



Article

The Mediating Role of Affects between Mind-Wandering and Happiness

Carlos Salavera 1,2,* and Pablo Usán 1,2

- Departament of Psychology and Sociology, Faculty of Education, Universidad de Zaragoza, 50009 Zaragoza, Spain; pusan@unizar.es
- Research Group OPIICS, University of Zaragoza, 50009 Zaragoza, Spain
- * Correspondence: salavera@unizar.es

Received: 28 May 2020; Accepted: 18 June 2020; Published: 24 June 2020



Abstract: The aim of this study was to assess the mediating role of affects between mind-wandering and happiness. The study was conducted with a sample comprising 270 university students—133 men (49.26%) and 137 women (50.74%)—who filled out the Mind-Wandering Questionnaire (MWQ), the Positive and Negative Affect Questionnaire (PANAS), and the SHS subjective happiness scale. Mind-wandering was found to be negatively correlated with happiness and positive effects. Higher mind-wandering-related scores went hand in hand with scores related to both lower happiness and positive affects. Approximately half the participants yielded low mind-wandering and negative affect scores and above-average happiness and positive affects scores. In addition, one in four scored above average in terms of mind-wandering and low in terms of happiness and positive effects. Finally, the mediating role played by affects was examined. It can be concluded that although in principle mind-wandering has no direct effect on happiness, some influence can be attested when affects, both positive and negative, are taken into consideration.

Keywords: mind-wandering; affects; happiness; mediation

1. Introduction

The human mind tends to get distracted from ongoing tasks. The mind is prone to drift towards past events or to plan future events, as well as to spontaneously generate thoughts and elaborate on them independently from external stimuli [1]. This process, which affects all everyday activities, involves our mind getting distracted from an ongoing task in order to focus on intrinsically generated content [2]. The human mind tends to focus on its own internal events between 10% and 50% of the time while awake [3].

One of the most beneficial effects of mind-wandering is that it assists with future-planning, when the mind detaches itself from past and present events [4]. Future-focused thoughts increase with self-reflection and prioritise personal targets, while being undermined by negative moods [5]. Future-planning helps problems being faced creatively [6].

High levels of mind-wandering are related to bad moods and thoughts [3]. An increase in negative thoughts and related mind-wandering have been found to ensue from depression [7]. This association may be related to an increased tendency to focus on intrinsic thoughts, emotions, and experiences [2]. High levels of mind-wandering have also been put in relation to low levels of self-esteem [4].

Subjective happiness, on the other hand, provides a positive outlook for intermediate achievements but tends to blur longer-term future perspectives [8,9]. Therefore, its effects have a limited temporal scope. Happiness can be defined as subjective well-being, a personal, subjective, and global assessment of the individual's cognitive and affective status [10]. Happiness is characterised by a positive temperament, a tendency to see things positively, and little inclination to "overthink" negative events.

Sustainability **2020**, *12*, 5139

A happy person will have friends and people whom they trust and adequate resources to achieve their goals and cope with stressful events [11]. Happiness is a positive emotion related by many studies to greater levels of physical, emotional, and social well-being [12]. Positive emotions can focus on the past, the present, and the future: Future-related emotions include optimism, faith, hope, and confidence; present-related emotions include tranquillity and flow (optimal experience); and past-related emotions include self-realisation, satisfaction, pride, and serenity [13].

Finally, affects are divided into positive and negative affects [14]. While positive effects are related to pleasant feelings (gregariousness, energy, motivation, achievement, and success), negative effects are related to unpleasant feelings (insecurity, inhibition, fear, failure, and frustration) [14,15]. People who experience positive affects tend to experience feelings of satisfaction, friendship, unity, energy, self-affirmation, enthusiasm, and self-confidence. They are optimistic, extroverted, and resilient. Conversely, people who experience negative effects are prone to sadness, boredom, lack of interest, shame, envy, and guilt. They react badly to stress, vegetative lability, and unfavourable environments [16].

