi 2$ value (relative to df) in the constrained models relative to the unconstrained model indicated that the constraints across groups were possible. However, as the S-B chi-square tests are known to be sensitive to sample size, and even a small difference may be found to be significant with increasing sample sizes (Cheung & Rensvold, 2002), we used change in CFI (ΔCFI) less than .01, and change in RMSEA (ΔRMSEA) less than .015 as fit indexes suggesting no significant decrease in model fit and supports measurement invariance (Chen, 2007).

To address the study aim two, we computed Pearson's zero-order correlations between Gender, Age, scores at TALE-R, and Facebook Life Events Check-list. Successively, we computed a series of hierarchical linear regression analyses aimed at exploring the role both of demographic variables (i.e., Gender, Age) and of functions of AMs on criterion variables as measured by the Facebook Life Events Checklist. Finally, interaction effects Gender X Functions of AMs and Age X Functions of AMs were also included in the regression models in order to address whether gender and age differences exist between the relationship between functions of AMs and all the dependent variables of the study. Descriptive statistics, exploratory factor analysis, Cronbach's alpha, Pearson's linear correlations, MANOVA, and hierarchical regression analyses were conducted with the IBM SPSS 20.0 software package (IBM Corp. Released 2011. IBM SPSS Statistics for Macintosh, Version 20.0. Armonk, NY: IBM Corp). Confirmatory Factor analysis was performed using the Analysis of Moment Structures (AMOS) software package (Arbuckle, 2014).

3. RESULTS

3.1. Cross-cultural Validation of the Italian version of the TALE-R and Measurement Invariance across Gender and Age

3.1.1. Exploratory factor analysis

To provide a cross-cultural validation in the Italian population of the TALE-R (Bluck & Alea, 2011), we preliminary tested our database for outliers or missing values. We found no outliers in the distributions of scores for TALE-R, and Facebook Life Events Checklist as well as cases with missing data.

Table 2 reports descriptive statistics, indexes of skewness, and kurtosis for each of the 15 items of the Italian version of the TALE-R. Results showed that mean scores are all at the range between 2.24 (SD = 1.0) and 3.53 (SD = 1.0) and that the deviation of data from normality was not severe as the value of skewness and kurtosis indexes were below 3 and 10 respectively (Gravetter & Wallnau, 2014).

Table 2 about here

Successively, results at EFA using the principal axis factoring extraction with VARIMAX rotation suggested a three-factor solution that accounted for 57.6% of the variance (see Table 3).

Table 3 about here

Our three-factor solution overlapped the well-known tripartite model of functions of AMs reported by literature. Hence, we labeled factors using the same definitions provided in the original version of the TALE-R (Bluck & Alea, 2011). Cronbach's alpha was calculated to test

the reliability of variables retained in each factor, and coefficients greater than or equal to 0.50 were considered acceptable and a good indication of construct reliability (Nunnally, 1967). As shown in Table 3, in the present study, Cronbach's alpha values were 0.77 for the DBF, 0.82 for SBF, and 0.79 for the SCF scale. All values were within a satisfactory range (Van De Ven & Ferry, 1980). Considering that the three TALE-R factors presented high and significant positive intercorrelations (Pearson's r values from .46 to .52- see Table 6), we hypothesize a second-order overall factor of functions of AMs that might account for the covariance of the first level. Then, a MANOVA was performed on the three TALE-R subscales total factorial scores using Gender, Age, and Gender by Age interaction as independent variables in order to determine whether Gender or Age needs to be accounted for in the analyses. Results at multivariate tests showed a not significant multivariate effect of Gender, $F(3, 486)=1.72$, n.s, but a significant multivariate effect of Age, $F(3, 486)=15.3$, $p<.001$, $\eta=.08$. However, the interaction Gender by Age was not statistically significant, $F(3, 486)=0.55$, n.s. Results at univariate tests on scores at each of the TALE-R subscales revealed only a significant univariate effect of Gender on scores obtained by participants at the self-continuity subscale, showing women obtaining higher scores than men (Female: M=2.61, SD=0.8; Male: M=2.47, SD=0.7). On the contrary, results showed significant univariate effects of Age in directive-behavior, $F(3, 486)=23.1$, $p<.001$, $\eta=.04$, Young Adults: M=3.41; SD=0.6; Middle-aged Adults: M=2.97, SD=0.7; social-bonding, $F(3, 486)=38.3$, $p<.001$, $\eta=.07$, Young Adults: M=3.34; SD=0.7; Middle-aged Adults: M=2.76, SD=0.7, and self-continuity TALE-R subscales, respectively, $F(3, 486)=23.6$, $p<.001$, $\eta=.04$, Young Adults: M=2.69; SD=0.7; Middle-aged Adults: M=2.17, SD=0.7. In all the cases, data showed that young adults are having higher scores than middle-aged adults. However, no significant univariate effects for the interaction of Gender by Age have emerged.

3.1.2. Confirmatory factor analysis

To test the structural factorial model derived by EFA, we performed CFA using the WLSM method to verify the factor structure of the Italian version of TALE on a restricted sample of cases randomly selected by our data (N=300; Male 48%; Female 52%; *M*age= 25.5, SD=7.39; range 18-51). We tested by CFA three plausible models: a one-factor model (Model 1), a three-factor model isomorphic to the EFA solution (Model 2), and a three-factor model plus a second-order general factor model suggested by the significant correlation between factors in the EFA solution (Model 3).

As reported in Table 4, Model 1 and Model 2 fit indices are not satisfactory. Model 3 showed a better fit, as confirmed by AIC. All structural indices were significant ($p < 0.001$), following the criteria proposed by Hu and Bentler (1999): Comparative fit index (CFI) >0.95, Adjusted goodness of fit index (AGFI) >0.90, and Root of means square error of approximation (RMSEA) <0.06.

Table 4 about here

3.1.3. Measurement Invariance across Gender

To determine whether Gender affected the measurement model, we split the sample into men and women and constraints were introduced to test if parameters could be constrained across both groups. Then, we compared the fit of the constrained model to that of the free model were parameters were estimated independently in each group. Both models were compared in terms of $\Delta\chi 2$ and by ΔCFI: the more constrained model was accepted if the constraints did not significantly deteriorate model fit (Cheung & Rensvold, 2002). Following Brown (2014), we first examined the fit of the single-sample solution for Model 3 within the specific subsamples (e.g., men-only and women-only subsample) separately. Next, we tested metric and scalar invariance using a series of increasingly restrictive models. Table 4 shows the single-sample solution for Model 3 based on the men-only and women-only subsamples. Both sub-samples

were associated with the excellent model fit. The test of configural invariance was supported, as evidenced by fit indices meeting the benchmarks for adequate fit (CFI=.93, RMSEA =.04). All levels of metric and scalar invariance could be assumed across Gender, as evidenced by a non-significant drop-in model fit (ΔCFI <.01) for the successively more constrained models (see Table 5).

3.1.4. Measurement Invariance across Age

Similarly, we evaluated our tripartite model to check for invariance across Age in the two cohorts of young adults and middle-aged adults. The single sample solutions for Model 3 based on the young adult and the middle-aged adult group subsamples are shown in Table 4. Results show a good model fit for both subsamples. Data supported configural invariance by fit indices meeting benchmarks for adequate fit (CFI=.91, RMSEA =.05). Metric and scalar invariance could be assumed across age groups, as evidenced by a non-significant drop-in model fit (ΔCFI < .01) for the successively stricter models (see Table 5).

