Social Media Usage and Subjective Well-Being in Middle School Students

Kimberly R. Hutcheson
Otterbein University, kimberly.hutcheson@otterbein.edu

Follow this and additional works at: http://digitalcommons.otterbein.edu/stu_honor
Part of the Developmental Psychology Commons, and the Social Psychology Commons

Recommended Citation
Social Media Usage and Subjective Well-Being in Middle School Students

Otterbein University
Department of Psychology
Westerville, Ohio 43081
Kimberly Hutcheson

4 April 2016

Submitted in partial fulfillment of the requirements for graduation with Honors

Meredith Meyer, Ph.D.
Project Advisor

Cynthia Laurie-Rose, Ph.D.
Second Reader

Stephanie Patridge, Ph.D.
Honors Representative
Abstract

With more people using social media platforms at younger ages, it is imperative to understand the relationship between social media use and well-being. Previous research regarding young adults and their use of social media has shown inconclusive results concerning frequency of social media use and well-being. The current study focused on a younger adolescent population and on their motivations for posting on social media as opposed to their general frequency of use. Thirty seven middle school students took an online survey asking questions regarding frequency of social media use, motivations for use, self esteem, life satisfaction, and source of perceived social support—family versus friend support. The findings indicated that, as predicted, frequency of use had no relationship with life satisfaction or self esteem. Furthermore, motivation for use was the sole significant predictor of life satisfaction compared to the other predictor variables. In other words, participants who use social media for positive motivations more frequently than negative motivations showed higher life satisfaction scores.
Social Media Usage and Subjective Well-Being in Middle School Students

It can be observed, without a doubt, that the use of the Internet for social purposes has grown and is continuing to grow within our society. Computers are no longer only for college students researching in the library or professional lab set-ups but are now accessible to a broader user base of almost any age. In 1984, 8.2% of households in a U.S. Census reported owning a computer compared to 75.6% in 2011 (File, 2013). Furthermore, as of October 2015, 68% of U.S. adults owned smartphones. This rate shows a 35% increase from 2011 (Anderson, 2015). Additionally, an online survey found that a typical 15-16 year old spends 118 minutes online each day (Best, Mankteelow, & Taylor, 2014). Other data indicate that 83% of 18- to 29-year-old Internet users use social networking sites. Social networking sites (SNS) can be defined as “websites which make it possible to form online communications and share user-created content” (Best et al., 2014, p.1). Popular examples include Facebook, Twitter, and Reddit.

These SNS are the new way for young people to communicate and continue the practice of social sharing in today's technological environment. Social sharing, or the process of sharing with others significant emotional experiences and the events that triggered them (Choi & Toma, 2014), has always been a highly prevalent social phenomenon even before the presence of social media. People report sharing emotional experiences with their relational partners 90% of the time when given the opportunity, a rate seen to be consistent across cultures. This pattern of behavior implies that social sharing may satisfy a basic human need that relates
social connectedness to emotional expression (Choi & Toma, 2014). Therefore, it makes sense that the youth of today’s society are adapting their means of social sharing to match this technologically advanced age by using various SNS.

Due to the increased frequency of use along with its ability to facilitate social sharing, social media has become a large part of life within our society today. But how does social media affect our lives? With social media and SNS reaching younger and younger populations at developmentally vulnerable ages, it is imperative to consider and fully understand the developmental influences of these technologies and their effects on the adolescent population (Best et al., 2014). Moreover, examining this relationship has practical applications. Understanding the relationships between social media use and adolescents’ well-being can help parents decide how much they will allow their child to use them in order to promote healthy social development. Furthermore, if this relationship is better understood, parents, caregivers, teachers, and even guidance counselors can encourage children and adolescents to use social media in a healthy manner.

During adolescence, many aspects of one’s social understanding and awareness shift, making this age group potentially more susceptible to influences of social media. For example, during this time period in one’s life, there is a shift from depending on parental relationships to depending on peers for social support (Ellis, Marsh, & Craven, 2009; DeGoede, Branje, Delsing, & Meeus, 2009). While Piko and Hamvai (2010) found gender differences in the level of dependency on peers during this time—such that parent support continues to play a larger role in the life satisfaction of adolescent males while life satisfaction of adolescent females is more
heavily influenced by peer support—the shift is still evident in both genders. SNS is a method by which adolescents can exercise this heightened dependency on their peers.