2. Mind-Wandering and Happiness

Happiness has been variously related to questions such money, love, life, and work, but the studies carried out to date in this regard have only yielded modest and contradictory results. Other studies have suggested that happiness may be more closely related to immediate experiences than to quality of life more broadly.

Individuals generally spend almost half their waking time thinking about something different from what they are doing, and this mind-wandering often makes them unhappy [3]. Some authors have suggested that one of the most powerful predictors of happiness is something that people are unaware of: mind-wandering. When the mind wanders, thinking about something other than what is happening around the person, it can take them to somewhere happier than reality. The wandering mind has been associated to lower levels of happiness [17], but it is unclear whether it is the wandering mind that causes unhappiness or whether the mind wanders when the person is unhappy.

3. Mind-Wandering and Affects

As noted, mind-wandering involves thoughts that are unrelated with the task at hand. People spend almost half of their waking time mind-wandering. Numerous studies have demonstrated that mind-wandering can precede negative emotions, but little attention has been paid to the positive role of mind-wandering. In general, it is thought that mind-wandering plays a negative role, as it hampers the carrying out of executive tasks [1], although some studies have suggested that mind-wandering may be beneficial for tasks such as creative thinking [6], problem-solving [18,19], and pain avoidance [20]. From this perspective, mind-wandering may be a double-edged sword for carrying out tasks and managing emotions.

Mind-wandering has been consistently related to negative effects, although some researchers have pointed out that it can relieve negative emotions and promote positive emotions, and that positive emotions can drive the mind away from negative ones [3,19–22], which suggests that mind-wandering and affects are mediated by multiple factors.

4. Affects and Happiness

Affects are a coping strategy to regulate emotions [23,24]; positive affects reflect a person's activity, alertness, energy, and enthusiasm [25], while negative affects reflect discontent, anger, fear, and nervousness [14]. It has been noted that positive effects are an important component of happiness [10,26,27], and that they are beneficial for cognitive operations in the short and long terms. Persons with a positive affective style are happier [28]; they also tend to be less reactive, able to regulate emotions better, and prone to positive affects [29].

Sustainability **2020**, *12*, 5139

In general, persons prone to positive effects are better at coping with problems and stress [30]. Although positive affects often have positive effects, Gruber, Mauss, and Tamir [31] indicated that the constant search of happiness may have unexpected negative consequences and may be related to important psychological and behavioural dysfunctions.

Although it is assumed that positive and negative effects have an effect on happiness, there is not sufficient evidence concerning the effect of negative effects on happiness.

5. The Current Study

Although previous studies have demonstrated the relationship between mind-wandering, affects, and happiness [3,5,17,22,26], not enough work has been done concerning the relationship between mind-wandering and happiness. Based on the review of existing studies, the aim of this study is twofold: (1) to identify different profiles considering the dimensions of mind-wandering, affects, and happiness, and (2) to analyse the mediating effect of the effects on the relationship between mind-wandering and happiness. Concretely, the following hypotheses were raised: (1) high levels in the mind-wandering lead to low levels of happiness; and (2) affects play a mediating role between mind-wandering and happiness. The proposed research model is depicted in Figure 1.

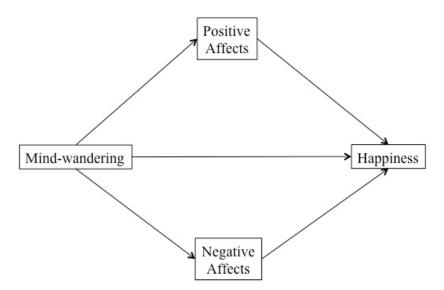


Figure 1. Hypothetic model of the relationship between mind-wandering, affects, and happiness.