Table 5 about here

3.2. The Relationships between Gender, Age, Functions of AMs, and Facebook Life Events

Table 6 shows descriptive statistics for all the variables of the study and results at Pearson's zero-order correlations. Results showed significant positive associations between scores at the TALE-R SBF subscale (r=.15; p<.001) as well as at the TALE-R SCF subscale (r=.15; p<.001) and POS. These findings suggest that people using their AMs for social-bonding or self-continuity purposes disclose on Facebook more positive life events. Scores at the TALE-R SCF subscale were also significantly associated with NEG (r=.13; p<.001) and with PU (r=.13; p<.001) evidencing that people who have a self-continuity functional usage of their AMs upload on their Facebook profiles both textual information about adverse life events and

photos. Further significant negative relations between Gender and POS (r=-.10; p<.001) and Gender and PU (r=-.18; p<.001) have also emerged. These outcomes showed that women write on their Facebook status more positive textual information about life events and post more photos than men. Significant negative correlations have also found among Age and scores at TALE-R DBF (r=-.24; p<.001), SBF (r=-.29; p<.001) and SCF (r=-.26; p<.001) subscales in the direction that young adults obtained higher scores than middle-aged adults. Age was also related to FSU, but with an inverse tendency showing Middle-aged Adults posting more frequently information on their Facebook profiles (r=.14; p<.001). Significant intercorrelations among all the Facebook Life Events Check-list measures have also found, revealing an excellent internal consistency of the instrument we developed for the present research (Pearson's r values from .34 to .58- see Table 6).

Table 6 about here

Further correlational analyses deepen the associations between the TALE-R three-factor scores and positive or negative topics of FSU and PU.

As shown in Table 7, scores at all the three TALE-R subscales were significantly related to positive information about vacations (Pearson's r values from .15 to .22). Significant correlations between scores at SBF (r=.20; p<.001) or SCF subscale (r=.13; p<.001) and positive life events referring to acceptance into a college, university or mayor has emerged too. Besides, scores at the SCF subscale were significantly related to information about getting engaged (r=.13; p<.001). Further outcomes evidenced that gender and age differences affected these results. Indeed, women write more than men about their vacations (r=-.15; p<.001), young adults post more information about their academic careers then middle-aged adults (r=-.25; p<.001), and middle-aged adults write more about job promotion (r=.24; p<.001) and birth of a child (r=.22; p<.001).

With concerns to adverse life events, results showed significant correlations between scores at DBF subscale and stressful situations (r=.14; p<.001), as well as between scores at SCF and feelings to be lonely (r=.13; p<.001), angry (r=.16; p<.001) or posting adverse news events (r=.12; p<.001). Data showed gender differences once more: women write more than men about feelings to be angry at a significant other (r=-.12; p<.001) or at a friend (r=-.12; p<.001). Age differences were found too in the direction that middle-aged adults post online more information than young adults about asking for support and prayers (r=.16; p<.001). Results about topics of the photos uploaded online evidenced significant correlations between scores at all the three functions of AMs and pictures related to life events, friends, and panoramas (Pearson's r values from .17 to .30). Further significant correlations have risen among scores at DBF subscale and photos related to family (r=.13; p<.001), animals (r=.22; p<.001) and objects (r=.13; p<.001), as well as between photos concerning selfies and scores at SBF (r=.18; p<.001) or SCF subscales (r=.15; p<.001), and photos about animals and scores at SCF subscale (r=.13; p<.001). Otherwise, gender and age differences are associated with these findings. Significant negative correlations were found between gender and all the PU topics apart from panoramas (Pearson's r values from -.12 to -.17). In all cases, women upload more than man photos with various themes. As well, significant negative correlations have emerged between age and PU topics such as life events, friends, myself (Pearson's r values from -.16 to -.32), in the direction that young adults post more than middle-aged adults. A positive correlation has emerged between Age and objects (r=.16; p<.001), evidencing middle-aged adults post more pictures with this theme then young adults. Finally, a not significant correlation was shown among Age and panoramas, family, or animals (see Table 7).

Table 7 about here

3.3. Gender and Age Differences in the Relationship between the Functions of AMs and Facebook Life Events

After standardizing all variables, we conducted a series of different hierarchical regression analyses separately. The criterion variables were the measures of the Facebook Life Events Check-list (i.e., FSU; POS; NEG; PU). We entered Gender and Age as the block of predictors at Step 1; Gender, Age, and TALE-R subscales scores at Step 2; Gender, Age, TALE-R subscales scores and interactions terms Gender X scores at each function of AM and Age X scores at each function at Step 3. We used s t-test on the simple slope gradients to test the significant interaction.

3.3.1. Facebook Status Updating

Results at hierarchical regression analyses (see Table 8) showed that Age (B=.22, p<.001) and DBF (B=.13, p<.01) are significant positive predictors of the Facebook Status updating when we consider the linear association between variables. Similar results were for Age (B=.23, p<.001), for the interaction effect between Age and SBF (B=.14, p<.01), and for the interaction effect between Gender and SBF (B=-.13, p<.01). Finally, Age (B=.19, p<.001) and SCF (B=.10, p<.01) were two significant positive predictors of Facebook status updating. More specifically, we found that both middle-aged participants and those who use their AMs for a directive or self-continuity purposes show more information on their Facebook profiles. On the contrary, Gender and Age differences influence the relationship between SBF and FSU. Indeed, both the interaction Gender x SBF (B=-.13, p<.01) and Age x SBF (B=.14, p<.01) predict the number of information people posts on their Facebook status significantly. Coherently to our expectation, these results mean that middle-aged women with high scores on the TALE SBF subscale upload more textual information about their life events on Facebook. However, t-test analyses on the simple slope gradient, performed on Step 3 models, showed no significant interactions between AMs and Age and AMs and Gender in predicting FSU.

3.3.2. Positive textual information

Results at hierarchical regression analyses (see Table 8) showed that SBF (B=.19, p<.001) and SCF (B=.17, p<.001) are significant linear predictors of the textual information about positive life events people post online. Moreover, Age influenced the relationship between SBF and POS (B=.16, p<.001). Indeed, a significant Age x SBF interaction effect (B=.15, p<.001) was in the direction that middle-aged adults with high scores on TALE SBF subscale post more textual and positive information about their life events. Further t-test analyses on the simple slope gradient, performed on Step 3 models, showed as significant interactions only between DBF and Age in predicting Positive topics ($g = 0.11$, $t = 2.46$, $p < .05$) and SBF and Age in predicting Positive topics ($g = 0.15$, $t = 3.35$, $p < .001$) (see Table 9).

3.3.3. Negative textual information

Concerning the relationships between Gender, Age, Functions of AMs and the Amount of information with negative themes participants post online, results (see Table 8) showed linear association between all the three functions of AMs, specifically with DBF (B=.10, p<.05), SBF (B=.13, p<.01) and SCF (B=.15, p<.001). Furthermore, a significant interaction effect Age x DBF (B=.10, p<.05) and Age x SBF (B=.14, p<.01) report that middle-aged people with high scores on DBF or SBF tend to post more negative information about their life events. Further t-test analyses on the simple slope gradient, performed on Step 3 models, showed as significant interactions only that between DBF and Age in predicting Negative topics ($g = 0.10$, $t = 2.24$, $p < .05$) and that between SBF and Age in predicting Negative Topics ($g = 0.13$, $t = 2.91$, $p < .01$) (see Table 9).

3.3.4. Photo uploaded

We found that both Gender (B=-.19, p<.01) and Age (B=.11, p<.05) were associated with the intensity of uploaded photos. Hence, women and middle-aged adults tend to post more photos

than men and young adults. DBF (B=.10, p<.05) and SCF (B=.15, p<.001) were also positively associated with photo uploading. Thus, people with high scores on DBF or SCF tend to upload more photos. However, t-test analyses on the simple slope gradient, performed on Step 3 models, showed no significant interactions between AMs and Age and AMs and Gender in predicting Photo uploaded.

