What motivates people to use social media platforms?

Master Thesis Psychology

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Abstract

Background. Previous research regarding what motivates people to use social media is incomplete and solely based on quantitative methods. Therefore, the purpose of the current study was to explore with a qualitative approach what social media users value about their platforms and what motivates them to use these platforms. Furthermore, a goal was to find out whether psychosocial need satisfaction might be related to higher feelings of intrinsic motivation. The Self-Determination Theory (SDT) was used as a theoretical framework to analyze people's motives regarding social media use. **Method.** An innovative narrative approach, the 'love letter method', was conducted to gain insights into people's thoughts and emotions regarding social media platforms. Participants could choose a social media platform themselves and were instructed to write a love letter to this platform. Thirty-eight people participated in this study. The concepts of SDT, namely the three psychosocial needs (i. e., relatedness, competence, and autonomy) and intrinsic motivation, were used as a basis to derive an initial coding scheme. The final coding scheme was then developed inductively during an iterative analysis process of the letters. Frequencies of categories and codes were calculated, and it was investigated whether letters that reflected more psychosocial needs reflected more intrinsic motivation. **Results.** People valued most about social media platforms that these platforms let them feel more connected to other people, and they valued the feeling of joy they experience when using social media. Findings regarding a potential relation between psychosocial needs and intrinsic motivation turned out to be non-significant. **Discussion.** The 'love letter method' provided interesting insights into the aspects that make participants use social media, such as connection to others and enjoyment of social media use. The satisfaction of psychosocial needs by social media platforms, especially of relatedness and competence needs, might explain why people use social media. However, the concept of intrinsic motivation might have not been optimally conceptualized to give valid results. Therefore, future research is necessary to validate this conceptualization, and to then further explore motivators to use social media. Practical recommendations could be made for social media developers based on the findings of the current study. They might develop new social media platforms that are based on what participants value about existing ones (e. g., they should include features that allow connection to others).

Introduction

"Instagram is superficial and fake!" is common sentence among young adults. There seem to be many people who think critically about social media platforms, yet did 75% of the adult population use at least some type of social media in 2019 (Pew Research Center, 2019). Social media services are applications that allow people to create their own profiles and to connect these profiles with each other (Obar & Wildman, 2015). The most common ones reported in 2020 were Facebook, YouTube, WhatsApp, Facebook Messenger, WeChat, Instagram, and Tik Tok (Statista, 2020).

Due to the fact that social media have such an important part in our life, many studies have been done in this field. Multiple studies indeed reported negative effects of social media on their users' physical and mental health (Breslow, Sandil, Brewster, & Parent, 2020; Cleland Woods & Scott, 2016; Twenge, Martin, & Campbell, 2018; Vogel, Rose, Roberts, & Eckles, 2014). For example, it was found that adolescents who used social media more slept worse, exhibited lower self-esteem and exhibited enhanced anxiety and depression scores, especially when engaging in social media use during nighttime (Cleland Woods & Scott, 2016). Also it was found that people who used Facebook more exhibited lower feelings of self-worth in their lives in general, as well as lower feelings of self-worth during actual Facebook usage (Vogel et al., 2014).

Although many studies have found negative effects of social media usage, there also seem to be positive effects. For example, it was found that social media usage can improve the ability to socialize (Valkenburg, Peter, & Schouten, 2006). When using 'friend networking sites' more, participants felt better and more worthy regarding social contacts compared to those who used these websites less (Valkenburg et al., 2006). However, this effect came up only when users received positive feedback by others. In contrast, when they received negative feedback, people's social self-worth and well-being decreased.

The effect of social media use on users' self-esteem has also often been studied. However, the results are inconclusive. On the one hand, it was found that when Facebook users created and viewed idealistic profiles of themselves rather than profiles that represented their actual selves, their self-esteem increased (Gonzales & Hancock, 2011). On the other hand, the discrepancy between the ideal and actual self has rather be seen as having unhelpful effects on users' self-esteem by social media usage in previous studies (e. g., Vogel et al., 2014). Furthermore, a study of Jang and Cho (2018) found the opposite effect that Gonzales and Hancock (2011) reported. In this study, it was found that Facebook users who revealed their

real self rather than a strategic self that preliminary focused on their positive characteristics exhibited higher self-esteem and feelings of happiness.

As previous studies posed conflicting results regarding the effects of social media on users' physical and mental health, it seems as if there is no clear-cut solution to say if social media are itself 'good' or 'bad'. It seems to depend on the individual, on its usage patterns, and also on the other users of the particular social media platforms if these media can have helpful or rather unhelpful effects. However, although many studies have been conducted regarding helpful and unhelpful effects of social media use, only limited research has been done regarding *people's motives* to use social media platforms. One study assessed social media users' motivation to share content on social media platforms. Results were that ten motivators played a role: enjoyment, self-efficacy, learning, personal gain, altruism, empathy, social engagement, community interest, reciprocity, and reputation (Oh & Syn, 2015). Still, previous research has focused on only a limited set of motivations and was done by means of quantitative methods. Therefore, it is necessary to further explore what exactly individuals value about their social media platforms and what motivates them to use them. One framework that can aid in better understanding users' motives and their subjective positive experiences regarding social media usage is the *Self-Determination Theory (SDT)*.

Self-Determination Theory

SDT states that humans' motivation mainly arises from the satisfaction of several psychosocial needs they have. These psychosocial needs are relatedness, autonomy, and competence (Deci & Ryan, 1985). The psychosocial need *relatedness* includes that humans have the feeling of being valuable for other people, and also that one has people one values in one's life. Thus, it is enhanced by feeling included and respected in one's environment, whereas it is decreased by feeling excluded and criticized. The psychosocial need *autonomy* includes that humans have the feeling of doing something voluntarily instead of being forced to do something. Thus, it is strengthened by having a personal choice in decision-making processes. The psychosocial need *competence* includes that humans feel capable of mastering tasks in their lives. When they experience a certain degree of challenge, the feeling of competence is increased. However, there needs to be a balance between ideal challenges and challenges that are perceived as too high for the competence need to be satisfied.

Furthermore, a central concept in SDT is (intrinsic) motivation, which is assumed to arise when the basic psychosocial needs are fulfilled. Thus, the satisfaction of relatedness, autonomy, and competence needs forms the basis of reaching human motivation (Ryan & Deci,

2000). The concept of *intrinsic motivation* forms the right end of a continuum from amotivation to intrinsic motivation (Deci & Ryan, 1985). When experiencing amotivation, individuals are assumed to neither feel motivated from an external source (such as a certain deadline for a university project) to do something, nor feel motivated from within. Amotivation is related to outcomes that are not beneficial for an individual (Vallerand & Pelletier, 2008). Furthermore, as Ryan and Deci (2000) stated that the satisfaction of the psychosocial needs is related to higher intrinsic motivation, it is likely that none or less of their psychosocial needs is fulfilled if someone experiences amotivation. The middle of the continuum forms extrinsic motivation, which includes for example rewards or punishments, but also somewhat more internal motivators such as personal values and goals. Intrinsic motivation, the right side of the continuum, includes that individuals' actions are entirely determined from internal sources, which consist of genuine interest and enjoyment to do something.

There is scientific evidence that the satisfaction of autonomy, competence, and relatedness needs, as well as the concept of intrinsic motivation, are connected to physical, emotional, and psychological well-being (Lin, 2016; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2008; Waterman, 2005; Webster, 2008). Thus, people tend to feel better if their basic needs are fulfilled and if they are intrinsically motivated to engage in certain activities. Furthermore, they tend to lead more meaningful lives and feel more capable to master their tasks in life.

In the following part, it will be explained how every component of SDT (i. e. relatedness, autonomy, competence, and intrinsic motivation) might reflect something that users value about social media platforms.

Relatedness and social media. Social contacts are an essential component of social media platforms. A study of Lin (2016) indicated that Facebook has the potential to aid users in satisfying their relatedness need and thereby enhance their well-being. Thus, it is likely that users value about social media platforms that they can have positive relationships with others there. This might help them to feel more included in their environment and more connected to other people.

