

The Mediating Effect of Photo-taking Involvement on Photo Sharing and Travel Engagement and Enjoyment

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<Abstract>

Previous research has found that taking photos during travel for the purpose of sharing with others via SNS (social networking sites) induces self-presentational concerns and decreases consumer engagement and enjoyment. However, they tended to use a narrow definition of consumer engagement and enjoyment. While some travelers are reluctant photo takers, others place great importance on photo taking. Hence, immersion in taking and sharing photos as an important aspect of the travel experience as a whole for the former travelers should be considered a positive form of consumer engagement. To address these deficiencies, this research explores the possibility of taking photos can increase consumer engagement and enjoyment by identifying three moderating factors of the causal relationships between them: (1) the level of photo-taking involvement, (2) the existence of a photo-sharing task, and (3) the photo-sharing opponents.

<Keywords>

Travel experience, Hospitality, Photo-taking involvement, SNS, Consumer engagement, Consumer enjoyment

Introduction

The activities of sightseeing and tasting local foods bring enjoyment to travelers. It has been found that such enjoyment is heightened if the traveler is accompanied by companions (cf. Lambert, Gwinn, Baumeister, Strachman, Washburn, Gable and Fincham 2013). Intuitively, the actual presence of a travel companion may not be necessary. The sharing of sightseeing photos and travel stories via social networking sites (SNS) may also serve to enhance travelers' enjoyment (cf. Dehl, Zauberman, and Brasch 2016). Despite the potential positive effect of taking photos to share upon travel enjoyment, the latest research found that taking photos with a goal to share induces self-presentational concern and generates disutility, which decreases engagement and enjoyment in turn (Brasch, Zauberman, and Diehl 2018).

Previous studies tended to use a narrow definition of travel engagement and enjoyment limited to sightseeing and local foods tasting experiences. However, in the real world, there are some travelers regarding photo taking and sharing as more important and enjoyable than sightseeing and local foods tasting activities and, as such they may be more inclined to engage in taking and sharing photos instead of sightseeing and local foods tasting. Hence, immersion in taking and sharing photos as an important aspect of the travel experience for those travelers should also be considered a positive form of engagement. The engagement in taking and sharing photos with a positive feeling could enhance enjoyment of the travel

experience as a whole.

To bridge the gap between previous research and the actual behavior of travelers mentioned above, this research explores the possibility of taking photos can increase consumer engagement and enjoyment by identifying the moderating factors of the causal relationships between them.

We conduct three empirical studies to examine the following three moderating factors: (1) the level of photo-taking involvement, (2) the existence of the photo-sharing task, and (3) the photo-sharing opponents. And the results of these studies indicate that the photo-taking task decreases consumer engagement and enjoyment only in the case of low-involvement. Taking photos increases consumer engagement and, in turn, increases consumer enjoyment among consumers with a high level of photo-taking involvement.

Furthermore, we examine the effects of photo-sharing tasks. We compare consumers who take photos and share them via SNS with those who take photos for self-viewing only in terms of the effects of the photo-taking task on consumer engagement and enjoyment. Additionally, we compare consumers who take photos and share them with close friends to those who take photos and share them only with acquaintances.

By identifying the conditions under which the photo-taking task enhances/reduces consumer engagement and enjoyment, this research provides important implications for practitioners regarding how to manage photo-taking behavior to enhance the consumer experience.

Literature Review

Hedonic experience is a fundamental aspect of people's lives and their well-being. One of the main reasons for this is that the experiences are often shared with others and, thus, they contribute to the value and happiness that people derive from their social relationships (Leary and Baumeister 2000). In recent years, experience has been widely shared with others not only through written and verbal communication but also through photos shared via SNS (cf. Diehl, et al. 2016). Therefore, a better understanding of factors that can influence the enjoyment of experiences is important both to consumers who look for happiness and to the companies that create and market such experiences (cf. Diehl et al. 2016).