6. Materials and Methods

6.1. Procedure

Universities were contacted by phone to request their cooperation. While the questionnaires were handed out, the aim of the study was explained to all participants, and the importance of all items in the questionnaire being addressed was emphasised. Participants were given twenty minutes to fill out the questionnaires and the informed consent form. It was stressed that the information collected was to be treated anonymously and confidentially.

The survey was designed as a study based on natural groups because the groups were constituted by stable independent variables and without major cultural differences. Individual differences were compared, and dependent and independent variables recorded. The data were collected in October and November 2019.

6.2. Participants

The sample comprised 270 university students: 133 men (49.26%) and 137 women (50.74%). Participation was voluntary, and all participants signed an informed consent form. All the ethical

Sustainability **2020**, *12*, 5139 4 of 9

principles set forth in the Declaration of Helsinki were met. The study protocol was approved by the Ethics Review Committee of Psychology and Sociology Department at the University of Zaragoza. The average age of participants was 21.97 years, and their ages ranged from 18 to 35 years, with a standard deviation of 3.91.

6.3. Measures

6.3.1. Mind-Wandering Questionnaire (MWQ)

For the Mind-Wandering Questionnaire (MWQ) [32], the Spanish translation was used [33]. This is a 5-item self-report questionnaire used to measure mind-wandering-related features on a 6-point Likert scale that goes from 1 (almost never) to 6 (almost always). Items include, for instance, "I struggle to focus on simple or repetitive tasks" or "I do things without giving them my full attention". The total MWQ score (5–30) results from adding the scores yielded by each item. In this study, the scale yielded a high internal consistency score (Cronbach's α 0.811); a score of more than 0.8 is generally considered good.

6.3.2. Subjective Happiness Scale

The subjective happiness assessment scale [34] measures a molar category of well-being as a general psychological phenomenon, insofar as it regards happiness from the participant's subjective point of view. The instrument is a 4-item Likert scale. The final result is the average score. In this study, the scale yielded a high internal consistency score (Cronbach's $\alpha = 0.838$).

6.3.3. Positive and Negative Affects Questionnaire (PANAS)

The positive and negative affect questionnaire (PANAS) [14] is a 20-item Likert scale; ten items refer to positive affects (PA) and ten to negative effects (NA). All items refer to the participant's perspective at the time of filling the questionnaire, ranging from 0 (not at all emotional) to 5 (extremely emotional). In this study, the scale yielded a high internal consistency score (Cronbach's α = 0.803 for PA and 0.869 for NA).

6.4. Data Analysis

The data were processed with SPSS v.26.0 statistical software. After conducting normal distribution and equality of variances tests, we decided to use parametric techniques. Each variable was subject to descriptive analysis. In all cases, we used the lowest significance level possible. Bilateral tests were conducted. For two-group hypothesis testing we used Student's *t*-distribution. Finally, mediation analyses were conducted to assess the effect of positive and negative effects, following Baron and Kenny's criteria [35].

7. Results

Table 1 presents the average scores, as well as the partial correlations between the mind-wandering, subjective happiness, and affects scales. Significant correlations were confirmed between all scales.

 Table 1. Descriptive statistics and correlations on mind-wandering, happiness, and affects.

 Average
 Standard Deviation
 Mind-Wandering
 Happiness
 Positive

Positive Affects 13.744 4.442 Mind-Wandering -0.311 ** Happiness 20.844 4.762 -0.341 ** 0.458 ** **Positive Affects** 32.474 6.219 0.416 ** -0.541 ** -0.254 ** **Negative Affects** 22.862 7.979

^{**} p < 0.01.

Sustainability **2020**, *12*, 5139 5 of 9

Mind-wandering was found to be negatively correlated with happiness and positive effects, which suggests that greater levels of mind-wandering are associated with less happiness and positive effects, and vice versa. Negative effects were found to be correlated with mind-wandering. Happiness was found to be correlated with positive effects and negatively correlated with negative effects. Positive and negative effects are negatively correlated.