Autonomy and social media. Social media platforms offer several opportunities that users might value because they give them the feeling of being autonomous in their usage. For example, there is evidence that when people experience self-control during media use, they do enjoy using these media more (Ryan, Rigby, & Przybylski, 2006). Regarding social media, it might be that users enjoy these media because they are autonomous in deciding what they want to see on the particular platform. As social media platforms offer several personalization

options, such as following certain profiles one values, users can make their own choices how they want to use their platforms. Furthermore, it is possible for users to control what other people see about their personal profiles on social media.

Competence and social media. Social media platforms might aid users in managing challenges and tasks of their lives. There is scientific evidence that when experiencing competence during media use, people enjoy using these media more (Ryan et al., 2006). Social media services offer several possibilities to feel more competent, such as by notifications that remind users to not forget important dates and events, or by reading educational posts and thereby enhance their knowledge. Therefore, it is likely that social media users value social media platforms more when they experience these feelings of competence.

Intrinsic motivation and social media. As mentioned above, (intrinsic) motivation is assumed to arise when the basic psychosocial needs are fulfilled. Therefore, it can be expected that when users' basic psychosocial needs are satisfied on social media platforms, it is likely that an intrinsic motivation to use these platforms arises. It was found that the motivation behind using social media platforms is crucial for whether its use turns out to be rather helpful or unhelpful (Manuoğlu & Uysal, 2019). Specifically, Facebook users who felt intrinsically motivated to use this platform exhibited higher daily well-being than users who were extrinsically motivated (Manuoğlu & Uysal, 2019). Furthermore, there is evidence that enjoying media use is related to the satisfaction of the three psychosocial needs (Tamborini, Bowman, Eden, Grizzard, & Organ, 2010). Thus, it might be that users are motivated to use social media platforms because they value the feeling of enjoyment these platforms give them (which would also be in line with Oh & Syn, 2015). This enjoyment might in turn be the product of need satisfaction by the platforms.

The current study

In the current qualitative study, it will be explored what social media users value about their platforms. SDT will be used as a theoretical background to analyze what motivates people to use these social media platforms. Thus, the concepts of relatedness, autonomy, competence, and intrinsic motivation will be used as a basis to explore what people value about the social media platforms they use. As indicated above, most research on this topic was done with quantitative methods. Therefore, more qualitative research is needed and the chosen method for the current study will be an innovative form of narrative approach, namely the 'love letter method'. This method can prompt people's personal thoughts, values, and emotions (Nejar, 2017). It is considered as appropriate for the current study because the purpose will be to explore

people's personal experiences with social media, what they value about them and what motivates them to use these media. Furthermore, as Ryan and Deci (2000) indicated that intrinsic motivation mainly arises when the three psychosocial needs are fulfilled, it will be explored whether intrinsic motivation comes up more frequently in letters in which these needs are fulfilled. Connected to that, the research questions that will be investigated in the current study are:

1. *What do people value about the social media platforms they use?*
2. *In how far can humans' psychosocial needs (i. e. relatedness, competence, and autonomy) and the concept of intrinsic motivation explain why people use social media platforms?*
3. *Do letters in which more psychosocial needs are fulfilled also reflect more intrinsic motivation?*

Method

Design

A qualitative research design was chosen for the current study to explore people's personal thoughts about social media platforms. Participants were asked to write a love letter to a social media platform of their choice. Ethical approval was given by the Ethics Committee of the University of Twente (Behavioral, Management, and Social sciences).

Participants

Participants were recruited via a link (created on the platform Qualtrics) that was shared with acquaintances, family and friends of the researcher via WhatsApp. Furthermore, the link was distributed via the SONA-system of the University of Twente, where students of that university could take part. The SONA-system is a platform that allows graduating students to publish projects for their theses and thereby helps them with their data collection. Undergraduate students can then sign up for these projects, and they receive credits for their participation afterwards. Collecting study participation credits is an essential part of the bachelor's program that students need to fulfill at the University of Twente.

Thirty-nine people initially took part in the current study. Exclusion criteria were not giving informed consent, being younger than 18 years, not using social media, and low motivation to write the letter. Thus, participants who wrote texts that did not make sense contentwise, such as randomly writing down letters, were excluded from the study. After exclusion of one participant, 38 people remained. This participant was excluded as her letter indicated low motivation to take part because she just copied the instruction text in the letter box.

Participants were aged between 18 and 48 years, the majority was female (76%) and German (89%; see Table 1 for all demographic variables). Every participant except one indicated that he/she uses social media every day, with an average of 2.16 hours per day. The most frequent chosen social media platforms for the letters were Instagram (44%), followed by Facebook (26%) and Pinterest and WhatsApp (each 8%). Three participants did not mention a specific platform in their letters (8%). Snapchat and Tik Tok were each chosen once (thus, each 3%). Participants could take part in this study voluntarily. Furthermore, students had the possibility to receive study participation credits if they took part via the SONA-system.

Table 1

Background characteristics of the 38 participants

Demographic variable	N	Percentage (%)
Age (mean), years (SD)	23.89 (4.97)	
Range of age, years	18 - 48	
Gender		
Female	29	76
Male	9	24
Nationality		
German	34	89
Dutch	1	3
Other	3	8
Social media usage		
Less than once a week	0	0
Once a week	0	0
2-3 times a week	0	0
Several times a week	1	3
Everyday	37	97
Social media usage per day		
Less than 1 hours	2	5
1 hour	11	29
2 hours	12	32
3 hours	7	18
4 hours	5	13
5 hours	0	0
6 hours	1	3
7 hours	0	0
More than 7 hours	0	0

Materials

    Demographics. At the beginning of this project, participants were asked about their gender, age, and nationality. Furthermore, they were asked how often they use social media per week, and how much time they spend per day using social media on average (see Table 1 for all answer options).

    Love letter to a social media platform. As mentioned above, the chosen method for this study consisted of writing a love letter to a social media platform (see Appendix A for the instruction used in the current study). The rather open structure of a love letter was assumed to help participants to write down whatever came into their minds without thinking too much. This was assumed to be useful for the exploration of their rather unbiased personal thoughts and emotions.

In the current study, the letter could be written in English as well as German, because many acquaintances of the researcher were Germans. It was assumed that it might be easier for participants to show emotions and personal thoughts when the letters could be written in their native language. The character number was set to 200 words minimum to ensure that participants did not write down some words and then go on to the next block of the project. There was no word maximum. However, participants were instructed to not spend more than ten minutes on writing their letters because as indicated above, they should spontaneously write down what came into their minds without overthinking the content of their letters too much.

Procedure

Before the actual study, pilot tests were conducted with three participants who gave some suggestions regarding the study instructions. After adjusting the feedback of the pilot testers, data were collected.

At the beginning of the current study which was conducted via Qualtrics, participants were welcomed and told by whom the study was conducted. They got to know about the background and purpose of the study, the duration, the interests of the researcher, and the advantages of participating. Furthermore, they were informed that there were no assumed risks and disadvantages by participating, that their data will be anonymized, and deleted after four months. Participants could contact the researcher if questions were left. Afterwards, they were asked to give their informed consent.

After signing informed consent, participants had to fill in their background data and write the love letter. At the end of the project, participants were thanked for their participation. Furthermore, contact details of the researcher were shown again and participants had the possibility to contact the University of Twente for complaints regarding the study.

Data analysis

After finishing the data collection, letters were uploaded to ATLAS.ti version 8.4.24., a software for qualitative data analysis. This program was then used to code the letters.

The initial coding scheme (see Appendix D) was developed deductively based on the components of SDT. The three psychosocial needs (i. e. *relatedness need satisfaction, autonomy need satisfaction,* and *competence need satisfaction*) as well as *intrinsic motivation* were used as categories to investigate what people value about social media and what motivates them to use these media. According to SDT, intrinsic motivation mainly arises when the three psychosocial needs are fulfilled (Ryan & Deci, 2000). Therefore, in the current study, intrinsic

motivation was assumed to be more frequent in letters in which the three psychosocial needs were fulfilled. However, Ryan and Deci (2000) also mentioned that the link between the psychosocial needs and intrinsic motivation only counts when the activity itself already elicits an intrinsic motivation in people. Therefore, intrinsic motivation was also considered as a separate concept to explore whether it might play a separate role apart from the psychosocial needs regarding what users value about their social media platforms.