Recently, the availability of phone with high-quality camera has transformed the way that people share their experience with others. Photo sharing has become a daily and prevalent activity for millions of people. Therefore, increasing numbers of studies have examined the effects of the photo-taking task on consumer engagement in and enjoyment of the experience. Previous studies have contended that photo taking increases engagement because it requires attention being directed toward the experience that the person wishes to capture, and then it focuses attention on the positive aspects of the experience (Dehl et al. 2016). Early studies have also demonstrated that photo taking enhances enjoyment across a broad range of experiences (e.g., bus tours, meals, museum visits), and they identified engagement as a relevant process that influences whether photo taking increase or decrease enjoyment (Csikszentmihalyi 1997; Higgins

2006).

In contrast, the latest research has found that compared to taking photos to preserve one's memories, taking photos with the intention to share them with others is more than likely to trigger self-presentational concern and thus decrease engagement in and enjoyment of positive experiences (Brasch et al. 2018). However, previous research has tended to use a narrow definition of consumer engagement and enjoyment limited to sightseeing and local foods tasting experiences.

Study 1: Photo-taking involvement as a moderating factor

Hypotheses

Study 1 was designed to examine the level of photo-taking involvement as a moderating factor. Previous research has contended that photo taking decreases consumer engagement and enjoyment, particularly in the case of consumers with the goal to share the photos via SNS. In the experiment, participants were asked to watch a sightseeing video and take share-worthy photos by capturing scenes from the video. The results showed that the levels of engagement and enjoyment perceived by those participants with the goal to share the taken photo were lower than those perceived by those participants who were taking photos only for self-viewing (Brasch et al. 2018). These findings can be explained based on the Information Processing Theory (Bettman 1979) as follows, due to limitations on motivations and/or abilities for processing information, engaging in taking photos consumes a considerable amount of the competence for information processing for the travel experience as a whole. Thus, the participants in the experiment reported that they enjoyed the sightseeing video less because the video-watching (virtual sightseeing) task was interrupted by the photo-taking task. However, consumers in the real world rate the whole travel experience including sightseeing and taking photos. Hence, the laboratory experiment conducted by previous research has failed to measure accurately the degrees of consumer engagement and enjoyment.

Some consumers in the real world are more involved in taking photos than in sightseeing. Such highly-involved photo-taking consumers might find it difficult to engage in and enjoy the experience if photo taking were prohibited. The difference between the participants in previous research and such consumers lies in their level of photo-taking involvement, i.e., the level of importance that they give to taking photos. If photo taking is regarded as less important and even troublesome, then it decreases consumer engagement and enjoyment. In contrast, if photo taking is regarded as important and pleasurable, then the task promotes consumer engagement and enjoyment. Thus, we have proposed Hypotheses 1a and 1b as follows:

H1: Unlike consumers who do not regard photo taking as an important aspect of experiences, consumers who regard photo taking as important are more likely to (a) engage in and (b) enjoy the experience if they face a photo-taking task than if they face no photo-taking task.

Methods

A total of sixty-five university students (55% female; $M_{age}=21$) at a university participated in the experiment. Like previous research (Brasch et al. 2018), all participants were exposed to a three-minute video of a walking tour through Rome and were asked to imagine that they were actually there, participating in the tour. While they were watching the video, all participants were asked to take photos.