4. DISCUSSION

The first aim of the present study was to provide a cross-cultural validation of the TALE-R on a sample of Italians, also testing for measurement invariance across gender and age groups. Prior literature on functional use of AMs in everyday life has assigned a particular role to cultural variations of AMs claiming for further studies (Alea et al., 2015). Coherently with our expectations, results at exploratory and confirmatory factor analyses corroborated previous findings about universality of TALE-R (e.g., Buck & Alea, 2011; Alea et al., 2015; Maki et al., 2015; Vranić et al., 2018), and supported the idea that the Italian version of the TALE share the well-known tripartite structure based on directive-behavior, social-bonding and self-continuity functions of AMs. Then, it is a valid measure for assessing the functions of AMs in people with different cultural backgrounds. Linear correlations between the three TALE-R factorial scores in the current exploratory factor analysis were a little quite higher than prior works (Bluck & Alea, 2011; Alea et al., 2015; Maki et al., 2015; Vranić et al., 2018), so explaining the fitness of our measurement model with a second-order factor. The high correlation between all three factorial scores we found in the present study is consistent with previous findings that have demonstrated a strict interdependence of all the three functions of AMs (Andreani Dentici, 2006). Both the social-bonding and the directive-behavior functions are two different, but complementary, aspects of self-continuity one. Indeed, a well-adapted and coherent self is the expression of a positive evaluation of life events that are built through social relationships and purposes for the future (Conway, 2005). Accordingly, factorial equivalence across gender and

age was also found in line with prior works (e.g., Vranić et al., 2018). Thus, our results give also empirical support for using the TALE-R as an essential tool in the psychological assessment of gender and age differences in the functional use of AM with the Italian population (e.g., Bluck & Alea, 2009; 2011).

The second goal of the current study was to explore the linear relationships between gender, age, the three different functions of AMs, and the amount and textual or visual information about life events people share on Facebook. Partially corroborating our expectation about the strong associations between self-continuity function and the use of Facebook for sharing life events, results showed significant direct effects between scores at DBF and SCF subscale and the frequency of Facebook status updating, the amount of textual information with positive or negative topics, and the number of photos. Consistently with prior works (Caci, Cardaci, Tabacchi & Scrima, 2014; Seidman 2014; Zhao et al., 2008), these results might suggest that people moved by directive-behavior and self-continuity functions of AMs disclose on Facebook information about their real-life events, also prompted by self-presentation need (Nadkarni & Hofmann, 2012). The creation and enhancing of self-image are one of the main motives for social media usage, too (Utz, 2010). In this sense, we might presume that the directive-behavior function of AMs that is a crucial aspect for identity management and development (e.g., Baltes, Featherman, & Lerner, 2016), as well as the self-continuity one, which leads people to create a coherent, stable and enduring representation of their selves over time (e.g., Bluck & Alea, 2008), might found a fertile ground on Facebook. In turn, life events posted on Facebook might nurture directive and self-continuity functions of AMs, in line with the idea that reminiscences of past events support the functional usage of AMs (Bluck & Alea, 2002).

As far as the social bonding function of autobiographical memory is mainly concerned, this function seems associated with the frequency with which individuals post online positive or negative topics. Often posting topics with content ranging from positive to negative could, therefore, be explained by the satisfaction of the need to belong. Humans have a strong need for

the social support of groups of families (Baumeister & Leary, 1995). Sharing positive or negative topics with friends on Facebook could, accordingly, be moved by an attempt to confirm or reinforce social ties. Again, this result is in line with prior works on the functional usage of AMs in real everyday environment showing individuals who use their AMs with social-bonding purposes retrieve past life events with the intent to create, hold, and enhance their social ties (Alea & Bluck, 2003), also providing materials for conversations (e.g., Pasupathi et al., 2002). Vice versa, life events posted on Facebook might be intended as social cues that engage users in stories, and elicit empathic responses, mainly if the listener responds with their memory (Pillemer, 1992). As well, we found that individuals who use mainly their AMs with social-bonding purposes share online positive life events and photos that are specifically related to their friends too. This result is consistent with prior works that suggest positive emotions make benefits on AMs and enhance for material about personal life events to be recorded and shared with others (e.g., Pascuzzi & Smorti, 2017). As well, it might also be influenced by the tendency of using social media for building social ties (Ellison, Steinfield, & Lampe, 2007).

A further result in our cross-sectional study is about the strong linear interrelations among scores in all three DBF, SBF, and SCF sub-scales of TALE-R and the number of photos people upload on their profiles. This finding is consistent with previous studies that evidenced the massive sharing on social media of visual materials such as photographs, especially by young (Eftekhar, Fullwood, & Morris, 2014; Malik, Dhir, & Nieminen, 2015). Young people, who usually communicate visually on social media, collect and share photos about their life events for self-presentation and impression management (Siibak, 2009). As suggested by Csikszentmihalyi & Rochberg-Halton (1981), photos serve the purpose of preserving the memory of personalities. We might hypothesize that the functional use of AMs for directive-behavior, social-bonding, and self-continuity purposes also guides on Facebook the so-called process of “autotopography” stated as a “private-yet-material memory landscape made up of

the more intimate expressions of values and beliefs, emotions and desires that are found in the domestic collection and arrangement of objects" (Gonzalez, 1995, p. 133; Petrelli, Whittaker, & Brockmeier, 2008), and vice versa.

Even if, in the overall sample, our findings showed significant linear correlations between each function of AMs and measures of Facebook Life Events, results become more evident when considering gender and age differences. Regarding the main effects of gender on measures of Facebook Life Events, in general, it was found that women have a greater tendency than men to update their Facebook status with positive topics and to upload photos, partially corroborating our expectations. This result is in line with the findings in other studies. For example, Muscanell and Guadagno (2012) have shown that women are more oriented towards maintaining relationships on Facebook and more oriented towards online interpersonal relationships than men. As a consequence, updating positive statuses and uploading photos could be the basis of a tendency for women to maintain a relationship with people they already know and trust. Contrarily to our assumption, gender does not moderate the relationship between the functions of AMs and measures of Facebook Life Events. Some authors had already shown that there are no gender differences in autobiographical memory functions, both in American and Danish samples (Bluck & Alea, 2009; Harris et al., 2014). Differently, Maki and collaborators (2015), with research on a sample of Japanese, have instead shown that women more often use the social bonding and continuity functions of AMs more than men. However, the authors suggest that it is possible to consider belonging to different cultures to explain this inconsistency between the various studies (Hofstede, 2001).

Consistently with our hypothesis, all interactions between age and functions of AMs were significant to affect measures of Facebook Life Events. First, the relationship between DBF and positive and negative topics was positively moderated by age. Specifically, in young adults having a high or low DBF does not affect the frequency with which they post positive and negative topics, as far as middle-aged adults are concerned, the higher the DBF, the more

positive and negative posts are. According to Pillemer (2003), individual episodes of personal memory can play active leadership roles in people's lives in a variety of different ways. Alea, Arneaud, and Ali (2013) argue that, in general, the memories used in the directive function are more negative if compared with the other two functions. However, the authors discovered bias of positivity in middle-aged adults. The memories of more experienced adults were generally more positive than the memories of the younger ones. Moreover, the mediating role of age in the relation between the functions of AMs and Facebook Life events might be explained by the recent change of trend between age and Facebook use (source: pewresearch.org). Data in the present study not provided empirical evidence for significant mutual relations among gender, age, and functions of AMs on the measures of Facebook Life Events, thus not verifying expectation five. This outcome might depend on the cross-sectional nature of the present study. Functional variability of AMs can be observed when we go down from the broad categories to more specific memory usages (Kulkofsky

et al., 2010). However, as suggested by researchers, it would be needed for a more refined theoretical approach to understanding the various memory usages in diverse contexts (Harris et al., 2014; Rasmussen & Habermas, 2011). As well in Step 3 of our regression analyses, the estimates of dependent variables are deviations from that particular reference, after taking into account both gender as dummy variables, age, and scores on TALE-R subscales. Even if stepwise regression was particularly useful to test our directional hypothesis about middle-aged women with higher scores on each TALE-R subscale to obtain higher scores on measures of Facebook Life Events, our sample size was too small (Te Grotenhuis & Thijs, 2015).