Several initial codes were assigned to the four categories. These codes and their explanations were taken from definitions of the different components of SDT as mentioned in the introductory part of this study. Furthermore, a graphic representation of SDT, as developed by Cook and Artino (2016; see Appendix B) was used as a basis for the initial formulation of codes. Additionally, a quantitative measurement (Basic Psychological Need Satisfaction and Frustration Scales; see Appendix C for the items) was used as an inspiration to develop initial codes for the three psychosocial needs.

With the initial coding scheme, several letters were analyzed. They were screened for the initial codes and several new codes (e. g., personal memories and dependency) were added based on the content of the letters. Two coders analyzed three letters independently to check for interrater reliability. Krippendorf's alpha coefficient was .78. The remaining letters were then analyzed by one coder. The coding scheme was adjusted in six rounds of coding till a final coding scheme could be derived (see Appendix E for the final coding scheme). Thus, the coding process started deductively based on the components of SDT and continued inductively by adjusting the coding scheme based on the content of the letters in an iterative process. With the final coding scheme, all letters were then coded again.

Generally, only one code was assigned to text sections, except when these sections were considered as reflecting multiple codes at once. Sections in the letters that were considered as entirely negative thoughts about social media platforms were not coded. As the purpose of this study was to find out what people *value* about social media platforms, these sections were considered as redundant to code. However, they were taken into account in the data analysis because they could give rise to emotions and contradictions within letters of particular participants. Introductory and closing sentences of the letters were also not coded if they were not regarded as giving valuable results, such as sentences about how long a person knows a social media platform already. The quotes used for the results section of the current study were translated to English.

Apart from exploring the different categories and codes in the letters, it was analyzed whether intrinsic motivation might be the result of the satisfaction of the three psychosocial

needs as Ryan and Deci (2000) indicated. A co-occurrence table was done with ATLAS.ti to get an overview of the psychosocial needs and intrinsic motivation per letter. All codes except those belonging to intrinsic motivation were counted as psychosocial needs because the codes were initially developed based on these needs. Additionally, they were regarded as belonging to the three needs also in the final coding scheme (see Appendix E). The total count of psychosocial needs across all letters was 179. This number was divided by the number of participants (n = 38) to compute the average of psychosocial needs per letter (= 4.71). Based on this average, participants could be divided into two groups. Group one was considered as reflecting more psychosocial needs than average and group two as reflecting less psychosocial needs than average. For every participant in both groups, it was calculated how many psychosocial needs he/she exhibited in his/her letter. This number was divided by the number of words in each letter, which was assumed to be useful to have a unit for making comparisons between participants. Furthermore, this result was then divided by three because of the three psychosocial needs that should be compared to the single code of intrinsic motivation. Additionally, it was calculated for every participant in both groups how many times the code intrinsic motivation was mentioned, and this number was also divided by the number of words in each letter. Then, the results regarding intrinsic motivation were divided by the results regarding the psychosocial needs. Thereby, it could be analyzed whether participants who reflected more psychosocial needs in their letters exhibited a higher score in intrinsic motivation and vice versa. Additionally, a Pearson's r test was conducted with the uncorrected scores of intrinsic motivation and psychosocial needs across participants to further investigate the relation between both variables. Furthermore, a scatterplot was created to get a visualization of intrinsic motivation per psychosocial needs. The uncorrected scores were plotted to get more differentiation in the scores as there was almost no variance in the standardized scores (see Appendix F). Furthermore, no split took place between participants here to get an overall impression of the relation between psychosocial needs and intrinsic motivation.

Another analysis was done to find out whether certain codes were more reflected in letters addressed to certain social media platforms than in other ones. The purpose of this additional analysis was to validate results of the current study because it was assumed that when participants chosen platforms reflected certain codes that fitted to the platforms' original purpose, the letters were more likely to be written in an authentic manner and with at least some effort. The letters were first split up based on the social media platforms they were addressed to. With these letters, further co-occurrence tables were done by ATLAS.ti to get an overview of codes per letters belonging to a certain social media platform. Thus, a co-occurrence table

was done for every social media platform in relation to all codes. For every code, it was analyzed how often it came up in each platform. This number was then divided by the total number of letters that were addressed to the particular platform to be able to make comparisons between platforms. Furthermore, for every code, a mean was calculated by dividing the total number the particular code was mentioned in all the letters by the number of all the letters. This was done to get an overview of how often each code was mentioned per letter on average. Thereby, the averages belonging to the particular social media platforms could be compared to that average, to get an idea if the particular code was mentioned below or above average regarding that platform.

Results

Participants' motivations to use social media platforms

Relatedness need satisfaction. Overall, the category 'relatedness need satisfaction' could be found in 31 out of 38 letters and 70 times in total. This category included the codes *connection* and *personal memories* (see Table 2 for an overview of all codes and frequencies).

Connection. Connection was the most frequent code found in the letters, mentioned 63 times in total. Thus, many participants indicated that they value social media platforms because these platforms allow them to have more intensive and/or frequent social contacts.

Overall, participants reported that social media platforms eased the connection and communication to other people. Participant 6 wrote about Instagram: *"You always connect and make me feel more connected to my friends and you encourage me to reach out to people I haven´t spoken to in a while."* Furthermore, the letters indicated that social media platforms let participants feel less alone: *"I am not feeling so alone anymore."* (Participant 4 about Facebook) Participant 27 indicated that without using WhatsApp, he would barely engage in social contacts:

> *Oh what would I do without you, definetely not partaking in any sort of social life that for sure! You keep me in contact with my friends and family, many of whom I see every day but many who I would have no way of knowing how they are doing right now (…).*

However, he revised his thoughts regarding the connection to his friends afterwards and seemed to feel guilty to not WhatsApp the way he could use it:

> *Although I should admit at this point, I haven´t used you to your full potential and I´m slacking off more and more. Friends who I usually contacted every other day, now have to wait days/weeks or even months for a reply.*

Many participants wrote about people they met all around the world, and regarded social media platforms as an essential medium to keep contact to these people. As Participant 4 wrote about Facebook:

> *We see each other everyday and have chats with my friends and family all over the world! Since I met you staying in touch with them was so much easier! And less*

13

expensive. Speaking via Phone was too expensive and writing emails was not so personal.

Furthermore, social media allowed participants to have a larger social network: *"You bring the life of so many people that I'm interested in into my daily live. Through you I can contact friends and even influencers that I would otherwise not be possible to reach."* (Participant 35 about Instagram) Participant 38 stated that she met her boyfriend on Instagram: *"(...) offering the opportunity to find a boyfriend through you (...)"*.

Personal memories. The code personal memories came up seven times, meaning that participants indicated that they value that social platforms store memories they made together with others and regularly remind them of these memories. Furthermore, participants connected these memories with some sort of emotions.

Participant 9 wrote about Facebook: *"So many photos and memories, I love the reminders you send me for friendship anniversaries and year reviews! I takes me back to the older days..."* Participant 18 stated that Instagram enabled it to evoke positive emotions in her by means of the memories: *"Thank you for reminding me of funny, emotional, and happy moments in times I need them the most."*

Autonomy need satisfaction. Codes belonging to the category 'autonomy need satisfaction' were mentioned quite regularly in the letters (47 times in total). Overall, this category could be found in 30 out of 38 letters. It included the codes *dependency*, *challenging own opinion*, and *choice*.