Furthermore, creating and maintaining friendships is a pressing developmental process during adolescence (Best et al., 2014). In early childhood, friendships are defined by partaking in similar activities while friendships in adolescence are formed due to similar attitudes, interests, and shared senses of loyalty and acceptance. One specific component of friendship that becomes especially characteristic during adolescence is self-disclosure (Siegler, Eisenberg, DeLoache, & Saffran, 2014). During this period in one’s life, the function of friendship shifts from simply having companionship to providing new benefits, including emotional security, advice, and validation of interests (Rubin, Fredstrom, & Bowker, 2008). These observed trends in friendship development highlight the importance of positive social media use during adolescence since SNS are an easily accessible ways to address this new emphasis on deeper social interactions.

Finally, self-esteem changes rapidly during adolescence. Self-esteem has been shown to have a positive relationship with one’s overall well-being (Sharma & Agarwala, 2015). Furthermore, an adolescent’s idea of body image is often shaped by their self-esteem in this vulnerable developmental time (Stojkovic, 2013). SNS allow adolescents to post pictures of themselves which are constantly being viewed by and shared with peers. One can see how the feedback from these photos by way of SNS could affect an adolescent’s body image, self-esteem, and consequently their well-being. Since this is a developmentally crucial time period in the life of an
adolescent, it is imperative to understand how their social interactions influence their development in order to promote healthy growth.

Researchers have begun to turn their attention to this topic. Out of 32 studies concerning well-being in adolescents in relation to SNS reviewed in a meta-analysis by Best et al., (2014) both positive and negative benefits and risks were reported while some results indicated more mixed findings. One large scale study suggested that one’s well-being may decrease by merely setting up a social networking profile, although the results were only significant in females. In contrast, most other studies in the review reported mixed or no effects of social media on adolescent well-being (Best et al., 2014). Other research found varying results due to type of SNS used. Of eight studies examining self-esteem and social media usage, three reported negative correlations between SNS, blogging, and self esteem, while other studies found positive correlations between self esteem and activities that involve communication online such as chatting and receiving social support (Best et al., 2014).

Examples of mixed or inconsistent results are seen in other studies as well; research conducted by Valenzuela, Park, and Kee (2009) identified a positive relationship between the amount of Facebook use and one’s life satisfaction. Özgüven & Mucan (2009) supported these results by finding that heavy social media users are more satisfied with their lives, more conscientious, and more open to experiences. Conversely, multiple studies linked Facebook and other SNS to users perceiving others as happier than themselves, making unhealthy comparisons between themselves and others, and ultimately leading to disappointment in one’s self (Chou & Edge, 2012; Haferkamp & Kramer, 2011).
The inconclusive results of previous research pose many more questions to examine on the topic of SNS usage and well-being; moreover, most of the academic attention in this area has been given to young adults, mostly college students (Best et al., 2014). Additionally, the previous literature on the topic of social sharing has been limited to face-to-face interactions, which fails to link the experience of social sharing and how online communication may be affecting it (Choi & Toma, 2014). Finally, research is moving away from studying frequency of SNS use, due to no associations between the variable and well-being (Best et al., 2014), and is turning towards other less extensively researched variables such as behavior tendencies when using SNS, motivations for online behaviors while using SNS, and age of user.

The recent research on the relationship between how people use SNS and their well-being has provided some interesting results that may clear up the mixed results found by only examining their frequency of use. For example, Casale, Lecchi, & Fioravanti (2015) found evidence that problematic uses of the Internet, i.e. using the web to regulate negative feelings, are associated with low well-being. Spies, Shapiro, & Margolin (2014) found that while SNS can be used for positive means of identity development during adolescence, they also make it easier for social comparison, which can have a negative impact on one’s identity. These studies suggest that further research needs to be done to determine how specific Internet and SNS behaviors can show positive or negative associations with well-being. As previously mentioned, if the relationship between type of activity on social media and well-being is better understood, then parents, caregivers, teachers, and guidance counselors can teach children and adolescents to avoid using social media
for negative and harmful uses. By teaching healthy coping skills and encouraging positive posts on SNSs, social media can become a healthier, and possibly integral part of adolescent social development.