In addition, a cluster analysis was conducted (Table 2) in order to classify participants according to their responses. Since the aim was to measure the effect of the wandering mind and its effects on happiness, three groups were defined based on the measurements yielded by the participants in terms of happiness: (1) a group with high levels of happiness that yielded below-average scores in terms of mind-wandering and negative effects, and above-average scores in terms of subjective happiness and positive affects; (2) a group with middle levels of happiness that yielded slightly above-average scores in terms of mind-wandering and slightly below-average scores in terms of happiness and negative effects (that is, positive affects scored slightly above average); and (3) a group with low levels of happiness that yielded above average scores in terms of mind-wandering and negative effects, and below average in terms of subjective happiness and positive effects. In other words, nearly half of the participants present low levels of mind-wandering and negative effects, and above-average levels of happiness and positive effects. One in four present above-average levels of mind-wandering and negative effects. These results suggest that subjective happiness and positive affects are related, as are mind-wandering and negative effects.

	High Happiness	Middle Happiness	Low Happiness	Mean	F	Sig.
Mind-wandering	11.33	15.49	16.51	13.74	53.67	0.000
Happiness	23.67	19.58	16.92	20.84	79.37	0.000
Positive affects	36.00	27.69	30.47	32.47	65.84	0.000
Negative affects	17.70	21.35	33.48	22.86	301.66	0.000
N (%)	131 (48.52%)	66 (24.44%)	73 (27.04%)			

Table 2. Cluster analysis on mind-wandering, happiness, and positive and negative affects.

A mediation analysis, following Baron and Kenny [35], was conducted in order to evaluate whether the relationship between mind-wandering and happiness is mediated by positive and negative effects. After checking that this study met all of Baron and Kenny's criteria, Hayes's [36] macro Process 3.0 for SPSS (24.0) was used. This analysis took into consideration gender and age variables, which were found not to have a significant effect on the relationship between mind-wandering and happiness.

In order to determine that the mediation effect was significant, bootstrapping analyses (10,000 runs) were conducted. It was found that both positive and negative affects play a mediating role in the relationship between mind-wandering and happiness (Figure 2). The results suggest that the mind-wandering (VI) has an effect on positive effects and negative effects. Likewise, a direct effect of mediators (positive and negative affects) on happiness (VD) was found. In line with one of our hypotheses, mind-wandering did not have a direct effect on happiness, but a total effect (direct plus indirect effects) was attested, when positive and negative effects were taken into consideration (in both cases p < 0.001). Zero was not included in the confidence interval (95% CI); the effect was between -0.0686 and -0.3046, so it may be said that the mediation effect is total. The proportion of variance for happiness as explained by the model was $R^2 = 0.62$.

Sustainability **2020**, *12*, 5139 6 of 9

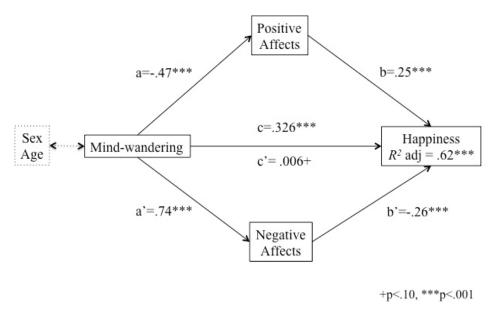


Figure 2. Positive and negative affects as mediators in the relationship between mind-wandering and happiness, taking into consideration age and gender variables.

8. Discussion

This study examined the possible mediating role of effects on the relationship between mind-wandering and happiness. Some features of mind-wandering, subjective happiness, and affects are also described. The study revealed that mind-wandering can be used to predict happiness when positive and negative effects are taken into consideration, in line with Killingsworth and Gilbert [3].