4.1. Limitation

Despite its strength in ecological validity, we need to interpret results in the context of some inherent limitations. First, we used a self-report questionnaire to assess AMs functions, so addressing the conscious uses of memory to serve a specific purpose. However, people are

often not aware of the functions a memory may have helped or be serving (Kuwabara & Pillemer, 2010), so future studies might use implicit measures of AMs as narration and associations (Conway, Singer, & Tagini, 2004). Even if our measurement model fit well our data, the high correlations between first-order latent factors observed in our sample suggest that the functional use of AMs might lack coherent differentiation of sub-factors. One reason for this result might be related to self-report measures of TALE-R that ask individuals to self-rate different motivations for using their AMs referring to their past experiences, but this might cause them to be less reliable and accurate. Individuals try hard to retrieve events and experiences from the past and state reasons that have been affected their behavior from these events.

Second, results might be influenced by the variability in the time scales assessed in the Facebook Life-Events Checklist that was mainly due to the specific technological constraints of the Facebook application. Thus, further studies need to be performed on data coming from different social media environments (e.g., Instagram) in order to better analyze individual differences in the functional use of AMs and their relationships with textual or visual contents posted online. Third, the Facebook Life- Events Checklist requested participants to recollect information about the contents of their Facebook status updating and Photo uploading only by memory. Future studies might use measures of information posted online by people, requesting them to look back at their Facebook accounts (e.g., private Facebook groups or private messages) and record it. However, in this latter case, privacy concerns need to be taken into account by researchers. Finally, this is a cross-sectional study, performed on a small sample of Facebook users made in prevalence by young women. In the present study, we found that women update their Facebook status with positive topics and upload photos more than men, and this is in line with prior works (e.g., Muscanell and Guadagno, 2012). However, our expectation about the mediation role of Gender in the relationship between the functional use of AMs and Facebook usage is not confirmed. A possible explanation for this last outcome might

be related to the gender distribution of participants. In fact, in our sample, females are much more represented than males; moreover, the ratio of young adults and middle-aged adults in the subgroups of males and females is unbalanced. Thus, a bias in the results when the gender variable is used might emerge. Further studies with a more balanced sample and via structural equation models (SEM) need to be performed to avoid this limitation, and better define both the mediational role of Gender and directionality of the findings of the present study.

5. CONCLUSIONS

Implications of the present study results are both empirical and theoretical. In line with literature that described the benefits of a functional approach to autobiographical memory (e.g., Baddeley, 1987), we made empirical arguments that the functions of autobiographical memories have an adaptive role given the complex reality of our everyday environment (Liao, Bluck, Alea, & Cheng, 2015; Bluck, 2017). Facing new environmental demands related to the usage of social media, people serve all the functions of AMs also when they record information about their life events on Facebook. In turn, individual differences in the reasons why people use AMs modulate how life events are experienced and processed on Facebook. As a consequence, the strict interdependence between the directive-behavior, social-bonding and self-continuity functions of AMs with the personal experiences of posting on social media might bring individuals to enhance the long-term retention of their life events (Wang et al., 2017). It is also worth mentioning that recently Facebook developers introduced the "On this day" function by which everyday users enjoyed memories of their life events in front of them and demonstrated that this function has a positive influence on mood and well-being (i.e., Isaacs et al., 2013). However, further empirical researches, both in the field of the psychological literature of AMs and in the panorama of social media studies, need to be fostered to deepen this possible benefit for human memory.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References

Alea, N., & Bluck, S. (2003). Why are you telling me that? A conceptual model of the social function of autobiographical memory. Memory, 11, 165-178, doi: 10.1080/741938207

Alea, N., & Bluck, S. (2007). I'll keep you in mind: The intimacy function of autobiographical memory. Applied Cognitive Psychology, 21, 1091-1111, doi: http://dx.doi.org/10.1002/acp.1316

Alea N., & Wang, Q. (2015). Going global: The functions of autobiographical memory in cultural context, Memory, 23(1), 1-10, doi: 10.1080/09658211.2014.972416

Alea, N., Arneaud, M.J. & Ali, S. (2013). The quality of self, social, and directive memories: Are there adult age group differences? International Journal of Behavioral Development, 37(5), 395–406, doi: 10.1177/016502541348424

Alea N., Bluck S., & Ali S. (2015). Function in context: why American and Trinidadian young and older adults remember the personal past. Memory 23, 55–68, doi 10.1080/09658211.2014.929704

Amichai-Hamburger, Y. and Vinitzky, G. (2010) Social Network Use and Personality. Computers in Human Behavior, 26, 1289-1295. http://dx.doi.org/10.1016/j.chb.2010.03.018

Andreani Dentici O. (2006), Ricordi molto lontani. La memoria a lungo termine nella vita quotidiana, Milano, Unicopli.

Arbuckle, J. L. (2014). Amos (Version 23.0) [Computer Program]. Chicago: IBM SPSS.

Baddeley, A. (1987). But what the hell is it for? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), Practical aspects of memory: Current research and issues (pp. 3-18). Chichester, England: Wiley.

Baddeley J. L., & Singer J. A. (2008). Telling losses: personality correlates and functions of

bereavement narratives. Journal of Research in Personality, 42, 421–438, doi: 10.1016/j.jrp.2007.07.006

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117(3), 497-529, doi: http://dx.doi.org/10.1037/0033-2909.117.3.497

Beaton D. E., Bombardier C., Guillemin F., & Ferraz M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. Spine (Phila Pa 1976), 25, 3186-91.

Bell, G. & Gemmell, J. (2009). Total recall: how the E- memory revolution will change everything. Dutton., New York.

Bluck, S. (2017). Remember and Review or Forget and Let Go? Views from a Functional Approach to Autobiographical Memory. The International Journal of Reminiscence and Life Review, 4 (1), 3-7, doi: http://www.ijrlr.org/ojs/index.php/IJRLR

Bluck, S., & Alea, N. (2002). Exploring the functions of autobiographical memory: Why do I remember the autumn? In J. D. Webster & B. K. Haight (Eds.), Critical advances in reminiscence work: From theory to application (pp. 61-75). New York, NY, US: Springer Publishing Co.

Bluck, S., & Alea, N. (2008). Remembering being me: The self-continuity function of autobiographical memory in younger and older adults. In F. Sani (Ed.), Self-continuity: Individual and collective perspectives (pp. 55-70). New York: Psychology Press.

Bluck, S., & Alea, N. (2009). Thinking and talking about the past: Why remember? Applied Cognitive Psychology, 23, 1089-1104, doi: https://doi.org/10.1002/acp.1612

Bluck. S.. & Alea. N. (2011). Crafting the TALE: Construction of a measure to assess the functions of autobiographical remembering. Memory. 19:5. 470-486, doi: 10.1080/09658211.2011.590500.

Bluck, S., & Liao, H.W. (2013). I was therefore I am: Creating self-continuity through remembering our personal past. *The International Journal of Reminiscence and Life Review*, 1,

7–12. Retrieved from http://www.ijrlr.org/ojs/index.php/IJRLR

Bluck, S., Alea, N., Habermas, T., & Rubin, D. (2005). A tale of three functions: The self-reported uses of autobiographical memory. Social Cognition, 23, 91-117. doi:10.1521/soco.23.1.91.59198.

Bosak, K., & Park, S. H. (2018). Characteristics of adults' use of Facebook and the potential impact on health behavior: Secondary data analysis. Interactive Journal of Medical Research, 7(1):e11., doi: 10.2196/ijmr.9554

Brown, T. (2014). Confirmatory Factor Analysis for Applied Research. New York: Guilford Publications.

Bruce, D. (1989). Functional explanations of memory. In L. W. Poon, D. C. Rubin, & B. A. Wilson (Eds.), Everyday cognition in adulthood and late life (pp. 44-58). Cambridge: Cambridge University Press.