Dependency. This code was assigned to the category 'autonomy need satisfaction' because it was assumed to lower autonomy. It was indicated 17 times that participants feel motivated to engage in social media usage because they feel dependent on these platforms and cannot refrain from using it. As Participant 27 wrote about WhatsApp: *"I feel tired of using you sometimes, yet you always draw me back."*

Some participants felt dependent on social media platforms but still enjoyed using them. As Participant 36 stated about Instagram: *"Without your daily amusement I would not be able to survive."* Participant 32 wrote about Instagram: *"You're the one with who I want to spend all my time, I read through you and you read through me."*

Participant 6 noticed that Instagram usage sometimes stops her from engaging in her daily duties, but that she can still not refrain from using it: *"That is not always the best, for example, when I should write an assignment, but I can never be angry at you."* Participant 38 noticed that Instagram usage could also have negative impacts, but she still did not manage it to stop its usage:

> *I have tried to take a break from you because I have heard various people complaining about how much young people are spending on the websites but, to be honest with you I always felt like something was missing. Something did not feel right. So I gave up and continued using you.*

Challenging own opinion. It was mentioned 16 times that participants' motivation to use social media platforms arose because after critical thoughts about these platforms, they became curious to use it. As Participant 32 wrote about Instagram: *"I have to confess that at the beginning I wasn't really convinced, but I decided to download you."* Participant 1 had negative prejudices regarding Tik Tok in the first place: *"Initially, I thought you were a platform that was all about trivial dance videos of teenage girls. However, I quickly realized that you offer me much more than that."*

Two participants found it uncommon to engage in social media usage in the beginning, but then they became used to it and started to enjoy it. For example, Participant 33 wrote about WhatsApp: *"In the beginning it was unusual to communicate with you so often. But then I learned to appreciate you."*

Many participants heard of other people that they used these platforms already, but they were not convinced in the first place. As Participant 14 wrote about Instagram:

> *When I first met you, I was not sure what u should think of you. When more and more of my friends started using you, I also decided to give it a try. At first, I was not very active, but rather watching what's going on. But then, (...)*

Choice. It was indicated 14 times that participants' value social media platforms due to personal decisions they can make on these platforms. Thereby, social media platforms offer a lot of personalization options, as Participant 5 stated about Facebook:

[Y]ou can be used as a personalized newspaper. You offer that I can select about which topics, companies or persons I get to know the newest information. Beside of that I like that I can insert personalized information so that I will not forget about my favorite books, musicians, movies and other cultural stuff.

Participant 32 stated about Instagram: *"You choose your username, catchy but not too much, then you choose a photo for your profile. so many important choices!"*

Some participants enjoyed that social media platforms can be used to the extent they want to use it. This makes it e. g. possible to use it multiple hours a day, but also to not use it at all for some time, which improves its usage to some extent. For example, Participant 3 wrote about Pinterest: *"We don't see each other all the time, but that's what makes our relationship so special."*

Competence need satisfaction. In total, the category 'competence need satisfaction' could be found in 27 out of the 38 letters and 64 times in total. This category included the codes *inspiration*, *mastery*, and *accomplishment*.

Inspiration. The code *inspiration* was mentioned 26 times. Thus, participants valued social media platforms because they get inspired and/or creative by using it. For example, Participant 12 stated about Pinterest: *"Thank you for your tireless creativity, which inspires me again and again to become active myself and try new things."*

Some participants stated that social media platforms helped them to become acquainted with different opinions and lifestyles, for example: *"You share my interest in so many topics that raise awareness about things that may go wrong in our society and to find ways for an open and more tolerant and sustainable way of living."* (Participant 30 about Facebook) Participant 17 wrote about Facebook: *"You also help me to think outside the box by showing me views that may not correspond to the opinion of many."*

Because of being inspired by social media platforms, some participants felt more motivated to engage in different kinds of activities. For example, Participant 22 wrote (social media platform unknown): *"You also motivate me from time to time and show me ideas, e.g. when doing sports with workouts."*

Mastery. It was indicated 23 times that participants value about social media platforms that they became more capable of mastering tasks and challenges of their lives. For example,

Participant 4 stated about Facebook: *"I can always reach out and when I have problems sleeping, having to cope with depression or anxiety you help me to get back on my feet."*

Generally, many participants thanked social media platforms for always being there and for enhancing their mood. For example, Participant 18 wrote about Instagram: *"Thank you for always being there for me."* Participant 25 wrote (social media platform unknown): *"You make me smile when I feel down through your memes."*

Social media platforms helped many participants to feel more relaxed in stressful times. As Participant 38 wrote about Instagram:

> *You also accompanied me through my stage of graduating. You helped me to find a way to distract myself with content that would make me laugh or think about myself and at the same time would make me forget about the stress that was surrounding me.*

Due to reminders of social media platforms, some participants managed it to keep in mind important dates: *"Also, thank you for reminding me of birthdays - I am so bad with dates, but I hate forgetting someone's birthday so I always check if there are upcoming ones."* (Participant 9 about Facebook) Participant 7 stated about Snapchat: *"So I can never forget my friends' birthdays, I am always reminded of great parties, concerts and holidays (…)."*

In his extensive letter, Participant 23 wrote critically about the competition on Instagram, but at the same time about its potential. He wrote that he knows about challenges Instagram brings along, but regarded himself as ready to face these challenges:

> *It certainly means a challenge to wish one's fellow human beings (…) only the best and to be happy for them when they have positive experiences that they then share on Instagram. If this change of values succeeds, however, it will be an incredible gain for humanity, also for the rest of life. I am aware that not everyone dares to take this step, but I feel ready to face this extraordinary challenge and to form a bond with you.*

Accomplishment. Fifteen times, it was reflected that participants' valued about social media platforms that these platforms helped them in achieving a personal goal or inner wish.

Participant 5 could reach a lot of people because she was 'famous' on Facebook: *"When I was younger you made me famous and people that I never knew before would approach me and ask me to make pictures, because they heard and seen about me from you."* However, she admitted later in her letter that this fame had negative consequences: *"Then this all was too*

much from me and I got bad anxiety and paranoid thoughts. I deleted everything from every social media platform and completely withdrew from this world for a lot of years." She wrote that she now uses Facebook again and sees its advantages, but still behaves a bit distant: *"(...) though I am still a bit hesitant to share information about me because of our history and I am just writing with one person so far."*

Participant 19 made similar experiences on Instagram. She achieved that she feels better due to 'likes' on this platform: *"The likes you give make me feel better (...)."* However, in the same sentence, she added that there is also a negative side of 'likes' and 'followers' on Instagram: *"(...) but if it's not enough, self-doubt overcomes me. Then I wonder if I'm not good enough or if I'm not beautiful enough. Also when followers unfollow me, these doubts overcome me."* Thereby, Participant 19 stressed the ambivalence of Instagram in her letter. On the one hand, she wrote that she values the good times on Instagram, but on the other hand, she experiences feelings of never being enough.

Participant 21 wrote about the acknowledgement by others she achieved by using Instagram: *"Back when I was still posting a lot myself, you always gave me the confirmation that I needed at the moment and couldn't get anywhere else (...). "* However, she learned that this confirmation was only short-term: *"(...) Even if it was years ago and I now know that this kind of confirmation is not permanent, you gave me what I wanted and needed at that time."*

Some participants could enhance their knowledge and educate themselves by using social media platforms. For example, Participant 1 wrote about Tik Tok: *"Through you I was able to broaden my horizon and learn a lot about languages, cultures and also professional things."* Participant 30 wrote that she knows what is going on in the world by means of Facebook: *"You are an expert in providing me with information about news and keeping me up to date politically."*

Intrinsic motivation. The category 'intrinsic motivation' could be found in 32 out of 38 letters and 69 times in total. It included the codes *enjoyment*, *thrill*, *flow experience*, and *expedient*.