The current study will examine the relationship between social media usage and two outcomes, subjective well-being and self-esteem, in a sample of middle-school-aged students. Both frequency of use and motivations for use will be examined as predictors. Specifically, the study will examine relationships between three main predictor variables: healthy motivational reasons for social media use, unhealthy motivational reasons for social media usage, and frequency of social usage. Examining specific positive and negative motivations for use and how they relate to participant’s subjective well-being will provide support for the potential relationship between the two seen in previous literature. Asking participants to record the frequency of which they check their SNS will also help address a potential relationship between frequency and well-being. For the purposes of this research, the study will measure subjective well-being using life satisfaction, happiness, and positivity.

Motivations for social media use that will be considered healthy in this study include: means of identity clarification or self-expression, information sharing to benefit others, and relief of distress. Motivations that will be considered unhealthy in this study include: social validation and seeking approval of others, social comparison, and social control (using social media to control social outcomes).

The motivations identified as positive are labeled accordingly because they seem to have no psychological harm to another person or to the original poster (OP)
using the SNS. The negative motivations were labeled as such due to similarities to the negative uses of the Internet identified by Casale et al. (2015). Furthermore, these motivations can lead to negative social outcomes such as psychological harm to the OP or to other Internet users as seen in Spies et al. (2014).

Considering previous research results, the study predicts to find:

Hypothesis 1: Frequency of SNS use and subjective well-being will have no significant correlation.

Hypothesis 2: Reporting more positive versus negative motivations for use will relate to subjective well-being.

Hypothesis 3: Motivations will predict self-esteem and life satisfaction not just independent of frequency, but also participant gender and the extent to which family vs. friends are used as a source of support.

We thus include frequency, motivation, gender, and source of social support in a final regression to examine how these predictors relate to the outcome variables of self esteem and life satisfaction.

Method

Participants

Thirty-seven eighth grade students at a public middle school in the Mid Western region of the United States participated in this study: 22 males and 15 females. The ages of the participants ranged from 13 to 14 years old with an average age of 13.27 (SD=.45). The sample was recruited via email sent from a guidance counselor at the school to parents of eligible eighth graders containing a brief explanation of the study and a link to an online consent form. Students participated
during regular school hours. Participants were compensated with $10.00 gift cards to a local ice cream shop. The school was also given a small monetary gift for participation as well.

**Materials and Procedure**

Each student was asked to report to the computer lab in their school during their study hall in order to take a survey. The survey was proctored by the researcher with the guidance counselor in the room as well. Each student was given a laptop with a Qualtrics survey pre-loaded onto the screen. Each group of participants was told that researchers were interested in learning how younger generations use social media. They were then offered the opportunity to sign the assent form. Following signing the assent form, participants answered the survey questions regarding their social media habits and other questions about themselves. Refer to Table 1 for a full list of the survey items.

The survey began with initial demographic questions such as the student’s gender and age. If the student selected male, the next question would ask whether or not they had been involved in a mentorship program offered to the school in prior semesters called “Boys’ Club.” A similar question was given asking whether or not the student had participated in “Girls Club,” the female equivalent of the Boys Club program, for those who selected female. These programs have discussed the topic of self esteem and other topics mentioned in the survey, therefore it was relevant to know whether or not pre-exposure to these topics might influence their answers. The survey also asked participants to identify which types of social media they use. The options were “Facebook”, “Instagram”, “Twitter”, and “Tumblr, Imgur,
or Reddit.” Participants were instructed to select all that apply. Once a social media platform was selected, further questions regarding that specific social network site (SNS) would appear to identify the frequency in which participants used the SNS. Frequency was measured by asking participants how many times they logged onto or checked the SNS during a typical school day morning, afternoon, and evening. Frequency of use during a typical Saturday morning, afternoon, and evening was measured as well. Participants were asked to move a sliding bar to indicate their answers. The range of the sliding bar option was from zero to fifty in increments of five. It was possible, however, to indicate a value other than an interval of five. For example, a student could answer with the number four by sliding the bar just short of the increment indicating the value five.