Bumgarner, B. A. (2007) You have been poked: Exploring the uses and gratifications of Facebook, First Monday, 12 (11). Retrieved at: http://firstmonday.org/article/view/2026/1897

Cabrera-Nguyen, P. (2010). Author Guidelines for Reporting Scale Development and Validation Results in the Journal of the Society for Social Work and Research. Journal of the Society for Social Work and Research, 1, 99–103. DOI: http:// dx.doi.org/10.5243/jsswr.2010.8

Caci, B., Cardaci, M., & Miceli, S. (2019). Autobiographical memory, personality, and Facebook mementos. Europe's Journal of Psychology, 15(3), 614-636.

Caci B., Cardaci M., Tabacchi M.E., & Scrima F, (2014). Personality variables as predictors of Facebook usage. Psychological Reports, 114(2), 528–539, doi: http://doi. org/10.2466/21.09.PR0.114k23w6.

Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14(3), 464-504.

Cheung, G. W., & Rensvold, R.B., (2002). Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance. *Structural Equation Modeling*, 9 (2), 233-255. doi:

https://doi.org/10.1207/S15328007SEM0902_5

Conway, M. A. (2005). Memory and the self. Journal of Memory and Language, 53, 594□-628, DOI: 10.1016/j.jml.2005.08.005

Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. Social Cognition, 22, 491-□529. DOI: 10.1521/soco.22.5.491.50768

Costello, A. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. Practical Assessment, Research & Evaluation, 10, 173-178. Available online: http://pareonline.net/getvn.asp?v=10&n=7

Csikszentmihalyi, M. & Rochberg-Halton, E. (1981) The Meaning of Things Domestic Symbols and the Self. Cambridge University Press, Cambridge.

Donath, J. & boyd, d. (2004), Public displays of connection. *BT Technology Journal*, 22(4), 71-82. doi: 10.1023/B:BTTJ.0000047585.06264.cc

Dupuis M., Khadeer, S., Huang, J. (2017). "I Got the Job!": An exploratory study examining the psychological factors related to status updates on Facebook. Computers in Human Behavior, 73, 132-140. doi: http://dx.doi.org/10.1016/j.chb.2017.03.020

Eftekhar, A., Fullwood, C., & Morris, N. (2014). Capturing personality from Facebook photos and photo-related activities: How much exposure do you need? Computers in Human Behavior, 37, 162–170. doi: https://doi.org/10.1016/j.chb.2014.04.048

Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites, Journal of Computer-Mediated Communication, 12(4), 1143-1168, doi: https://doi.org/10.1111/j.1083-6101.2007.00367.x

Ellison, N.B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New media & Society,* 13(6), 873-892. doi: http://dx.doi.org/10.1177/1461444810385389

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. Child Development, 77(6), 1568–1588, doi: 10.1111/j.1467-8624.2006.00960.x.

Gonzalez, J. (1995) Autotopographies. In Brahm, G. and Driscoll, M. (eds.) Prosthetic Territories – Politics and Hypertechnologies. Boulder: Westview Press, 133-150.

Gravetter, F., & Wallnau, L. (2014). Essentials of statistics for the behavioral sciences (8th ed.). Belmont, CA: Wadsworth.

Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. Psychological Bulletin, 126, 748-769. DOI: http://dx.doi.org/10.1037/0033-2909.126.5.748

Harris C. B., Rasmussen A. S., & Berntsen D. (2014). The functions of autobiographical memory: an integrative approach. Memory, 22, 559–581, doi: 10.1080/09658211.2013.806555

Hofstede, G. (2001), Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations, 2nd ed. Sage, Thousand Oaks, CA

Houghton, D. J., Joinson, A. N., Caldwell, N. D., & Marder, B. L. (2013). Tagger's delight? Disclosure and liking in Facebook: The effects of sharing photographs amongst multiple known social circles. Birmingham Business School: Discussion Paper Series, 1–34. http://dx.doi.org/10.1080/10705510701301834

Hu, L. & Bentler, P. (1999). Cutoff criteria for fit indices in covariance structure analysis: conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1-55, DOI: http://dx.doi.org/10.1080/10705519909540118

Huyssen, A. (2003). Present Past, Urban Palimpsests and the Politics of Memory, California: Standford Press.

Isaacs E., Konrad A, Walendowski A, Lennig T, Hollis V, & Whittaker S. (2013). Echoes from the past: How technology mediated reflection improves well-being. In: Proceedings of the SIGCHI conference on human factors in computing systems, Paris, France. Paris: ACM; 2013.

p. 1071–80.

Kapidzic, S., & Herring, S. C. (2015). Race, gender, and self-presentation in teen profile photographs. New Media & Society, 17(6), 958-976. doi: http://dx.doi.org/10.1177/1461444813520301

Kihlstrom J F (2009), Unconscious Cognition. In: William P. Banks, (Editor), Encyclopedia of Consciousness. volume 2, pp. 411-421. Oxford: Elsevier.

Kulkofsky, S., Wang, Q., & Hou, Y. (2010). Why I remember that: The influence of contextual factors on beliefs about everyday memory. Memory and Cognition, 38(4), 461–473. doi: http://dx.doi.org/10.3758/MC.38.4.461

Kuwabara, K. J., & Pillemer, D. B. (2010). Memories of past episodes shape current intentions and decisions. Memory, 18, 365-374. doi: 10.1080/09658211003670857

Kuwabara, K. J., Rouleau, T. J., & Pillemer, D. B. (2011). Children's use of autobiographical memories during social problem-solving. Poster presented at the biennial meeting for the Society of Research on Child Development, Montreal, Canada.

Liao, H.W., Bluck, S., Alea, N., & Cheng, C.L. (2015). Functions of autobiographical memory in Taiwanese and American emerging adults. Memory. doi:10.1080/09658211.2015.1015572.

Liu, C, Ang, R.P, & Lwin, M.O. (2013). Cognitive, personality, and social factors associated with adolescents' online personal information disclosure. Journal of Adolescence, 36(4), 629-38. doi: 10.1016/j.adolescence.2013.03.016

Maki Y., Kawasaki Y., Demiray B., & Janssen S. J. (2015). Autobiographical memory functions in young Japanese men and women. Memory, 23, 11–24. 10.1080/09658211.2014.930153

Malik, A., Dhir, A., & Nieminen, M. (2016). Uses and Gratifications of digital photo sharing on Facebook, Telematics & Informatics, 33(1), 129-138 DOI: 10.1016/j.tele.2015.06.009

Mendelson, A., & Papacharissi, Z. (2010). Look at us: Collective narcissism in college student Facebook photo galleries. In Z. Papacharissi (Ed.), The networked self: Identity, community and culture on social network sites (pp. 251-273). London, England: Routledge

Muscanell, N. L., & Guadagno, R. E. (2012). Make new friends or keep the old: Gender and personality differences in social networking use. Computers in Human Behavior, 28, 107-112, doi:10.1016/j.chb.2011.08.016

Nadkarni, A., & Hofmann, S.G. (2012). Why Do People Use Facebook? Personality and Individual Differences, 52(3):243-249, doi: 10.1016/j.paid.2011.11.007

Nunnally J C. (1967). Psychometric theory. New York: McGraw Hill.

Pascuzzi, D., & Smorti, A. (2017). Emotion regulation, autobiographical memories and life narratives. New Ideas in Psychology, 45, 28-37, doi: http://dx.doi.org/10.1016/j.newideapsych.2016.12.001

Pasupathi, M., Lucas, S., & Coombs, A. (2002). Conversational functions of autobiographical remembering: Long-married couples talk about conflicts and pleasant topics. Discourse Processes, 34, 163- 192. doi:10.1207/S15326950DP3402_3

Petrelli, D., Whittaker, S., & Brockmeier, J., (2008). AutoTopography: What can physical mementos tell us about digital memories? In: Proceedings of Conference on Human Factors in Computing Systems CHI 2008, 53–62.