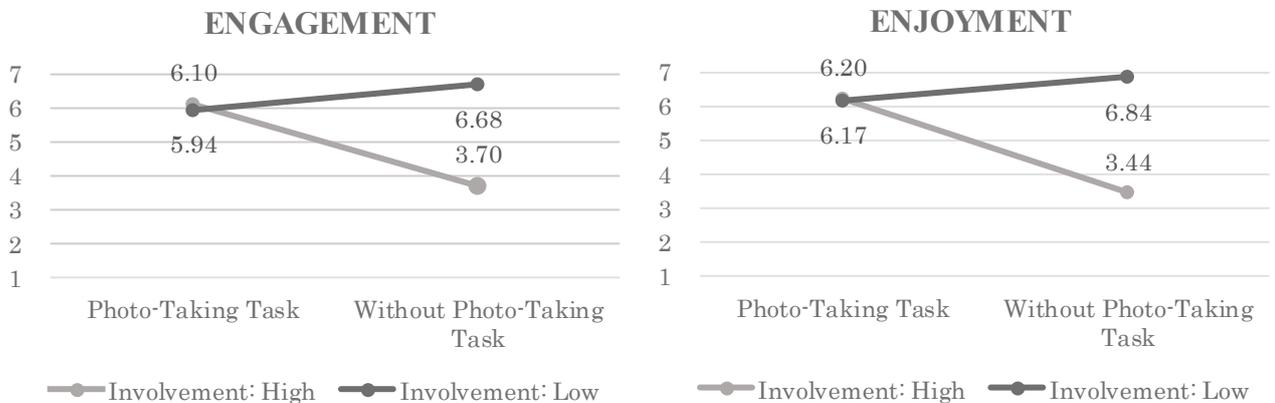
We used a 2 (photo-taking involvement: high vs. low) \times 2 (photo-taking task: yes vs. no) experimental design. Participants were randomly assigned to one of four groups as follows: (1) sixteen participants were asked to imagine that they found it important in their life to take photos (involvement: high) and, therefore, took photos during the experience (task: yes); (2) sixteen participants were asked to imagine that they found it important in their life to take photos (involvement: high), but they were not able to take photos during this particular experience; (3) sixteen participants were asked to imagine that they did not regard photos taking as important in their life (involvement: low), but they were obliged to take some photos because their “friends” expected them to do so; and (4) seventeen participants were asked to imagine that they did not regard photos taking as important in their life (involvement: low), and they did not take photos this time even if their “friends” expected them to do so.

Immediately after watching the video, participants were asked to answer two items on enjoyment and two items on engagement. All items were utilized from previous research (Brasch et al. 2018). The results of the manipulation check indicated that participants in Groups (1) and (2) regarded photo-taking as important and joyful ($M=6.51$, $SD=0.84$), while participants in Groups (3) and (4) regarded photo-taking as less important and troublesome ($M=2.33$, $SD=0.69$, $t=-21.99$, $p=0.01$). In addition, all participants in Groups (1) and (3) took ten pieces of photos in average and, thus, there were no participants to be excluded from the sample data-set.

Results

The results of the analysis are shown in Fig. 1.

Figure 1. The Results of Study 1



Engagement. Consistent with our predictions, a two-way ANOVA test revealed an interaction effect of photo-taking involvement and the existence of the photo-taking direction to consumer engagement in the travel experience as a whole ($F=26.37, p<0.01$). The simple main effect of the photo-taking task in the case that the task was regarded as important was significant ($F=67.72, p<0.01$). Participants who regarded the photo-taking task as important were more likely to engage in the travel experience if they faced the photo-taking task than if there were no photo-taking task. The simple main effect of the photo-taking task in case that the photo-taking task was not regarded as important was insignificant ($F=1.17, p>0.01$). Thus, Hypothesis 1a is supported.

Enjoyment. There was the interaction effect of photo-taking involvement and the existence of the photo-taking task not only on engagement, but also on enjoyment of the travel experience as a whole ($F=40.89, p<0.01$). The simple main effect of the photo-taking task in the case that the task was regarded as important was significant ($F=16.7, p<0.01$). Participants who regarded the photo-taking task as important were more likely to enjoy the travel experience if they faced the photo-taking task than if there were no photo-taking task. The simple main effect of photo-taking task in the case that photo taking is not regarded as important was not significant ($F=2.1, p>0.10$). Thus, Hypothesis 1b is supported.