In line with previous studies, which have suggested that the person is less happy when their mind wanders [2,3,17], our results indicate that mind-wandering and positive effects are negatively correlated, suggesting that greater levels of mind-wandering are associated with lower degrees of happiness and positive effects, but in any case, it indicates the relationship between the mind-wandering and positive and negative effects. This agrees with Franklin [37], who argued that in some cases mind-wandering is related to positive emotional states, especially when mind-wandering drifts toward positive thoughts, whereas a negative mood tends to set the focus on personal concerns. One contribution of our study is that evidence for a relationship between mind-wandering and negative affects was found, in line with Poerio, Totterdell, and Miles's conclusions [38].

As expected, happiness was found to be correlated with positive effects, and negatively correlated with negative effects, in line with previous studies [10,39,40]; it has been pointed out that thoughts related to the past and to other people lead to undermining the person's emotional state, while thoughts related to the future and oneself tend to improve the person's emotional state [18].

On the other hand, cluster analysis led to the definition of three groups, based on the happiness scores yielded by the participants in our survey—namely one group with high levels of happiness, characterised by low scores in terms of mind-wandering and negative effects, alongside above-average scores in terms of happiness and positive affects; a second group with middle levels of happiness (approximately one in four participants) with near-average scores in terms of mind-wandering and negative effects, but below-average scores in terms of positive affects; and a third group with low levels of happiness (again one in four participants), with above-average scores in terms of mind-wandering and negative effects and below-average scores in terms of happiness and positive effects. As such, it is argued that mind-wandering and happiness antagonise one another, as pointed out by previous studies [2,3,17]; in three out of four participants, low scores in one were mirrored by high scores in the other. It is shown that one in four participants present low degrees of subjective happiness and a high degree of negative effects, which, considering this is not a clinical study, is a concerning

Sustainability **2020**, *12*, 5139 7 of 9

proportion. An efficient use of affects and high levels of self-perceived happiness can provide emotional support and are useful conflict-management tools [9,10].

The second aim of this study was to analyse the mediating effect of affects (both positive and negative) in the relationship between mind-wandering and happiness. This mediating relationship was confirmed. Although it was initially observed that mind-wandering has no direct effect on happiness, a significant effect was attested once the mediating role played by positive and negative affects is taken into consideration. These results are easily explained, since affects are a coping strategy to regulate emotions; positive affects decrease negative effects, in a bipolar positive/negative continuum [14,15,41,42].

Our results provided information about the relation of three constructs studied. The results revealed the important mediating role played by affects in the relationship between mind-wandering and happiness, which is unsurprising given the human tendency to react more strongly to negative than to positive stimuli [41]. These results are in line with the idea that people with a high level of positive effects are prone to feelings of satisfaction, energy, enthusiasm, union, friendship, self-affirmation, and confidence, while people with high levels of negative effects are prone to feelings like lack of interest, sadness, boredom, shame, guilt, and envy, all of which are related to mind-wandering and subjective happiness [16,42,43].

Finally, the study's limitations must be mentioned. First, given the nature of the study, no causal relations can be drawn. Second, the data are based on self-report questionnaires, which can introduce an element of bias in the results. Lastly, it is possible that the effect of mind-wandering on happiness may be caused by variables which have not been taken into consideration in this study: Depression, a low ability to regulate emotions, and a lack of mental flexibility may have an effect on the relationship between mind-wandering and happiness [44,45]. In addition, although the sample is statistically relevant, it should be extended to other population groups, including clinical populations, in which the relationship between the constructs under consideration may be closer. Longitudinal studies are also necessary in order to assess the evolution of these relationships over a longer time span. In addition, retrospective methods can provide a different picture and can be incorporated into future studies. Other factors such as psychopathologies, personality, emotional intelligence, and social skills may have an effect on results. It may be advisable for therapeutic intervention not to aim at reducing the frequency of mind-wandering episodes but to work on content instead.