Enjoyment. Enjoyment was a very frequent code, mentioned 52 times in total. These participants indicated that they feel happy and entertained when using social media platforms. For example, Participant 36 wrote about Instagram: *"You provide so much fun in my life that I have to write this letter."*

Many participants reflected a feeling of joy when using social media platforms. As Participant 6 wrote about Instagram: *"You always entertain me and make me laugh. You make me smile nearly every time and I do enjoy spending time with you a lot."*

Furthermore, many participants described specific experiences they made on social media that provided them with joy and entertainment. As Participant 13 wrote about Facebook: *"I also loved games that I could play through you with my friends!"* Participant 11 wrote about Instagram: *"I also started to enjoy art and jokes and informative things with you."* Participant 35 wrote about Instagram: *"(...) the sexy women you show me all the time...wow, I am blown away."*

Some participants wrote about the helpful and unhelpful sides of social media platforms and concluded that they would not want to miss social media platforms in the end. For example, Participant 9 concluded about Facebook: *"I still love you for all your functions and despite your flaws. Thanks for being a part of my life for such a long time already!"* Participant 3 wrote that she sometimes needs distance from Pinterest, but she then concluded: *"But when we see each other again, it is always positive and nice."*

Furthermore, some participants noticed that their relationship toward social media platforms changed, but that they still enjoy it. As Participant 11 wrote about Instagram: *"Our relationship has changed from time to time but I feel like it is still very strong and may have even gotten stronger than in the beginning."*

Thrill. It was indicated nine times that participants feel motivated to use social media platforms because they perceive them as exciting and turbulent. For example, Participant 5 wrote about Facebook: *"We had quite a turbulent relationship together."*

Four participants wrote that they experience ups and downs with social media platforms. As Participant 16 wrote about Instagram: *"[Y]ou can say we have both our ups and downs."* Participant 34 indicated about Instagram: *"Over the years, our relationship was on and off."*

Two participants explicitly mentioned their excitement when engaging in social media usage. For example, Participant 32 wrote about Instagram: *"I remember the day I posted my first picture, so much pressure, and excitation at the same time, you made me thrilled."*

Flow experience. It was reflected four times that social media platforms are valuable because of a feeling of being totally immersed in these platforms when using them. As Participant 6 wrote about Instagram: *"[I]t's just too easy to get lost in you."*

Participant 12 wrote that she forgets the time when using Pinterest: *"In the beginning, I've lost myself in you for hours and was immersed in the versality of your photos and posts."* Also Participant 6 wrote that she has no feeling of time anymore when using Instagram: *"When I am with you time flies by and you make hours feel like minutes."*

Participant 13 wrote that she sometimes uses Facebook without even noticing it: *"Sometimes, I devote myself to you completely unconsciously, although I planned to do something entirely different with my smartphone."*

Expedient. Participants valued social media platforms because they serve as a means to an end and the code expedient was reflected four times in total. As Participant 17 wrote about Facebook: *"With you one can easily bridge boredom and pass the time."* Also Participant 21 wrote that she can easily bridge boredom by means of Instagram: *"(...) I'm happy that you are still there today when I'm bored and search for a way to keep myself busy."*

Table 2

Overview of frequencies per category and code as found in the 38 letters

Category	Category total n [1]	Code	Code total frequency [2]
Relatedness need satisfaction	31	Connection	63
		Personal memories	7
Autonomy need satisfaction	30	Dependency	17
		Challenging own opinion	16
		Choice	14
Competence need satisfaction	27	Inspiration	26
		Mastery	23
		Accomplishment	15
Intrinsic motivation	32	Enjoyment	52
		Thrill	9
		Flow experience	4
		Expedient	4

Note. Categories were formulated deductively based on the components of Self-Determination Theory (SDT); final codes were derived inductively during the iterative analysis of the letters

[1] total number of letters including the particular category (e. g. relatedness need satisfaction)
[2] total number of particular code (e. g. connection)

Psychosocial needs and intrinsic motivation

It was found that letters that included more psychosocial needs than average did not reflect more intrinsic motivation than letters that included less psychosocial needs than average. Instead, letters that included less psychological needs reflected more intrinsic motivation. The average of intrinsic motivation per psychosocial needs was .93 for participants who reflected five or more psychosocial needs in their letter, compared to 2.35 for participants who reflected less than five psychosocial needs (see Appendix F for more information). Thus, letters including less psychosocial needs reflected on average almost three times more intrinsic motivation than letters that included more psychosocial needs.

Additionally, a Pearson's r test was conducted with the uncorrected number of psychosocial needs and the uncorrected number of intrinsic motivation across participants. The correlation was statistically non-significant ($r(36) = -.0003$, $p = .49$; see also Figure 1).
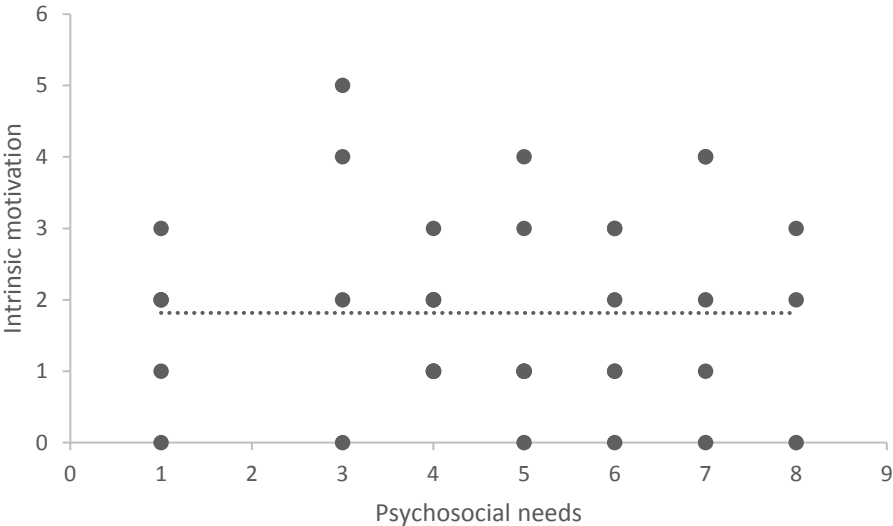

Figure 1. Scatterplot of intrinsic motivation per psychosocial needs

Validation of results

Relating social media platforms to certain codes. The frequency of particular codes differed between social media platforms (see Table 3). Especially, it stood out that letters to Pinterest exhibited the code *inspiration* more than letters to the other platforms. The average of the code inspiration in all letters was 0.66 and letters to Pinterest had an average of 2.67. Furthermore, Pinterest reflected the most frequent *flow experiences*. Also *choice* was something participants valued especially about Pinterest.

All platforms reflected the code *connection*, however, only Facebook and Snapchat exhibited this code above average. The average was 1.71, the letter to Snapchat had a mean of 3, and Facebook of 2.4. Also *enjoyment* seemed to be relevant for all social media platforms, while it was most striking for Tik Tok and Instagram.

Some codes were unique to Instagram and Facebook. *Personal memories* only came up in letters to Instagram and Facebook. Also the codes *thrill* and *expedient* were unique to Instagram and Facebook, but came up above average only in letters to Instagram.

Participants exhibited most *dependency* on Snapchat, Pinterest, and Instagram.

Table 3

Overview of codes per social media platforms

Code	Code total frequency (CTF)	CTF/n	Instagram	Facebook	Pinterest	Whats App	Snapchat[1]	Tik Tok[2]
Connection	60	1.71	1.5	**2.4**	0.33	1.67	**3**	1
Personal memories	7	0.2	**0.23**	**0.3**	0	0	0	0
Dependency	16	0.46	**0.53**	0.3	**0.67**	0.33	**1**	0
Challenging own opinion	16	0.46	**0.53**	0.2	0.33	**0.67**	**1**	**1**
Choice	13	0.37	0.30	**0.4**	**1**	0	0	**1**
Inspiration	23	0.66	0.59	0.4	**2.67**	0	0	**1**
Mastery	21	0.6	0.59	0.6	**0.67**	**0.67**	**1**	0
Accomplishment	15	0.43	0.23	**0.9**	0	0	**1**	**1**
Enjoyment	47	1.34	**1.58**	1.1	1	0.67	1	**3**
Thrill	9	0.26	**0.41**	0.2	0	0	0	0
Expedient	4	0.11	**0.18**	0.1	0	0	0	0
Flow experience	4	0.11	**0.12**	0.1	**0.33**	0	0	0

Note. n = 35 because unknown platforms (3 letters) were left out; numbers above average are marked in bold

[1] and [2] Results need to be interpreted with caution because both platforms were only chosen once

Discussion

The purpose of the current study was to explore what social media users value about the platforms they use, by letting them write a fictitious letter to their social media platform of choice. This innovative method enabled collecting positive experiences of both a cognitive and an emotional nature. Furthermore, it was investigated in how far humans' psychosocial needs (i. e., relatedness, competence, and autonomy) and the concept of intrinsic motivation are able to explain why people use social media platforms.