Once these questions were answered for each type of social media platform indicated by the participant, the survey moved to questions concerning life satisfaction. The questions were in the form of Likert statements with six possible answers that ranged from strongly disagree to slightly disagree, and slightly agree to strongly agree with no neutral option. Three of the questions were reverse coded in order to interpret the results. After the reverse coding, high scores on all the items indicated a high level of life satisfaction. Statements were taken from the Satisfaction with Life Scale originally published by Diener, Emmons, Larsen, & Griffin (1985) with some adaptation for adolescent use. These adaptations included simpler language and concepts. For example, instead of “I typically see the glass half full,” the statement would say, “I can find the positive things in most situations.”
Furthermore, one question was added to measure how participants compare themselves to peers.

Next, using the Rosenberg Self Esteem Scale from Rosenberg & Morris (1989) with some questions adapted for use with adolescents, participants’ self esteem was measured in the form of a Likert Scale with the same six answer options previously mentioned. After reverse coding of certain items, high scores indicated a high sense of self esteem. Adaptations included omitting questions that had concepts that seemed too advanced or complicated for adolescents such as “I feel that I am a person of worth, at least on an equal plane with others.”

Participants were then instructed to answer questions measuring the source and extent of their social support using the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988). Some questions were adapted for use with adolescents. The questions focusing on the support of a significant other were removed since the current study is focused only on friends versus family support. Furthermore, the word ‘sorrows’ was replaced with ‘sadness’ in order to use vocabulary adolescents are most comfortable with and use on a regular basis.

The final section of the questionnaire was focused on how participants use social media sites. Using questions from Luchman, Bergstrom, & Krulikowski’s Social Media Questionnaire (2014), participants were asked how frequently they use social media for varying purposes--e.g. to post about interesting drama going on in your school, to keep in touch with friends from other states or cities, or to post selfies). Five response options were given, ranging from never to very often. Prior to administering the survey, each possible purpose for using SNS was identified as
either a positive or negative motivation by the researchers of the current study. Using the functional model of self-disclosure on SNSs, researchers of the current study organized the 16 SNS uses into the motivation categories developed by Bazarova & Choi (2014), based on what type of reward was sought from the post. For example, if one used SNS to post about interesting drama going on, that use would be classified as a means of social control. Motivations were identified as positive if they fell into one or more of the following categories: means of identity clarification or self-expression, information sharing to benefit others, and relief of distress. These categories are considered positive because they pose no threat to another person, are not due to immaturity or impulsivity, or can lead to a better understanding of the participant. Examples of positive motivations include sharing an interesting article, informing friends about upcoming events, and staying in contact with friends in different cities or states.

The motivations identified as negative were identified as such if they fell into one or more of the following categories: social validation and seeking approval of others, social comparison, and social control. These categories are considered to be negative because they can harm others by controlling social outcomes, can harm the participant by comparing and identifying themselves as inferior, or can be due to immaturity or impulsivity. Examples of negative motivations include describing a fight with a family member or friend or posting about drama occurring in school. Some motivations are more clearly negative when done with a higher frequency. For example, complaining about something that frustrates you once may not be harmful but this action everyday could be considered more negative.
There are some actions, like posting a selfie, that could be coded as negative or positive depending on the reasoning for posting. This questionnaire separated the possibilities by wording these options as “Posting selfies because you are happy with the way you look,” which could lead to developing higher self-esteem, versus “Posting selfies because you want others to see how good you look,” which could be considered seeking social validation and valuing their worth by the opinions of others. It is important to mention once again that the degree of positivity or negativity in all of these actions depend on the frequency of which they are done.

Finally, participants were asked to answer three questions addressing the extent to which social feedback plays a role in posting to social media sites. The questions of the current study were constructed in order to examine more closely and more directly how peer feedback on social media influences participants’ emotions and also their self-esteem or self-perceptions. The questions asked students to imagine a situation in which a specific amount of feedback either positive or negative was given and report what their response would be by selecting responses from a list of options. Upon looking at the data, the answers to these questions had no relation to any of the analyses run and were deemed unimportant for the final results. Therefore, they will not be referred to in the reporting or the interpretation of the data.