The results of the study allow us to draw important conclusions and have significant implications. In conclusion it can be argued that affects, mind-wandering, and happiness are correlated, as empirically demonstrated by our study. Three out of four participants yielded high scores in terms of happiness and positive affects, and low scores in terms of negative affects and mind-wandering. It was also found that even if mind-wandering has no effect on happiness, this effect ensues when positive and negative affects are taken into consideration.

Mental wandering is a common feature of everyday life, and it is important that we understand it better. Our results provide additional evidence for the fact that managing affects efficiently can have a positive mediating effect on the relationship between the wandering mind and happiness.

Author Contributions: Conceptualization, C.S. and P.U.; methodology, C.S. and P.U.; validation, C.S. and P.U.; formal analysis, C.S. and P.U.; investigation, C.S. and P.U.; resources, C.S. and P.U.; data curation, C.S. and P.U.; writing—original draft preparation, C.S. and P.U.; writing—review and editing, C.S. and P.U.; funding acquisition, C.S. All authors have read and agreed to the published version of the manuscript.

Funding: This study was performed by Research Group OPIICS (S46_20R), University of Zaragoza (Zaragoza, Spain) and was supported by research funds provided by the Department of Science and Technology of the Government of Aragón (Spain) and the European Social Fund.

Acknowledgments: To Research Group OPIICS (S46_20R), University of Zaragoza (Zaragoza, Spain) for their support in the daily task.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