In the current study, it could be found out what people valued about social media platforms, namely most frequently (1) more intensive and frequent social contacts and thereby a stronger connection to other people, (2) the feeling of joy they experience when using social media, (3) that they get inspired by social media platforms and by that become more creative themselves, and (4) that they can better master tasks and challenges of their lives due to social media.

The concepts of SDT might partly explain why people use social media platforms. Especially the concept of relatedness might describe why people use these media, as it was found that most participants exhibited at least one code belonging to this category (especially *connection*). That participants of the current study valued the aspect of connection about social media is in line with existing research regarding the helpful effects of social media. Previous research indicated that social media use can strengthen people's ability to socialize and satisfy people's relatedness need (Lin, 2016; Valkenburg et al., 2006). Also the motivators 'social engagement' and 'community interest' that Oh and Syn (2015) found regarding sharing content on social media matched to the results of the current study.

Intrinsic motivation is another concept of SDT that might explain why people use social media platforms. Most participants exhibited at least one code that was assigned to this category in the current study (most frequently *enjoyment*). It is in line with previous research that participants valued the feeling of joy when using social media. For example, Oh and Syn (2015) found 'enjoyment' as one motivator to share content on social media, indicating that people experience positive feelings when engaging in social media use.

Also the concept competence of SDT might describe why people use social media. In the current study, participants felt competent in mastering challenges of their lives by means of social media. They regarded themselves as competent to accomplish personal goals, such as learning new things, by using social media platforms. These findings fit to what Oh and Syn

23

(2015) found, namely that 'learning' and 'personal gain' are motivators to share content on social media.

Whereas the concepts of relatedness, intrinsic motivation, and competence seemed to be concepts that might explain why people use social media platforms in the current study, findings regarding the concept of autonomy were rather contradictory. On the one hand, participants in the current study felt autonomous in having a personal choice (such as regarding the content they see) when using social media. On the other hand, one aspect that indicated that social media use might not entirely fulfill users' autonomy need was that several letters reflected participants' motivation to use social media just because of addictive feelings. Thus, some participants were not in control over themselves regarding their social media usage. The finding that participants were motivated to use social media due to dependent feelings fits to previous research because it was e. g. found that people who experienced flow experiences during Facebook use were more likely to become dependent on this platform (Brailovskaia, Bierhoff, Rohmann, Raedera, & Margraf, 2020). Additionally, people who were more dependent on social media platforms were more prone to high stress levels (Khalili-Mahani, Smyrnova, & Kakinami, 2019) and depressive symptoms (Jeri-Yabar, Sanchez-Carbonel, Tito, Ramirez-del Castillo, Torres-Alcantara, Denegri, & Carreazo, 2019).

In the current study, it was found that participants who reflected more psychosocial needs in their letters did not reflect more intrinsic motivation than participants who reflected less psychosocial needs. However, previous research indicates that there is at least distal evidence for a relation between the satisfaction of the three psychosocial needs and higher intrinsic motivation (Deci & Ryan, 2000; Van den Broeck, Ferris, Chang, & Rosen, 2016; Walker, Jan, & Kono, 2020). A reason that the results of the current study contradicted previous research might be the exploratory and open nature of the method used. It is possible that participants decided for writing about specific features they value about a social media platform (such as the opportunity to connect with others, which would be related to the need of relatedness) *or* for writing about a feeling of enjoyment when using social media (which would rather be related to intrinsic motivation). Thus, it might be that participants just put their focus differently regarding their chosen content, but that this did not relate to the relationship of psychosocial needs and intrinsic motivation. Another reason might have been that the conceptualization of intrinsic motivation and the conducted analyses were not valid in the first place. The conceptualization of intrinsic motivation started deductively based on the SDT definition of intrinsic motivation (reflecting mainly enjoyment; see Appendix E for initial codes and definitions). However, during the data analysis, several additional aspects were found in

the letters that were considered as likely belonging to intrinsic motivation, such as flow experience. Thereby, the original aspect of enjoyment was considered as not sufficient to reflect the concept of intrinsic motivation in the current study. That the original conceptualization of intrinsic motivation might be insufficient is also an aspect that Waterman (2005) already criticized. He mentioned that the concept of intrinsic motivation has only been defined as hedonic enjoyment (reflecting lower pleasures), leaving out the perspective of eudaimonism (reflecting higher pleasures and self-actualization), and raised the need to reconceptualize intrinsic motivation. Still, also more recent studies continued to stick to the conceptualization of intrinsic motivation as reflecting hedonic enjoyment (e. g., Guay, Bureau, Litalien, Ratelle, & Bradet, 2020; Tamborini et al., 2010; Van den Broeck et al., 2016). Due to the lack of conceptualization of intrinsic motivation in previous research, the conceptualization took place rather speculatively in the current study. This conceptualization based on the letter content led to interesting findings regarding what people value about social media, but it is still not clear if the findings really reflected the concept of intrinsic motivation. Therefore, there is a strong need for future research to validate the concept of intrinsic motivation. Based on the final code definitions of intrinsic motivation used in the current study (see Appendix F), a quantitative measurement could be created that could then be validated. This measurement could then be used as a basis to potentially adapt the code definitions belonging to intrinsic motivation as used in the current study. This new coding scheme could then be used in further studies that replicate the 'love letter method' in relation to what motivates people to use social media platforms.

Although the conceptualization of intrinsic motivation might not have been valid, it is likely that results regarding what people value about social media were. Several letters reflected the addressed social media platform's original purpose (most striking inspiration regarding Pinterest; About Pinterest, n. d.). Therefore, a strong point of the current study was that participants likely wrote sincerely down what they value about social media, making the results more valid. Another strong point was the 'love letter method' itself that gave insightful results regarding what people value about social media platforms. The goal of this method is to evoke people's personal thoughts, values, and emotions (Nejar, 2017). Participants wrote in their letters about what they think about social media platforms, which feelings these platforms evoke (such as joy), and what makes them use these platforms (such as being inspired by its content). Thus, the original goal of this method seemed to be fulfilled in the current study, and the method seemed to be an interesting instrument to explore people's inner thoughts and emotions. In future research regarding people's opinions and emotions, this method could therefore add to other methods, such as to face-to-face interviews. Another positive aspect of the current study

was that data saturation could be reached. When analyzing all letters, there were not many new codes found by the end of the coding procedure. Therefore, a sample size of 38 participants seemed to be sufficient to fulfill the purpose of the current study which was mainly to find out what people value about social media.

Although participants were specifically instructed to write about what they value about social media, several participants also wrote about negative things. One participant wrote that she got strong anxiety due to Facebook after getting 'famous' on this platform. This fits to an unhelpful effect that was found in previous research regarding social media use, namely that enhanced social media use can lead to higher scores in anxiety and depression (Cleland Woods & Scott, 2016). Furthermore, it was striking that some participants wrote down that they experienced self-doubt and feelings of lowered self-worth by using social media. They wrote that this happened because they compared themselves to people on social media living a 'perfect' life they will likely never reach themselves. This finding is in line with previous research that reported lowered self-esteem by social media usage due to 'upward comparisons' (Vogel et al., 2014). That negative thoughts about social media platforms were not coded is a limitation of the current study because of these several letters that were about negative experiences with social media. Initially, it was assumed that these thoughts might have been irrelevant for the purpose of the current study, as the purpose was to find out what people *value* about social media platforms. However, retrospectively, coding these negative thoughts might have had the potential to better reveal contradictions within letters. For example, it might have been that participants whose letters included positive codes also included negative codes that might have reflected the exact opposite. This could have given rise to either real contradictory thoughts within participants, or to rather invalid letters that were written with low motivation. Therefore, it might be interesting to not leave out any text sections in further research, to ensure that no potentially important points will be missed. Another limitation of the current study was that it is not possible to draw conclusions regarding if the results can be generalized. The chosen method was exploratory and innovative, and the sample used in the current study consisted mainly of German women. To investigate if the results of the current study can be generalized, it is necessary to conduct further research. For example, it would be interesting to replicate the 'love letter method' regarding what social media users value about their platforms in samples that consist of an equal distribution of males and females. Additionally, it would be interesting to investigate if the results would turn out similar in other countries. A further limitation of the current study was that, as mentioned above, it is likely that the conceptualization of intrinsic

motivation was not valid. Therefore, it is necessarily to conduct future research regarding the validation of intrinsic motivation.