If the participants selected that they had been a part of the Otterbein Girls Club programs at the beginning of the survey, the last question asked if the participant had been present at any of the self-esteem talks implemented by the program. This question did not appear if the participants had previously indicated
participation in Boys Club. Girls Club held self-esteem talks that could be directly related to the results in the current study whereas Boys Club did not hold talks relating to self esteem. Participants then encountered a screen thanking them for their participation. They were instructed to close the laptop and return to their study hall.

**Results**

**Data Treatment and Variable Creation**

The data extracted from the Qualtrics survey was exported onto an excel file. A total frequency of use score was calculated by adding up all reported logins on both weekdays and weekends for all social media platforms used. One subject was over three standard deviations away from the mean frequency of use. This subject’s data was removed from the analyses involving this variable. With the removal of the outlier, the mean total frequency in one week changed from 62.86 ($SD=72.00$) to 56.06 ($SD=59.73$).

An average life satisfaction (LS) score was calculated for each participant. Two of the life satisfaction items were reverse coded. On a scale of 1 to 6 where low scores indicated lower LS while higher scores indicated a higher sense of LS ($M=4.28$, $SD=.87$). An average self esteem (SE) score for each participated was also calculated. Four of these items were reverse coded. The reverse codes were used to create the average self esteem score. On a scale of 1 to 6 where lower scores indicated lower SE and higher scores indicated a higher sense of SE ($M=4.22$, $SD=.65$).
A score was calculated to reflect the degree of perceived social support from each participant’s family by creating an average score using the Likert indications for the support questions that included being able to confide in family members. On a scale of 1 to 6 where 1 was strongly disagree and 6 was strongly agree to questions measuring perceived family support, the mean score was 4.14 (SD=.98). An average support score from friends was calculated in the same manner using the questions regarding confiding in friends. On a scale of 1 to 6 where 1 was strongly disagree and 6 was strongly agree to questions measuring perceived friend support, the mean score was 4.82 (SD=1.04). In these scores, higher numbers indicate a stronger sense of perceived social support from that source.

A difference score of family versus friend support was calculated by subtracting the average friend support score from the average family support score. A score of zero indicates an equal sense of support from both sources. Positive scores indicate a stronger perceived sense of support from family versus friends and vice versa for negative scores. The mean difference of family versus friend support was -.68 (SD=1.09).

An average score for each possible type of motivation, both positive and negative, was calculated for each participant. For example, if the motivation was identity clarification, the score was calculated for that motivation by averaging the numerical responses to each of the frequency questions regarding that specific motivation. Once all motivation types were given an average score, a total average score for all the motivations identified as positive was calculated. On a scale of 1 to 5 where 1 indicated no use of social media based on that motivation and 5 indicated
very frequent use of social media based on that motivation, the mean positive motivation score was 2.83 (SD=.84). The same score was calculated for the negative motivations. On a scale of 1 to 5 where 1 was never and 5 was very often, the mean negative motivation score was 1.93 (SD=.89). In both of these scores, a higher number indicates that the type of motivation is more frequently exhibited.

A difference score of positive versus negative motivations was calculated by subtracting the average positive score from the average negative score for each participant. Positive scores indicate a higher frequency of positive motivations (relative to negative motivations) while negative difference scores indicate a higher frequency of negative motivations (relative to positive motivations). The mean motivation difference score was .90 (SD=.72).

**Main Analyses**

Upon examining the correlations, there was no significant relationship between total usage frequency and life satisfaction, $r(34)= -.06, p=.73$. There was no significant relationship between total frequency and self esteem, $r(34)= .05, p=.79$. Furthermore, there was no significant relationship between total usage frequency and motivation difference score, $r(34)=.13, p=.46$.

Although not statistically significant, a relationship was identified between motivation difference scores and life satisfaction where $r(35)= .30, p=.07$. A secondary analysis of which specific motivation drove this positive relationship, showed that the positive motivational category of relational development, i.e. “how often you use SNS to keep in touch with friends,” was the strongest predictor of life satisfaction such that $r(34)= .34, p=.04$. 
Family support showed correlations with both self esteem and life satisfaction where $r(35)= .52, p=.001$ and $r(35)= .59, p=.001$ respectively. Friend support showed a significant relationship with life satisfaction where $r(35)= .40, p=.02$. There was no statistically significant correlation between friend support and self esteem, $r(35)=.20, p=.25$. Furthermore, analysis of the support difference score showed no significant relationship with either self esteem or life satisfaction such that $r(35)=.28, p=.09$ and $r(35)=.15, p=.37$ respectively. Notably, while there was no difference in amount of family support across genders, an independent samples t-test indicated a significant difference between gender groups such that females ($M=5.23, SD=1.23$) scored higher on friend support than males ($M=4.54, SD=.80; t(35)=-2.06, p=.046, \text{two-tailed}$)