Sustainability **2020**, 12, 5139 8 of 9

References

- 1. Smallwood, J.; Schooler, J.W. The restless mind. Psychol. Bull. 2006, 132, 946–958. [CrossRef]
- 2. Smallwood, J.; Schooler, J.W. The science of mind wandering: Empirically navigating the stream of consciousness. *Ann. Rev. Psychol.* **2015**, *66*, 487–518. [CrossRef] [PubMed]
- 3. Killingsworth, M.A.; Gilbert, D.T. A wandering mind is an unhappy mind. *Science* **2010**, *330*, 932. [CrossRef] [PubMed]
- 4. Baird, B.; Smallwood, J.; Schooler, J.W. Back to the future: Autobiographical planning and the functionality of mind-wandering. *Conscious. Cogn.* **2011**, *20*, 1604–1611. [CrossRef] [PubMed]
- 5. Smallwood, J.; O'Connor, R.C. Imprisoned by the past: Unhappy moods lead to a retrospective bias to mind wandering. *Cogn. Emot.* **2011**, *25*, 1481–1490. [CrossRef] [PubMed]
- 6. Baird, B.; Smallwood, J.; Mrazek, M.D.; Kam, J.W.Y.; Franklin, M.S.; Schooler, J.W. Inspired by distraction: Mind wandering facilitates creative incubation. *Psychol. Sci.* **2012**, *23*, 1117–1122. [CrossRef]
- 7. Marchetti, I.; Koster, E.H.; De Raedt, R. Mindwandering heightens the accessibility of negative relative to positive thought. *Conscious. Cogn.* **2012**, *21*, 1517–1525. [CrossRef]
- 8. Christophe, V.; Hansenne, M. Dispositional happiness and affective forecasting: Generalor specific effect? *J. Posit. Psychol.* **2015**, *11*, 1–6. [CrossRef]
- 9. Salavera, C.; Usán, P. Repercusión de las estrategias de afrontamiento de estrés en la felicidad de los alumnos de Secundaria. *Revista Electrónica Interuniversitaria de Formación del Profesorado* **2017**, 20, 65–77. [CrossRef]
- 10. Diener, E.; Suh, E.M.; Lucas, R.E.; Smith, H.L. Subjective well-being. Three decades of progress. *Psychol. Bull.* **1999**, 125, 276–302. [CrossRef]
- 11. Diener, E.; Seligman, M.E. Very happy people. Psychol. Sci. 2002, 13, 81–84. [CrossRef] [PubMed]
- 12. Fredrickson, B.L. What good are positive emotions? Rev. Gen. Psychol. 1998, 2, 300–319. [CrossRef] [PubMed]
- 13. Seligman, M.E.P.; Csikszentmihalyi, M. Positive psychology: An introduction. *Am. Psychol.* **2000**, *35*, 5–14. [CrossRef]
- 14. Watson, D.; Clark, L.A.; Tellegen, A. Development and validation of brief measures of positive and negative affect: The PANAS scales. *J. Personal. Soc. Psychol.* **1988**, *54*, 1063–1070. [CrossRef]
- 15. Longo, Y. The simple structure of positive affect. Soc. Indic. Res. 2015, 124, 183–198. [CrossRef]
- 16. Crawford, J.R.; Henry, J.D. The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample. *Br. J. Clin. Psychol.* **2004**, 43, 245–265. [CrossRef]
- 17. Hobbiss, M.H.; Fairnie, J.; Jafari, K.; Lavie, N. Attention, mindwandering, and mood. *Conscious. Cogn.* **2019**, 72, 1–8. [CrossRef]
- 18. Ruby, F.J.M.; Smallwood, J.; Engen, H.; Singer, T. How self-generated thought shapes mood-The relation between mind-wandering and mood depends on the temporal content of thoughts. *PLoS ONE* **2013**, *8*, e77554. [CrossRef]
- 19. Stawarczyk, D.; Majerus, S.; Maj, M.; Van Der Linden, M.; D'Argembeau, A. Mind-wandering: Phenomenology and function as assessed with a novel experience sampling method. *Acta Psychol.* **2011**, *136*, 370–381. [CrossRef]
- 20. Kucyi, A.; Tambini, A.; Sadaghiani, S.; Keilholz, S.; Cohen, J.R. Spontaneous cognitive processes and the behavioral validation of time-varying brain connectivity. *Net. Neur.* **2018**, 2, 397–417. [CrossRef]
- 21. Smallwood, J.; McSpadden, M.; Schooler, J.W. The lights are on but no one's home: Meta-awareness and the decoupling of attention when the mind wanders. *Psychol. Bull. Rev.* **2007**, *14*, 527–533. [CrossRef] [PubMed]
- 22. Smallwood, J.; Fitzgerald, A.; Miles, L.K.; Phillips, L.H. Shifting moods, wandering minds: Negative moods lead the mind to wander. *Emotion* **2009**, *9*, 271. [CrossRef] [PubMed]
- 23. Erickson, S.; Feldstein, S. Adolescent humor and its relationship to coping, defense strategies, psychological distress, and well-being. *Child. Psychiatry Hum. Dev.* **2007**, *37*, 255–271. [CrossRef]
- 24. Saroglou, V.; Scariot, C. Humor style questionnaire: Personality and educational correlates in Belgian high school and college students. *Eur. J. Pers.* **2002**, *16*, 43–54. [CrossRef]
- 25. Sandin, B.; Chorot, P.; Lostao, L.; Joiner, T.E.; Santed, M.A.; Valiente, R.M. Escalas PANAS de afecto positivo y negativo: Validación factorial y convergencia transcultural. *Psicothema* **1999**, *11*, 37–51.
- 26. Ryan, R.M.; Deci, E.L. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annu. Rev. Psychol.* **2001**, *52*, 141–166. [CrossRef]