The method and results of the current study can aid social media developers in their development process. The results of the current study have shown what people value about social media platforms, which can give social media developers inspiration regarding what features they should include in their products to make people use them. Especially, they should include features that help people to connect with each other, and features that are likely to evoke feelings of joy in people (such as entertaining videos or photos). However, it is likely that users become dependent on the platform when they enjoy it 'too' much. Although this would be valuable for its developers, it would put into question whether the platform is morally justifiable because addiction to social media has shown to be related to mental health issues (e. g., Jeri-Yabar et al., 2019). Therefore, social media developers should clearly debrief its users about potential risks their platform could bring along.

Apart from helping social media developers based on the results of the current study, the exploratory nature of the chosen method can itself aid social media developers. Next to the 'love letter method', also the 'break up letter method' exists. This approach is about writing why one wants to break up with someone and who else one has already seen who is 'better' (Nejar, 2017). This method could be used to explore why social media users want to 'break up' with certain platforms. Thereby, social media developers could come up with innovative ideas for new platforms that could improve features that end-users dislike or miss about existing ones.

To conclude, the current study gave interesting insights into what people value about social media platforms by means of the 'love letter method'. Participants valued most that they can be more connected to other people by using social media, and they enjoyed the inner feeling of joy that social media use provides them. However, the conceptualization of intrinsic motivation might have not been sufficient to give valid results. Therefore, future research is necessary to improve this conceptualization, and to then further explore people's motivations to use social media. Still, results what people valued about social media were insightful and could be used for practical recommendations. Social media developers might profit from the results of the current study and also from the innovative method itself to investigate the features that users regard as important about social media platforms.

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Appendix A: Instruction of the love letter

(the 'following page' is left out here because it was part of another master thesis)

On this and the following page, we ask you to write two letters in total (thus, one letter per page). On this page of the study, we are interested in **your personal experiences with and emotions toward social media platforms**. For that, we ask you to write a "**love letter**" to a social media platform (for example Instagram or Facebook) of your choice. You are allowed to write this letter in English or German.

In your letter, we ask you to write about positive experiences you have made and/or are still making with your chosen social media platform. Consider your chosen platform as the person you are having a relationship with.

You are being asked to write about topics such as how you met each other, why you chose to be in this relationship, and what you love about your partner (the social media platform). Feel free to add topics you regard as important. However, you should need **not much more than 10 minutes** to finish your love letter. Thus, it is important that you just write about what comes into your mind first: Be spontaneously and do not think too much about what exactly you write. The letter should be about your personal experiences and arguments, and not about your grammar, spelling, etc. Thus, feel free to write whatever feels right for you in this letter: There are no right or wrong answers!

Deutsche Version:

*Auf dieser und der nächsten Seite bitten wir Sie darum, insgesamt zwei Briefe zu schreiben (d. h. ein Brief pro Seite). Auf dieser Seite der Studie sind wir interessiert daran, **Ihre persönlichen Erfahrungen mit und Emotionen gegenüber Social Media** zu untersuchen. Dafür bitten wir Sie darum, einen „**Liebesbrief**" an ein soziales Medium (beispielsweise Instagram oder Facebook) Ihrer Wahl zu schreiben. Sie dürfen diesen Brief auf Englisch oder auf Deutsch schreiben.*

Sie werden darum gebeten, in diesem Brief über die positiven Erfahrungen zu schreiben, die Sie mit Ihrem gewählten Medium gemacht haben bzw. machen. Sehen Sie das soziale Medium als eine Person, mit der Sie eine Beziehung führen.

*Schreiben Sie über Themen wie ihr gemeinsames Kennenlernen, wieso Sie sich dazu entschieden haben, eine Beziehung miteinander einzugehen, und was Sie an Ihrem Partner (dem sozialen Medium) lieben. Sie können gerne weitere Themen mit in Ihren persönlichen Brief aufnehmen, jedoch sollten Sie **nicht viel mehr als 10 Minuten** benötigen, um den Liebesbrief zu schreiben. Daher ist es wichtig, dass Sie schreiben, was Ihnen als erstes in den Kopf kommt: Seien Sie spontan und denken Sie nicht so viel darüber nach, was genau Sie schreiben. Der Brief soll um Ihre persönlichen Erfahrungen und Argumente gehen, und nicht um richtige Rechtschreibung, Grammatik o. ä. Fühlen Sie sich daher einfach frei, zu schreiben, was Sie für richtig halten: Es gibt keine richtigen oder falschen Antworten!*

Write your letter to a social media platform of your choice here:

_____

Appendix B: Graphic representation of SDT (Cook & Artino, 2016)
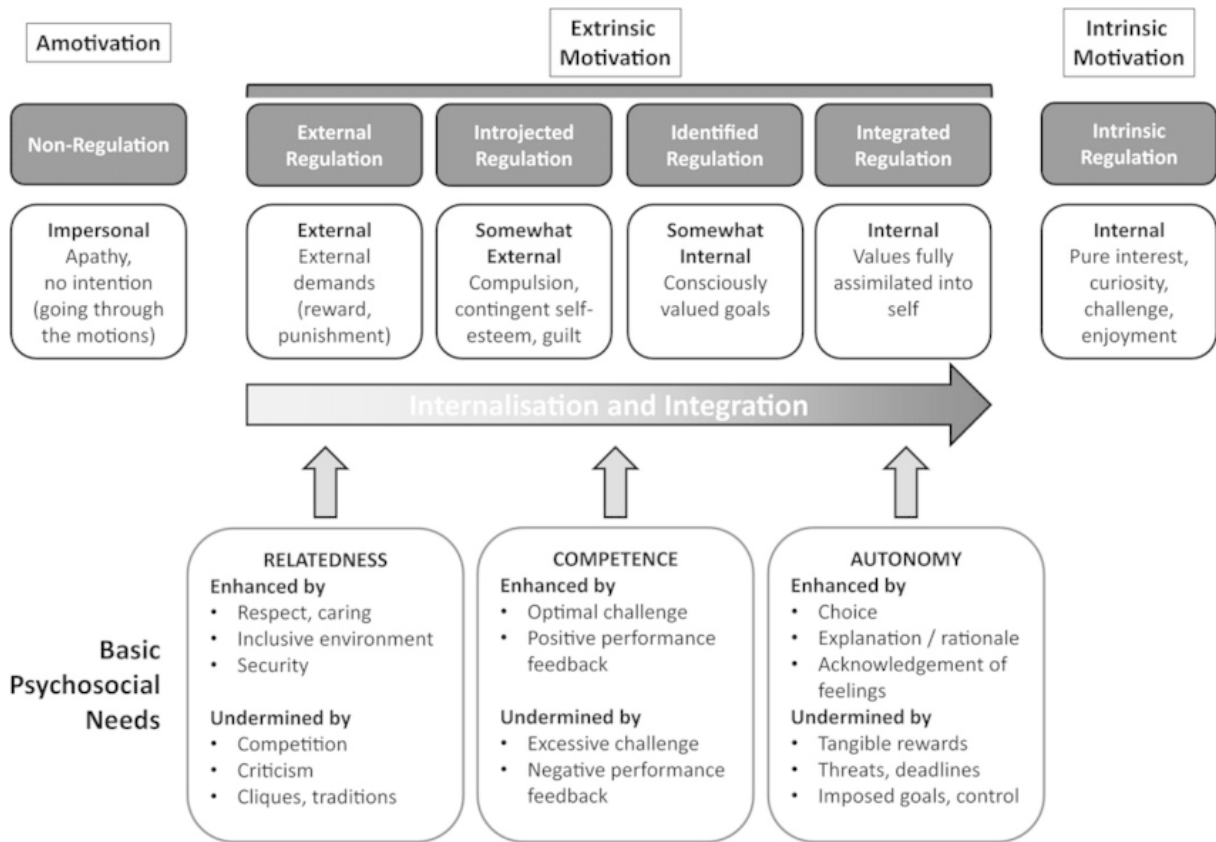
Appendix C: Items of the Basic Psychological Need Satisfaction and Frustration Scale
(Chen et al., 2015)