We conducted two separate regressions examining whether usage motivation predicted self esteem and life satisfaction independent of frequency of use, source of social support, and gender. Although the overall model was not significant, $f(4, 35)= 1.54, R^2=.17, p=.21$, usage motivation was the sole significant predictor of life satisfaction. No variable was identified as a significant predictor of self esteem $f(4, 35)= 1.04, R^2=.12, p=.40$. See Tables 3 and 4.

**Discussion**

As predicted, the results show no relationship between frequency of use and both life satisfaction and self esteem. In contrast, as predicted, there was a trend regarding motivation scores and life satisfaction such that a higher frequency of positive motivations correlated positively with higher scores of life satisfaction. Finally, the results show that motivation for use was the only significant predictor of
life satisfaction. All of these findings support the original hypotheses, although the results were only seen in the outcome life satisfaction and not self esteem. In other words, students who use social media to post positive things, e.g. inform friends about upcoming events, more frequently than negative things, e.g. post about drama going on at school, were also those who reported having a higher sense of life satisfaction.

While these relationships are important, it is necessary to acknowledge that this is correlational research and one cannot definitively claim that positive motivations for use cause an increase in life satisfaction. On one hand, it is certainly possible that this may be a cause and effect type relationship. For instance, imagine a scenario in which an adolescent seeks out social support by posting that how she got an 'A' in her class. This may lead to the verbal support of friends, which can lead to a higher sense of life satisfaction. Similarly, the same effect could be seen for negative motivations. For instance, imagine a scenario in which an adolescent seeks out social support by posting about drama. This may in turn lead to aggression from the parties involved who saw the post, which may have the later consequence of a lower sense of life satisfaction. On the other hand, it is also possible that those who are more satisfied with their own lives do not feel the need to find support through gossip or drama and therefore end up posting more positive things. Future research should strive to address a possible causal relationship.

In contrast to the predicted findings regarding life satisfaction, we did not see the results expected in regards to self esteem. A possible explanation for this lack of significant findings could be due to difficulties in adolescents' ability to self-reflect. It
may be easier developmentally at that age to reflect upon one's life rather than their own perception of themselves especially compared to others. According to the hierarchical model of self esteem, a child's general sense of self esteem is based on how they see themselves in four basic competency categories: academic competence, social competence, physical or athletic competence, and physical appearance. During adolescence, more categories upon which to be evaluated are added to the hierarchy of self esteem such as romantic appeal, close friendships, and even job competence (Berk, 2014). It is possible that the introduction of all these new forms of self-evaluations inhibit an adolescent's ability to view the self in broad, general terms. The claim that self esteem may be a difficult concept for adolescents is further supported by anecdotal evidence in which the researcher had previous exposure to children, at the same middle school as these participants, in which the students were unfamiliar with the term and concept of self-esteem.

While the findings of the current study are meaningful, future research could improve upon the study in a few key ways. First, a larger sample size is needed to support the findings and also determine whether or not there are other statistically significant results since some of the analyses came close to the accepted .05 p value. Second, motivation classifications—whether the specific motivation or motivation category was positive or negative—should be more refined. This claim is based on evidence of some relationships coming out with counterintuitive results. For example, writing a post complaining about something upsetting was identified as a positive motivation. More specifically, it was classified into the motivation category of self-expression. This distinction of positive versus negative was based on the idea
that having a way to relieve the stress or negative emotions of a situation is beneficial. On the other hand, constantly complaining about things in life that upset you could make you unhappy, especially if no productive seeking of help or ways to cope with the frustration accompanies the complaining, which would make that a negative motivation. A more refined set of motivation classifications would warrant a more accurate representation of which motivations are truly positive and truly negative. Finally, the self esteem section should be reworded to try and fix issues with self- reporting on this measure, or, a different measure of well-being should be used to see if the results yield any differently.