Study 2: Photo sharing as a photo taking goal

Hypotheses

Study 2 was designed to examine the existence of the photo-sharing task as a moderating factor. Previous research has also argued that the extent to which the photo-taking task reduces consumer engagement and enjoyment depends on whether the photo-taking goal is to share them via SNS or whether they were intended only for self-viewing. According to Brasch et al. (2018), the photo-taking task is more likely to decrease engagement and enjoyment when the photo-taking goal is to share than when it is they are intended only or self-viewing.

However, as mentioned above, previous research has only assumed that consumers who regard photo taking as a less important and a bothersome task would engage in and enjoy the experience less if the photo-taking goal is to share. As for consumers who regard photo taking as important and pleasurable, the levels of engagement and enjoyment would be high when there is a photo-taking task and the photo-taking goal is to share them. Thus, we propose the following hypotheses.

H2: Unlike consumers who do not regard photo taking as an important aspect of experience, consumers who regard photo taking as important are less likely to (a) engage in and (b) enjoy the experience if they face a photo-sharing task than if they take photos solely for the purpose of self-viewing.

Methods

Study 2 was designed to examine the existence of the photo-sharing task as a moderating factor. We used a 2 (photo-taking involvement: high vs. low) \times 2 (photo-sharing task: yes vs. no) experimental design. A total of one hundred fifty six university students (55% female: $M_{\text{age}} = 21$) were randomly assigned to one of four groups, (1) thirty-nine students were asked to imagine that they found it important in their life to take photos (involvement: high) and, therefore, took photos during the experience and share them via SNS (task: yes); (2) thirty-nine students were asked to imagine that they found it important in their life to take photos (involvement: high) and took photos during the experience for self-viewing but not to share them with their “friends” via SNS (task: no); (3) thirty-nine students were asked to imagine that they did not regard photo taking as important in their life (involvement: low), but they took and shared some photos because their “friends” expected them to do so (task: yes); and (4) thirty-nine students were asked to imagine that they did not regard photo taking as important in their life (involvement: low), and they took some photos, but they did not share them even if their “friends” expected them to do so.

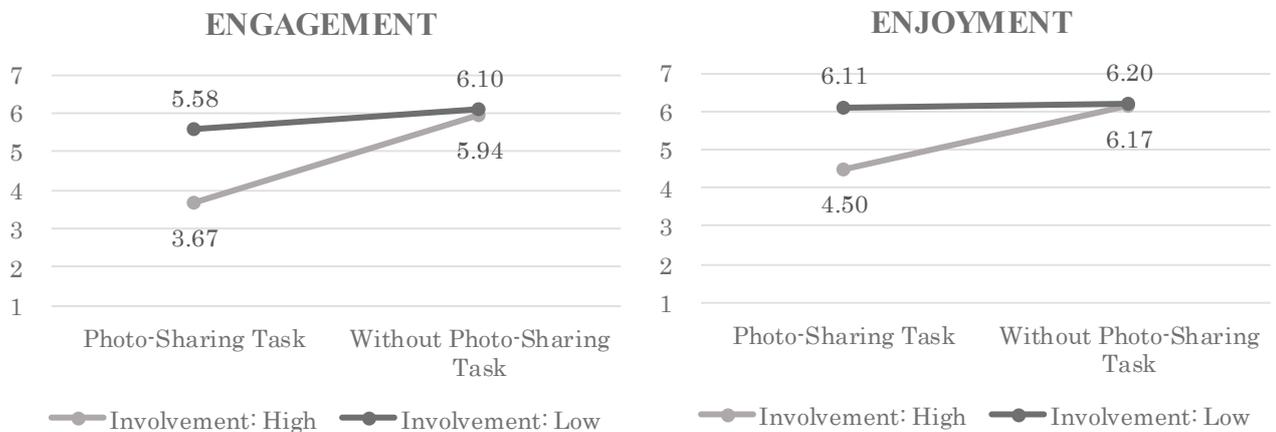
The participants received the same photo-taking involvement instructions as in Study 1. Those participants in the no-photo-sharing groups were asked to take photos using their cellphone camera for the self-viewing purpose, while those participants in the photo-sharing group received instructions to take photos using their cellphone camera and imagine that they were taking the photos for sharing via SNS.