1. I feel a sense of choice and freedom in the things I undertake
2. I feel that my decisions reflect what I really want
3. I feel my choices express who I really am
4. I feel I have been doing what really interests me
5. Most of the things I do feel like ''I have to''
6. I feel forced to do many things I wouldn't choose to do
7. I feel pressured to do too many things
8. My daily activities feel like a chain of obligations
9. I feel that the people I care about also care about me
10. I feel connected with people who care for me, and for whom I care
11. I feel close and connected with other people who are important to me
12. I experience a warm feeling with the people I spend time with
13. I feel excluded from the group I want to belong to
14. I feel that people who are important to me are cold and distant towards me
15. I have the impression that people I spend time with dislike me
16. I feel the relationships I have are just superficial
17. I feel confident that I can do things well
18. I feel capable at what I do
19. I feel competent to achieve my goals
20. I feel I can successfully complete difficult tasks
21. I have serious doubts about whether I can do things well
22. I feel disappointed with many of my performance
23. I feel insecure about my abilities
24. I feel like a failure because of the mistakes I make

Appendix D: Initial coding scheme of the current study

Category	Code	Definition
Intrinsic motivation	Enjoyment	Participant feels happy when using the social media platform
	Interest/curiosity	Participant shows genuine interest to engage in using the social media platform
Relatedness need satisfaction	Belongingness/connection	Participant feels included by other people by using the social media platform
	Positive relationships	Participant notices that he is valuable for others and has people he values/cares about in his life by using the social media platform
	Contact	Participant can stay in contact with other people by using the social media platform
	Respect	Participant feels respected by other people by using the social media platform
	Safety	Participant feels safe in the environment of the social media platform
Competence need satisfaction	Ideal challenge	Participant can engage in challenges that help him to grow personally by using the social media platform
	Competence	Participant expresses that using the social media platform comes naturally to him
	Mastery	Participant can better master tasks in his life by using the social media platform
	Accomplishment	Participant can achieve personal goals by engaging in using the social media platform
	Positive feedback	Participants gets positive feedback for things he does on the social media platform
Autonomy need satisfaction	Opinion	Participant can express his personal opinion by using the social media platform
	Choice	Participant can decide what he wants to see on the social media platform
	Responsibility	Participant expresses feelings of own responsibility to use the social media platform appropriately

Appendix E: Final coding scheme of the current study

Category	Code	Code definition	Example quote
Relatedness need satisfaction	Connection	Participant feels less alone and more connected to other people by using the social media platform, and can stay in touch with other people easily	*"You always connect and make me feel more connected to my friends."* *"Since I met you staying in touch with them was so much easier!"*
	Personal memories	Participant enjoys that the social media platform stores personal memories and reminds the person of these memories	*"We shared so many memories together and you remind me of them every now and then."*
Autonomy need satisfaction	Dependency	Participants feels dependent on the social media platform and cannot refrain from using it	*"I could not longer be distanced from you anymore."*
	Challenging own opinion	Participant describes a switch from skeptical thoughts about the social media platform to curiosity to use it	*"I have to confess that at the beginning I wasn't really convinced, but I decided to download you."*
	Choice	Participant expresses feelings of freedom to decide for himself what he wants to see on the social media platform and how (often) he wants to use it	*"You offer that I can select about which topics, companies or persons I get to know the newest information."* *"You're not mad at me when I don't stop by for a few days." [Original: "Du bist mir auch nicht böse wenn ich mal ein paar Tage nicht vorbei schaue."]*
Competence need satisfaction	Inspiration	Participants gets inspired and/or creative by using the social media platform	*"You showed me the world, gave me inspiration about how other people live their lives, and reinforced my interest for photography."*
	Mastery	Participant can master tasks and challenges of his life by using the social media platform	*"When I have problems sleeping, having to cope with depression or anxiety you help me to get back on my feet."*

	Accomplishment	Participant reaches a personal goal or inner wish by using the social media platform	*"When I was younger you made me famous."* *"I can't even tell how much I learned with you."*
Intrinsic motivation	Enjoyment	Participant feels happy and entertained when using the social media platform	*"You make me smile nearly every time and I do enjoy spending time with you a lot."*
	Thrill	Participant perceives the relationship to the social media platform as exciting and turbulent	*"I remember the day I posted my first picture, so much pressure, and excitation at the same time, you made me thrilled."* *"So you can say we have both our ups and downs."*
	Flow experience	Participant is totally immersed in the social media platform when using it	*"When I am with you time flies by and you make hours feel like minutes."*
	Expedient	Participant uses the social media platform as a means to an end	*"With you one can easily bridge boredom and pass the time." [Original: "Mit dir kann man gut Langeweile überbrücken und sich die Zeit vertreiben."]*

Note. Categories were formulated based on the components of Self-Determination Theory (SDT); Codes were derived inductively during the iterative analysis of the letters

Appendix F: Tables regarding psychosocial needs and intrinsic motivation

Psychosocial needs and intrinsic motivation of participants with above/equal to five psychosocial needs

Participant number	Psychosocial needs per word number (PNWN) / 3	Intrinsic motivation per word number (IMWN)	IMWN per PNWN [1]
1	0.01	0.02	2
3	0.02	0.01	0.5
4	0.02	0.01	0.5
7	0.01	0.01	1
9	0.01	0.01	1
10	0.01	0.01	1
11	0.01	0.02	2
12	0.02	0.01	0.5
13	0.01	0.01	1
17	0.01	0.02	2
18	0.02	0.03	1.5
19	0.01	0.01	1
21	0.01	0.01	1
23	0.01	0	0
25	0.02	0	0
26	0.02	0	0
28	0.01	0.02	2
30	0.01	0.01	1
33	0.02	0.01	0.5
35	0.01	0.01	1
38	0.01	0	0

Note. Participants with 5 psychosocial needs or more were considered as 'above average' because the mean of psychosocial needs was 4.71; the mean of IMWN per PNWN was 0.93 (indicating on average less intrinsic motivation compared to psychosocial needs)

[1] scores equal to 1 can be regarded as perfect agreement between psychosocial needs and intrinsic motivation (equal number of psychosocial needs and intrinsic motivation in the letter), whereas scores below 1 indicate less intrinsic motivation compared to psychosocial needs, and scores above 1 more intrinsic motivation compared to psychosocial needs

Psychosocial needs and intrinsic motivation of participants with less than five psychosocial needs

Participant number	Psychosocial needs per word number (PNWN) / 3	Intrinsic motivation per word number (IMWN)	IMWN per PNWN [1]
2	0.003	0.02	6.67
5	0.01	0.01	1
6	0.01	0.03	3
8	0.003	0	0
14	0.01	0	0
15	0.01	0.01	1
16	0.003	0.01	3.33
20	0.01	0.05	5
22	0.01	0.01	1
24	0.01	0.01	1
27	0.003	0.003	1
29	0.01	0.01	1
31	0.01	0.02	2
32	0.01	0.01	1
34	0.001	0.01	10
36	0.02	0.04	2
37	0.01	0.01	1

Note. Participants with less than 5 psychosocial needs were considered as 'below average' because the mean of psychosocial needs was 4.71; the mean of IMWN per PNWN was 2.35 (indicating on average more intrinsic motivation compared to psychosocial needs)

[1] scores equal to 1 can be regarded as perfect agreement between psychosocial needs and intrinsic motivation (equal number of psychosocial needs and intrinsic motivation in the letter), whereas scores below 1 indicate less intrinsic motivation compared to psychosocial needs, and scores above 1 more intrinsic motivation compared to psychosocial needs