Sustainability **2020**, *12*, 5139 9 of 9

- 27. Seligman, M. *La Auténtica Felicidad*; B DE BOOKS: Barcelona, Spain, 2002.
- 28. Gross, J.; Sutton, S.K.; Ketelaar, T. Relations between affect and personality: Support for the affect-level and affective-reactivity views. *Clin. Soc. Psychol. Bull.* **1998**, 24, 279–288. [CrossRef]
- 29. Davidson, R.J.; Jackson, D.C.; Kalin, N.H. Emotion, plasticity, context, and regulation: Perspectives from affective neuroscience. *Psychol. Bull.* **2000**, *126*, 890–909. [CrossRef]
- 30. Folkman, S.; Moskowitz, J.T. Positive affect and the other side of coping. *Am. Psychol.* **2000**, *55*, 647–654. [CrossRef]
- 31. Gruber, J.; Mauss, I.B.; Tamir, M. A Dark Side of Happiness? How, when, and why happiness is not always good. *Perspect. Psychol. Sci.* **2011**, *6*, 222. [CrossRef]
- 32. Mrazek, M.D.; Phillips, D.T.; Franklin, M.S.; Broadway, J.M.; Schooler, J.W. Young and restless: Validation of the Mind-Wandering Questionnaire (MWQ) reveals disruptive impact of mind-wandering for youth. *Front. Psychol.* **2013**, 27, 560. [CrossRef]
- 33. Salavera, C.; Urcola-Pardo, F.; Usán, P.; Jarie, L. Translation and validation of the Mind-Wandering test for Spanish adolescents. *Psicol. Refl. Crit.* **2017**, *30*, 12. [CrossRef]
- 34. Lyubomirsky, S.; Lepper, H. A measure of subjective happiness: Preliminary reliability and construct validation. *Soc. Indic. Res.* **1999**, *46*, 137–155. [CrossRef]
- 35. Baron, R.M.; Kenny, D.A. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *J. Pers. Soc. Psychol.* **1986**, *51*, 1173–1182. [CrossRef]
- 36. Hayes, A.F. *Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression Based Approach;* The Guilford Press: New York, NY, USA, 2013.
- 37. Franklin, M.S.; Broadway, J.M.; Mrazek, M.D.; Smallwood, J.; Schooler, J.W. Window to the wandering mind: Pupillometry of spontaneous thought while reading. *Q. J. Exp. Psychol.* **2013**, *66*, 2289–2294. [CrossRef]
- 38. Poerio, G.L.; Totterdell, P.; Miles, E. Mind-wandering and negative mood: Does one thing really lead to another? *Conscious. Cogn.* **2013**, *22*, 1412–1421. [CrossRef]
- 39. Rigoni, D.; Demanet, J.; Sartori, G. Happiness in action: The impact of positive affect on the time of the conscious intention to act. *Front. Psychol.* **2015**, *6*, 1307. [CrossRef]
- 40. Salavera, C.; Usán, P.; Teruel, P.; Antoñanzas, J.L. Eudaimonic Well-Being in Adolescents: The Role of Trait Emotional Intelligence and Personality. *Sustainability* **2020**, 12, 2742. [CrossRef]
- 41. Joseph, D.L.; Chan, M.Y.; Heintzelman, S.J.; Tay, L.; Diener, E.; Scotney, V.S. The manipulation of affect: A meta-analysis of affect induction procedures. *Psychol. Bull.* **2020**, *146*, 355–375. [CrossRef]
- 42. Salavera, C.; Usán, P.; Antoñanzas, J.L.; Teruel, P.; Lucha, O. Affects and personality: A study with university students. *Ann. Med. Psychol.* **2017**, *175*, 353–357. [CrossRef]
- 43. Clark, L.A.; Watson, D. Tripartite model of anxiety and depression: Psychometric evidence and taxonomic implications. *J. Abnorm. Psychol.* **1991**, *100*, 316–336. [CrossRef] [PubMed]
- 44. Kircanski, K.; Thompson, R.J.; Sorenson, J.; Sherdell, L.; Gotlib, I.H. The everyday dynamics of rumination and worry: Precipitant events and affective consequences. *Cogn. Emot.* **2018**, *32*, 1424–1436. [CrossRef] [PubMed]
- 45. Ottaviani, C.; Shapiro, D.; Couyoumdjian, A. Flexibility as the key for somatic health: From mind wandering to perseverative cognition. *Biol. Psychol.* **2013**, *94*, 38–43. [CrossRef] [PubMed]



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).