Pillemer, D. B. (1992). Remembering personal circumstances: A functional analysis. In E. Winograd & U. Neisser (Eds.), Affect and accuracy in recall: Studies of "flashbulb" memories (Emory symposia in cognition 4 ed., pp. 236-264). New York: Cambridge University Press.

Pillemer, D. B. (2003). Directive functions of autobiographical memory: The guide power of the specific episode. Memory, 11, 193-202, doi: 10.1080/ 741938208.

Rasmussen, A. S., & Berntsen, D. (2009). Emotional valence and the functions of autobiographical memories: Positive and negative memories serve different functions. Memory and Cognition, 37, 477-492, doi: https://doi.org/10.3758/MC.37.4.477

Rasmussen, A.S., & Habermas, T. (2011). Factor structure of overall autobiographical memory usage: the directive, self and social functions revisited. Memory, 19(6), 597-605. doi: 10.1080/09658211.2011.592499.

Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. Computers in Human Behavior, 27, 1658–1664, doi: 10.1016/j.chb.2011.02.004

Salimkhan, G., Manago, A., and Greenfield, P. (2010). The Construction of the Virtual Self on MySpace. Cyberpsychology. *Journal of Psychosocial Research on Cyberspace*, 4(1), article 1. Retrieved at http://cyberpsychology.eu/view.php?cisloclanku=2010050203&article=1

Saslow, L. R., Muise, A., Impett, E. A., & Dubin, M. (2013). Can you see how happy we are? Facebook images and relationship satisfaction. *Social Psychological and Personality Science*, 4(4), 411-418. doi: http://dx.doi.org/10.1177/1948550612460059

Schachter D.L. (1996). Searching for memory: The brain, the mind, and the past. New York: Basic Books.

Seidman, G. (2014), Expressing the ‘‘True Self’’ on Facebook. Computers in Human Behavior, 31, 367–372, doi: http://dx.doi.org/10.1016/j.chb.2013.10.052

Şendeniz, Ö. (2015). Bakmak, Biriktirmek, Paylaşmak:Fotoğraf, Bellek ve Sosyal Medyailişkisi. Karadeniz İletişim Araştırmaları Dergisi. 3(10), 21-31.

Seyfi, M., & Soydaş, A.U, (2017). The Relationship Between Autobiographical Memory and Social Media: Sharing Childhood Photographs on Social Media. Global Media Journal TR Edition, 8(15), 57-70.

Siibak, A. (2009). Constructing the Self through the Photo selection Visual Impression Management on Social Networking Websites. Cyberpsychology Journal of Psychosocial Research on Cyberspace, 3(1), article 1. Retrieved from https://cyberpsychology.eu/article/view/4218/3260

Sinn, D. & Syn, S.Y (2014). Personal Documentation on a Social Network Site: Facebook, a Collection of Moments from Your Life? *Archival Science*, 14 (2): 95-124.

Strano, M. M. (2008). User Descriptions and Interpretations of Self-Presentation through Facebook Profile Images. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*,

2(2), article 5. Retrieved from https://cyberpsychology.eu/article/view/4212/3253

Te Grotenhuis M., & Thijs, P. (2015). Dummy variables and their interactions in regression analysis: examples from research on body mass index. arXiv preprint arXiv:1511.0572. Online at: https://arxiv.org/abs/1511.05728

Tifferet, S., & Vilnai-Yavetz, I. (2014). Gender differences in Facebook self-presentation: An international randomized study. *Computers in Human Behavior,* 35, 388-39. doi: 10.1016/j.chb.2014.03.016

Utz, S., Muscanell, N. L., & Khalid, C. (2015). Snapchat Elicits More Jealousy than Facebook: A Comparison of Snapchat and Facebook Use. Cyberpsychology, Behavior, and Social Networking, 18(3), 141-146. https://doi.org/10.1089/cyber.2014.0479

Van de Ven A.H. & Ferry, D.L. (1980). Measuring and Assessing Organizations. New York: Wiley.

Vranić, A., Jelić, M., & Tonković, M., (2018). Functions of Autobiographical Memory in Younger and Older Adults, Frontiers in Psychology, 9-219, DOI: 10.3389/fpsyg.2018.00219

Wang, Q., Lee, D., & Hou, Y. (2017). Externalizing The Autobiographical Self: sharing personal memories online facilitated memory retention. Memory. 25(6), 772-776, DOI: 10.1080/09658211.2016.1221115

Waters, T.E. (2014). Relations between the functions of autobiographical memory and psychological wellbeing. Memory, 22(3):265-75. doi: 10.1080/09658211.2013.778293

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity Construction on Facebook: Digital Empowerment in Anchored Relationships. Computers in Human Behavior, 24, 1816-1836, doi: http://dx.doi.org/10.1016/j.chb.2008.02.012

Table 1 - Demographic Composition of the Overall Sample and by Gender and Age Groups.

Category	Overall (N=492)	Male (n=114)	Female (n=378)	Young (n=268)	Adult (n=224)
Gender					
Men	114 (23%)	-	-	-	-
Women	378 (77%)	-	-	-	-
Age					
Young adults	268 (54%)	89 (78%)	295 (78%)	-	-
Middle-aged adults	224 (46%)	25 (22%)	83 (22%)	-	-
Education					
Elementary		2 (1%)	3 (1%)	1 (1%)	4 (2%)
Diploma		84 (74%)	272 (72%)	263 (98%)	92 (41%)
Bachelor degree		28 (25%)	104 (27%)	3 (1%)	128 (57%)
Occupation					
Students	345 (70%)	79 (69%)	266 (70%)	257 (95%)	88 (39%)
Employed	117 (24%)	29 (26%)	88 (24%)	4 (2%)	26 (12%)
Unemployed	50 (6%)	6 (5%)	24 (6%)	7 (3%)	110 (49%)
Years of Facebook usage					
Less than one year	11 (2%)	3 (3%)	8 (2%)	4 (2%)	7 (5%)
From one to five years	107 (22%)	22 (19%)	85 (22%)	60 (22%)	47 (20%)
From five to ten years	374 (76%)	89 (78%)	285 (76%)	204 (76%)	170 (75%)
Facebook Daily usage					
Once a time per day	63 (13%)	15 (13%)	48 (13%)	49 (18%)	14 (7%)
From one to three times per day	144 (29%)	41 (36%)	103 (27%)	79 (29%)	65 (29%)
From three to six times per day	119 (24%)	18 (16%)	101 (27%)	53 (20%)	66 (29%)
More than six times per day	166 (34%)	40 (35%)	126 (33%)	87 (33%)	79 (35%)
Facebook Time usage					
Less than one hour per day	325 /66%)	79 (70%)	246 (65%)	191 (71%)	134 (59%)
From one to three hours per day	129 (26%)	23 (20%)	106 (28%)	59 (22%)	70 (31%)
From three to six hours per day	22 (4%)	6 (5%)	16 (4%)	14 (5%)	8 (3%)
More than six hours per day	16 (4%)	6 (5%)	10 (3%)	4 (2%)	12 (7%)

Table 2 - Means and Standard Deviations of the 15-items of the Italian Version of Thinking About Life Experiences Scale (N=492).