The results of the manipulation check indicated that participants in Groups (1) and (2) regarded photo taking as important and joyful ($M=6.71$, $SD=0.84$), while participants in Groups (3) and (4) regarded photo taking as less important and troublesome ($M=2.5$, $SD=0.35$, $t=-19$, $p=0.01$). In addition, all participants in Groups (1) and (3) took ten pieces of photos in average and thus, there were no participants to be excluded from the sample data.

Results

The results of the analysis are shown in Fig. 2.

Figure 2. The Results of Study 2



Engagement. Consistent with our predictions, a two-way ANOVA test revealed an interaction effect of photo-taking involvement and the existence of the photo-taking direction to consumer engagement in the travel experience as a whole ($F=16.12, p<0.01$). The simple main effect of the photo-sharing task in the case that photo taking was regarded as important was significant ($F=21.1, p<0.01$). Participants who regarded photo taking as important were more likely to engage in the travel experience if they took photos only for self-viewing than if they faced a photo-sharing task. The simple main effect of the photo-taking task in the case that the photo-taking task was not regarded as important was insignificant ($F=1.12, p>0.01$). Thus, Hypothesis 2a is supported.

Enjoyment. A two-way ANOVA test revealed an interaction effect of photo-taking involvement and the existence of the photo-sharing task to consumer engagement in the travel experience as a whole ($F=14.51, p<0.01$). The simple main effect of the photo-sharing task in the case that the task was regarded as important was significant ($F=30.96, p<0.01$). Participants who regarded the photo-taking task as important were more likely to enjoy the travel experience as a whole if they took photos only for self-viewing than if they faced the photo-sharing task. The simple main effect of the photo-sharing task in the case that the photo-taking task was not regarded as important was insignificant ($F=1.2, p>0.01$). Thus, Hypothesis 2b is supported.

Study 3: Photo-taking involvement and photo-sharing audience

Hypotheses

Study 3 was designed to examine the opponents of photo-sharing audience as a moderating factor. Based on the Impression Management Theory (Baumeister and Jones 1978; Leary, Nezlek, Downs, Radford-Davenport, Martin and McMullen 1994), consumers are less likely to manage their impressions if the opponents of photo-sharing audience are made up of close friends because close friends have already formed impressions of the consumers. In contrast, consumers are more likely to manage their impressions if the opponents of photo-sharing audience are made up of acquaintances because impression management is more effective in this context. Given that impression management is important for the consumer, it can affect the level of engagement in the travel experience and, thus, the level of enjoyment (Leary et al. 1994).

Thus, we proposed the following hypothesis:

H3: Both consumers who do not regard photo taking as an important aspect of experiences and consumers who regard photo taking as important are more likely to (a) engage in and (b) enjoy the experience if they should share the photos with close friends than if they should share them with acquaintances via SNS.

Methods

We used a 2 (photo-taking involvement: high vs. low) \times 2 (audience of photo-sharing: close friends