	M	SD	Skewness	Kurtosis
I think back over or talk about my life or certain periods of my life...				
IT1. ...when I hope to also find out what another person is like	2.82	1.0	.02	-.73
IT2. ...when I want to try to learn from my past mistakes	3.51	1.0	-.36	-.43
IT3. ...when I want to feel that I am the same person that I was before	2.24	1.0	.68	-.05
IT4. ...when I am concerned about whether I am still the same type of person that I was earlier	2.44	1.1	.41	-.65
IT5 ...when I want to maintain a friendship by sharing memories with friends.	3.46	1.0	-.45	-.38
IT6 …when I want to develop a closer relationship with someone	3.37	1.0	-.33	-.38
IT7...when I hope to also learn more about another person's life	2.92	1.1	-.06	-.76
IT8 …when I am concerned about whether my values have changed over time	2.51	1.1	.34	-.79
IT9...when I am concerned about whether my beliefs have changed over time	2.42	1.0	.35	-.55
IT10 ...when I want to remember a lesson I learned in the past	3.48	.95	-.41	-.03
IT11 ...when I want to develop more intimacy in a relationship	3.53	1.0	-.52	-.41
IT12 ...when I want to remember something that someone else said or did that might help me now	3.19	1.0	-.33	-.39
IT13 ...when I need to make a life choice and I am uncertain which path to take	3.24	1.0	-.03	-.66
IT14 ... when I believe that thinking about the past can help guide my future	3.20	1.0	-.13	-.63
IT15 …. when I want to understand how I have changed from who Iwas before	3.30	1.0	-.17	-.60

Table 3 - Exploratory Factor Analysis on the Italian version of Thinking About Life Experiences Scale

	Factor		
I think back over or talk about my life or certain periods of my life...	1	2	3
IT1. ...when I hope to also find out what another person is like	0.08	**0.69**	0.34
IT2. ...when I want to try to learn from my past mistakes	**0.78**	0.16	0.10
IT3. ...when I want to feel that I am the same person that I was before	0.03	0.19	**0.64**
IT4. ...when I am concerned about whether I am still the same type of person that I was earlier	0.21	0.13	**0.78**
IT5. ...when I want to maintain a friendship by sharing memories with friends.	0.33	**0.70**	0.07
IT6. …. when I want to develop a closer relationship with someone	0.23	**0.79**	0.12
IT7. ...when I hope to also learn more about another person's life	0.05	**0.80**	0.24
IT8. …. when I am concerned about whether my values have changed over time	0.30	0.13	**0.70**
IT9. ...when I am concerned about whether my beliefs have changed over time	0.13	0.12	**0.80**
IT10. ...when I want to remember a lesson, I learned in the past	**0.74**	0.09	0.06
IT11. ...when I want to develop more intimacy in a relationship	0.41	**0.67**	0.00
IT12. ...when I want to remember something that someone else said or did that might help me now	**0.60**	0.24	0.15
IT13. ...when I need to make a life choice and I am uncertain which path to take	**0.59**	0.24	0.17
IT14. ... when I believe that thinking about the past can help guide my future	**0.62**	0.17	0.12
IT15. …. when I want to understand how I have changed from who I was before	0.32	0.08	**0.40**
Explained Variance	21%	19.1%	17.5%
Cronbach's Alpha	0.77	0.82	0.79

Table 4 - *Confirmatory factor analysis fit indices and comparison between models and groups*

	X^2	df	X^2/df	p	AGFI	CFI	RMSEA	90% (LOW - HIGH)	AIC
Model 1	147.41	73	2.01	.000	.892	.779	.058	(.045 - .072)	241.41
Model 2	127.98	69	1.85	.000	.901	.825	.053	(.039 - .068)	231.98
Model 3	123.04	69	1.78	.000	.901	.951	.051	(.036 - .066)	227.04
Model 3									
Women	89.04	69	1.29	.053	.901	.951	.043	(.000 - .066)	193.04
Men	98.27	69	1.42	.012	.902	.952	.055	(.027 - .079)	202.23
Young adults	107.90	69	1.56	.002	.901	.951	.052	(.032 - .070)	211.90
Middle-aged adults	89.74	69	1.30	.048	.902	.952	.053	(.007 - .091)	193.73

Note: N = 300; Model 1 is an uncorrelated one-factor model, Model 2 is a correlated three-factor model, and Model 3 is a model with three factors + a second order factor. All parameters are significant for $p < .001$

Table 5 - Multigroup comparisons for Model 3 across gender and age groups.

Gender

	χ^2	df	χ^2/df	p	CFI	RMSEA	ΔCFI	ΔRMSEA	$\Delta\chi^2$	Δdf
Configural model	240.60	154	1.69	.000	.936	.048	-	-	-	-
Metric model	290.78	154	1.88	.000	.911	.055	-0.02	0.007	50.18	0
Scalar model	304.19	156	1.95	.000	.904	.056	-0.007	0.001	13.41	2

Age

	χ^2	df	χ^2/df	p	CFI	RMSEA	ΔCFI	ΔRMSEA	$\Delta\chi^2$	Δdf
Configural model	279.76	142	1.97	.000	.916	.057	-	-	-	-
Metric model	298.05	154	1.93	.000	.913	.056	-0.003	-0.001	18.29	12
Scalar model	307.81	156	1.97	.000	.908	.057	-0.005	0.001	9.76	2

Table 6 – Descriptive Statistics and Pearson's Zero-Order Correlation among Gender, Age, Total scores on the Three TALE DBF, SBF, SCF Sub-Scales and Measures of the Facebook Life Events Check-list (N=492).

	1	2	3	4	5	6	7	8	9
1. Gender	1								
2. Age	.01	1							
3. DBF	-.08	-.24*	1						
4. SBF	-.08	-.29*	.52*	1					
5. SCF	-.07	-.26*	.50*	.46*	1				
6. FSU	.00	.14*	.08	-.02	.06	1			
7. POS	-.10*	.03	.09	.15*	.15*	.48*	1		
8. NEG	-.05	.04	.09	.09	.13*	.42*	.58*	1	
9. N° PU	-.18*	.06	.08	.04	.13*	.52*	.53*	.34*	1
Mean (SD)	-	26.1 (10.5)	3.32 (0.7)	3.21 (0.8)	2.58 (0.8)	3.57 (2.4)	1.74 (0.5)	1.35 (0.4)	4.77 (2.6)

**Note*- DBF= Directive-Behavior Function; SBF= Social-Bonding Function; SCF= Self-Continuity Function; FSU= Facebook Status Updating (frequency); POS= positive topics of textual information; NEG= Negative topics of textual information; PU= Photos uploaded. Gender is a dummy variable, women=0; men=1; *p<.001

Table 7 - Descriptive Statistics and Pearson's Zero-Order Correlation among Gender, Age, Scores on the three TALE DBF, SBF, SCF Subscales and the Positive vs. Negative Themes of Textual and Visual Information Measured by the Facebook Life Events Check-list (N=492).

Items	M	SD	Gender	Age	DBF	SBF	SCF
Topics of Facebook Status Updating							
Job promotion or a new job (+)	1.52	0.9	.02	.24*	.00	-.03	-.02
Support and/or advocacy for a specific politician and/or political party (+)	1.49	0.8	.07	.09	-.01	.02	-.00
Feeling happy, glad, and/or excited (+)	2.34	1.2	-.09	.07	.09	.11*	.10*
Birth of a child (+)	1.26	0.7	-.13*	.22*	.00	.00	.08
Acceptance into a college, university, and/or major (+)	2.14	1.2	-.11*	-.25*	.06	.20*	.13*
Weight loss and/or fitness goals and/or progress (+)	1.22	0.5	-.01	-.05	.00	-.01	.04
Getting engaged (+)	1.44	0.8	.04	-.08	.12*	.08	.13*
Major accomplishment in an academic, sport, or work setting (+)	2.15	1.2	-.06	.04	.00	.09	.11
When you're on vacation and want to let people know (+)	2.15	1.2	-.15*	-.01	.15*	.22*	.17*
Asking for support and/or prayers when you, a friend, or family member have some type of medical issue, emergency, or procedure (-)	1.15	0.4	.00	.16*	.00	.03	.08
Feeling lonely, sad, and/or depressed (-)	1.42	0.8	-.01	-.02	.09	.03	.13*
Feeling angry, upset, and/or mad (-)	1.45	0.7	-.05	-.01	.10*	.06	.16*
Mad, angry, and/or upset at a significant other (-)	1.20	0.5	-.12*	-.04	.05	.06	.01
Mad, angry, and/or upset at a friend (-)	1.15	0.5	-.12*	.00	.04	.07	.02
Feeling stressed and/or dealing with a stressful situation (-)	1.54	0.8	-.06	-.00	.14*	.02	.11*
Disdain for a specific politician and/or political party (-)	1.47	0.9	-.00	.07	-.01	.04	-.00
Having difficulties in an academic, sport, or work setting (-)	1.30	0.6	-.08	-.01	.08	.10*	.05
Major news events that have a negative outcome (-)	1.49	0.8	.06	.12*	.01	.10*	.12*
Topics of Photo Uploading							
Life events	2.59	1.2	-.11	-.16*	.30*	.24*	.28*
Friends	2.83	1.2	-.12*	-.32*	.24*	.28*	.21*
Panoramas	2.43	1.2	-.12*	.03	.21*	.17*	.17*
Myself	2.94	1.2	-.05	-.17*	.06	.18*	.15*
Family	2.23	1.1	-.14*	-.05	.13*	.05	.08
Animals	1.80	1.1	-.17*	-.04	.22*	.10	.13*
Objects	1.48	0.7	-.13*	.16*	.13*	.04	.05