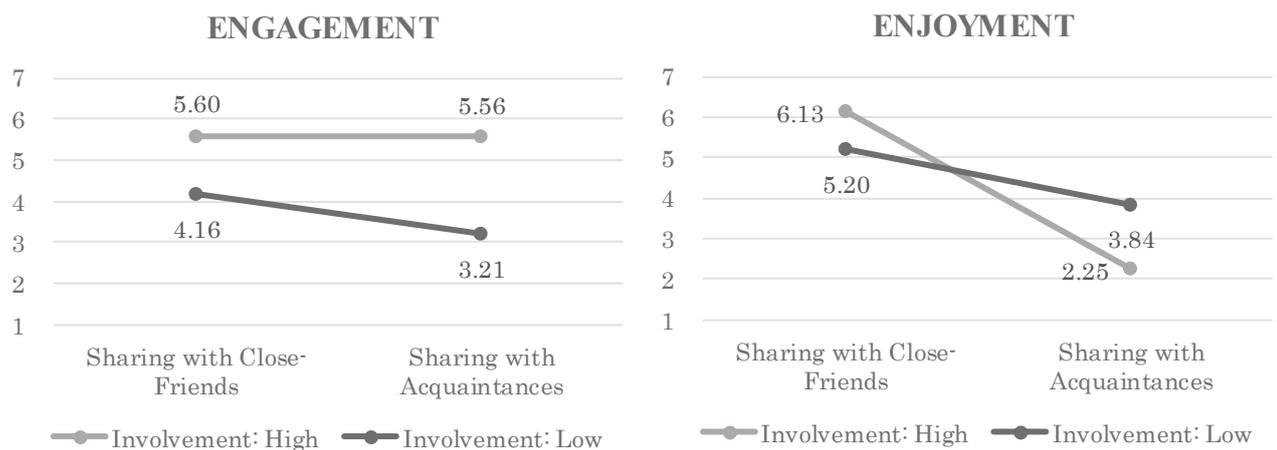
vs. acquaintances) experimental design. A total of one hundred and fifty six university students (55% female: $M_{age} = 21$) were randomly assigned to one of four groups, as follows (1) thirty-nine students were asked to imagine that they found it important in their life to take photos (involvement: high) and, therefore, took photos during the experience and shared them with close friends (photo-sharing audience: close friends); (2) thirty-nine students were asked to imagine that they found it important in their life to take photos (involvement: high) and took photos during the experience and shared them with all of their “friends” via SNS (audience: acquaintances); (3) thirty-nine students were asked to imagine that they did not regard photo taking as important in their life (involvement: low), but they took and shared some photos with their “close friends” because their “close friends” expected them to do so (audience: close friends); and (4) thirty-nine students were asked to imagine that they did not regard photo taking as important in their life (involvement: low), but they took photos and shared them with all of their “friends” via SNS because their “friends” expected them to do so (audience: acquaintances). Participants also received the same photo-taking involvement instructions as in Study 1 and Study 2.

The results of the manipulation check indicated that participants in Groups (1) and (2) regarded photo taking as important and joyful ($M=6.72$, $SD=0.73$), while participants in Groups (3) and (4) regarded photo taking as less important and troublesome ($M=2.4$, $SD=0.35$, $t=-19$, $p=0.01$). In addition, all participants in all of the Groups took ten pieces of photos in average and thus, there were no participants to be excluded from the sample data.

Results

The results of the analysis are shown in Fig. 3.

Figure 3. The Results of Study 3



Engagement. A two-way ANOVA revealed an interaction effect of photo-taking involvement and the photo-sharing task on engagement in the travel experience as a whole ($F=12.13$, $p<0.01$). The simple main effect of photo-sharing in the case that taking photos was regarded as important was significant ($F=5.12$, $p<0.05$). Participants who regarded photo taking as important were more likely to engage in the travel experience if they shared the photos via SNS with close friends than if they shared them with acquaintances. The simple main effect of photo-sharing task in case that photo taking was regarded as unimportant was also significant ($F=7.81$, $p<0.01$). Thus, hypothesis 3a is supported.

Enjoyment. There was also an interaction effect of photo-taking involvement and the photo-sharing task on enjoyment of the travel experience as a whole ($F=35.19$, $p<0.01$). The simple main effect of photo-sharing task in the case that taking photos was regarded as important was significant ($F=16.71$, $p<0.01$). Participants who regarded taking photos as important were more likely to enjoy the travel experience if they shared the photos with close friends than if they shared them with acquaintances via SNS. The simple main effect of photo-sharing task in the case that taking photos was regarded as unimportant was also significant ($F=12.43$, $p<0.01$). Thus, Hypothesis 3b is supported.