Note - (-) Negative Topics of Facebook Status Updating; (+) Positive Topics of Facebook Status Updating; Gender is a dummy variable, male=0; female=1; *p<.01

Table 8 – Summary of Simple Regression Analyses for Variables Predicting Measures of the Facebook Life Events check-list (*N*=492)

		FSU					POS					NEG					PU				
		B	SE	t	p	R^2	B	SE	t	p	R^2	B	SE	t	p	R^2	B	SE	t	p	R^2
Step 1	Gender	.00	.04	.06	n.s	.02	-.11	.04	-2.39	<.05	.01	-.06	.04	-1.33	n.s.	.01	-.19	.04	-4.30	<.001	.05
	Age	.15	.04	3.46	<.001		.03	.04	.78	n.s.		.05	.04	1.09	n.s.		.11	.04	2.46	<.05	
Step 2	Gender	.01	.04	.33	n.s	.04	-.10	.04	-2.21	<.05	.02	-.05	.04	-1.13	n.s.	.02	-.18	.04	-4.10	<.001	.06
	Age	.19	.05	4.12	<.001		.06	.05	1.32	n.s.		.08	.05	1.63	n.s.		.14	.04	2.98	<.01	
	DBF	.14	.05	2.99	<.01		-.11	.05	-2.23	<.05		.11	.05	2.30	<.05		.11	.05	2.31	<.05	
Step 3	Gender	.01	.04	.18	n.s	.05	-.11	.04	-2.33	<.05	.04	-.06	.04	-1.25	n.s.	.03	-.19	.04	-4.25	<.001	.06
	Age	.22	.05	4.44	<.001		.11	.05	2.14	<.05		.12	.05	2.36	<.05		.15	.05	3.03	<.01	
	DBF	.13	.05	2.89	<.01		.10	.05	2.07	<.05		.10	.05	2.15	<.05		.10	.05	2.28	<.01	
	Gender*DBF	-.05	.04	-1.14	n.s		-.04	.04	-.90	n.s.		-.04	.04	-.90	n.s.		-.06	.04	-1.47	n.s.	
	Age*DBF	.07	.04	1.62	n.s		.11	.04	2.56	<.05		.10	.04	2.34	<.05		.03	.04	.68	n.s.	
		B	SE	t	p	R^2	B	SE	t	p	R^2	B	SE	t	p	R^2	B	SE	t	p	R^2
Step 1	Gender	.00	.04	.06	n.s	.02	-.11	.04	-2.39	<.05	.01	-.06	.04	-1.33	n.s.	.01	-.19	.04	-4.30	<.001	.05
	Age	.15	.04	3.44	<.001		.03	.04	.78	n.s.		.05	.04	1.09	n.s.		.11	.04	2.46	<.05	
Step 2	Gender	.01	.04	.11	n.s	.02	-.09	.04	-2.10	<.05	.04	-.05	.04	-1.12	n.s.	.02	-.18	.04	-4.16	<.001	.05
	Age	.16	.05	3.46	<.001		.09	.05	1.94	n.s.		.09	.05	1.82	n.s.		.13	.04	2.84	<.01	
	SBF	.03	.05	.55	n.s		.18	.05	3.84	<.001		.12	.05	2.52	<.05		.07	.05	1.58	n.s.	
Step 3	Gender	.00	.04	-.16	n.s	.06	-.10	.04	-2.22	<.05	.07	-.05	.04	-1.19	n.s.	.04	-.20	.04	-4.43	<.001	.07
	Age	.23	.05	4.44	<.001		.16	.05	3.20	<.001		.15	.05	2.95	<.01		.16	.05	3.25	<.01	
	SBF	.04	.05	.77	n.s		.19	.05	4.05	<.001		.13	.05	2.68	<.01		.08	.05	1.74	n.s.	
	Gender*SBF	-.13	.04	-3.08	<.01		-.06	.04	-1.51	n.s.		-.05	.04	-1.14	n.s.		-.12	.04	-2.74	<.01	
	Age*SBF	.14	.04	3.04	<.01		.15	.04	3.41	<.001		.14	.04	3.08	<.01		.07	.04	1.61	n.s.	
		B	SE	t	p	R^2	B	SE	t	p	R^2	B	SE	t	p	R^2	B	SE	t	p	R^2
Step 1	Gender	.00	.04	.06	n.s	.02	-.11	.04	-2.40	<.01	.01	-.06	.04	-1.33	n.s.	.01	-.19	.04	-4.30	<.001	.05
	Age	.15	.04	3.46	<.001		.03	.04	.78	<.05		.05	.04	1.09	n.s.		.11	.04	2.46	<.05	
Step 2	Gender	.01	.04	.24	n.s	.03	-.10	.04	-2.15	<.05	.04	-.05	.04	-1.10	n.s.	.03	-.18	.04	-4.09	<.001	.07
	Age	.18	.05	.39	<.001		.07	.05	1.64	n.s.		.08	.05	1.83	n.s.		.14	.04	3.21	<.001	
	SCF	.11	.05	2.30	<.01		.17	.05	3.69	<.001		.15	.05	3.20	<.001		.15	.05	3.35	<.001	
Step 3	Gender	.00	.04	.03	n.s	.04	-.10	.04	-2.33	<.05	.05	-.06	.04	-1.26	n.s.	.04	-.19	.04	-4.26	<.001	.08
	Age	.19	.05	4.04	<.001		.10	.05	2.02	<.05		.11	.05	2.19	<.05		.14	.05	2.88	<.01	
	SCF	.10	.05	2.29	<.01		.17	.05	3.70	<.001		.15	.05	3.21	<.001		.15	.05	3.33	<.001	
	Gender*SCF	-.09	.04	-2.04	<.05		-.08	.04	-1.79	n.s.		-.07	.04	-1.52	n.s.		-.08	.04	-1.86	n.s.	
	Age*SCF	.04	.04	.96	n.s		.06	.04	1.46	n.s.		.07	.04	1.47	n.s.		-.03	.04	-.61	n.s.	

**Note*- DBF= Directive-Behavior Function; SBF= Social-Bonding Function; SCF= Self-Continuity Function; FSU= Facebook Status Updating (frequency); POS= positive topics of textual information; NEG= Negative topics of textual information; PU= Photos uploaded. Gender is a dummy variable, women=0; men=1; *p<.01 (with Bonferroni correction)

Table 9 – t test of the gradient of simple slope analysis

IV	DV	Moderator	Gradient	t	p
DBF	POS	Age	0.11	2.46	<.05
DBF	NEG	Age	0.10	2.24	<.05
SBF	POS	Age	0.15	3.35	<.001
SBF	NEG	Age	0.13	2.91	<.01