General Discussion

Theoretical Contributions and Managerial Implications

This paper proposed and tested a set of hypotheses describing both positive and negative relationships between the photo-taking task and consumer engagement and enjoyment with the following factors as moderators of the relationships: (1) the level of photo-taking involvement, (2) presence of a photo-sharing task, and (3) the photo-sharing audience. The results of our experiments showed that, in agreement with previous studies, taking photos had a negative impact on engagement in and enjoyment of the travel experience if the consumer had low involvement in taking photos or, in other words, he/she regarded taking photos as a bothersome obligation. However, if the consumer was highly involved in taking photos during the experiences, taking photos had positive impacts on consumer engagement and enjoyment. Moreover, positive impacts of taking photos on engagement and enjoyment was increased by photo sharing, particularly by photo sharing with close friends as opposed to acquaintances.

Previous research has implied that travel agencies and travel destination managers should be concerned that travelers' photo-taking behavior might decrease engagement in and enjoyment of the travel experience with the burgeoning popularity of SNS. However, based on the findings of the present study, this is true only for travelers with a low level of involvement in taking photos. Travel agencies and travel destination managers should provide travelers who are highly involved in photo taking during their travel experiences with more opportunities for taking better photos, e.g., by suggesting the best places for taking photos. With regard to travelers with a low level of involvement in taking photos, ways to make it easier for them to perform their "duty" to take photos should be provided (e.g., providing a "safe haven" zone

where taking photos is prohibited) so that these travelers can concentrate on activities such as sightseeing and tasting local foods. Additionally, travel marketers should encourage travelers to be more involved in taking photos by sharing their photos, particularly with their family and close friends to increase consumer engagement and enjoyment.

References

- [1] Barasch, Gal and Kristin Diehl (2018), "How the Intention to Share can Undermine Enjoyment: Photo-taking Goals and Evaluation of Experience," *Journal of Consumer Research*, 6 (April), 1220–1237.
- [2] Baumeister, Roy F and Edward Jones (1978), "When Self-presentation is Constrained by the Target's Knowledge: Consistency and Compensation," *Journal of Personality and Social Psychology*, 36 (June), 608–618.
- [3] Bettman, James R. (1979), *An Information Processing Theory of Consumer Choice*. Massachusetts, Boston: Addison-Wesley.
- [4] Csikszentmihalyi, Mihaly (1997), *Flow and the Psychology of Discovery and Invention*. New York: Harper Perennial.
- [5] Diehl, Gal and Alixandra Barasch (2016), "How Taking Photos Increases Enjoyment of Experiences," *Journal of Personality and Social Psychology*, 111 (August), 119–140.
- [6] Higgins, Tory E. (2006), "Value from Hedonic Experience and Engagement," *Psychological Review*, 113 (July), 439-460.
- [7] Lambert, Marlea, Roy F. Baumeister, Amy Strachman, Issac Washburn, Shelly J. Gable, and Frank D. Fincham (2013), "A Boost of Positive Affect: The Perks of Sharing Positive Experiences," *Journal of Social and Personal Relationships*, 30 (August), 24–43.
- [8] Leary, John, David Downs, Jennifer Martin Radford-Davenport, and Anne McMullen (1994), "Self-presentation in Everyday Interactions: Effects of Target Familiarity and Gender Composition," *Journal of Personality and Social Psychology*, 67 (October), 664–673.
- [9] Tice, Jennifer L. Butler, Mark B Muraven, and Arlene M. Stillwell (1995), "When Modesty Prevails: Differential Favorability of Self-presentation to Friends and Strangers," *Journal of Personality and Social Psychology*, 69 (December), 1120–1138.
- [10] Oviedo, Michelle Tornquist, Tierney Cameron, and Dan Chiappe (2015), "Effects of Media Multi-tasking with Facebook on the Enjoyment and Encoding of TV Episodes," *Computers in Human Behavior*, 51 (October), 407–417.