The findings of this study have real, practical implications for the use of social media in adolescents. The results show that what adolescents use their social media for makes a difference in how they perceive their life satisfaction. If we as adults were to encourage positive use of SNS and teach adolescents coping skills to prevent them from using their SNS for harmful, negative uses, it could significantly impact their sense of life satisfaction. This current study is not alone in the literature to suggest that adults may have more influence over social media use and well-being than once previously thought. Pabian & Vandebosch (2015) found that low levels of teacher-student relations increase the risk of participating in cyber-bullying—bullying through the platform of the Internet. Teachers, caregivers, and other adults have an influential role in an adolescent's healthy social development especially when it comes to how they use social media. Helping them develop good support systems and encouraging positive and healthy online activity could lead to happier and healthier adolescents on- and offline.
References


Table 1: The Survey Items

**Frequency of Use**
Participants selected which SNS they currently use out of a list of four options—Facebook, Instagram, Twitter, and Tumblr/Imgur/Reddit; for each SNS they selected, the following questions appeared:
- On a typical/regular school day MORNING (7:00am-11:59 am), how many times do you check [SNS]?
- On a typical/regular school day AFTERNOON (12:00pm-4:59pm), how many times do you check [SNS]?
- On a typical/regular school day EVENING (5:00pm-11:59pm), how many times do you check [SNS]?
These questions were then repeated for each SNS, substituting “school day” for “Saturday”.

**Life Satisfaction**
Most of the time, I can find the positive things in any situation
In most ways my life is close to the best it could be
In general, I am not very happy with my life right now (R)
So far I have gotten the important things I want in life
I feel happy more often than sad
My friends are happier than I am (R)
If I could live my life over, I would change almost nothing
I am satisfied with my life

**Self Esteem**
I have a lot of good qualities
Overall, I feel like I am a failure (R)
I can do things as well as other people can
I do not have much to be proud of (R)
All in all, I am satisfied with who I am
I wish I could have more respect for myself (R)
I feel useless at times (R)

**Perceived Social Support**

---

1 Responses to these items were given by indicating the value on a sliding scale. The scale ranged from 0 to 50.
2 Responses for each day and time period for each SNS were added together to create a total weekly usage score.
3 Responses to the Life Satisfaction, Self Esteem, and Perceived Social Support items were given on a 6-point scale (1=strongly disagree to 6= strongly agree).
4 (R) indicates items that were reverse coded.
5 An average score for both Life Satisfaction and Self Esteem was calculated.
I get the emotional help and support I need from my family
I can count on my friends to be there for me when things go wrong
I have friends who I can share my joy and sadness with
I can talk about my problems with my family
My family is willing to help me make decisions
My friends are around when I am in need
My friends are willing to help me make decisions
I can talk about my problems with my friends

**Motivations for Use**

How often do you use social media sites to ... 
Post about fun things you are doing because you're excited
Post about fun things you are doing because you want people to know (N)
See/hear something entertaining
Give updates about major events in your life
Give minor updates throughout the day (N)
Share ideas/information with peers (group project/homework questions)
Teach others about something you have learned
Describe a fight with a family member or best friend (N)
Keep up with friends from other states or cities
Inform friends about upcoming events
Post selfies to show other people how good you looked that day (N)
Post selfies because you were happy about that event or how you looked
Post silly selfies to entertain your friends
Complain about things or events that upset you
Find out interesting drama going on in your school (N)
Post about interesting drama going on in your school (N)

---

6 The average friend support score was subtracted from the average family support score for each participant to create a support difference scale. A difference score of 0 indicates equal amount of support from both sources; a negative score indicates a higher amount of friend support and a positive score indicates more family support.
7 Responses were given on a 5-point scale (1=never to 5=very often).
8 (N) indicates these responses were categorized as negative motivations. The average positive score was subtracted from the average negative score to create a motivation difference score. A negative score indicates more frequent negative uses whereas a positive score indicates more frequent positive uses.
Table 2: Descriptive Table

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measures</th>
<th>Possible Range</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Use in 1 Week</td>
<td>Self Report-The Number of Times SNS is Checked</td>
<td>0 to 300</td>
<td>56.06 (59.73)</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Satisfaction with Life Scale</td>
<td>1 to 6 (higher=more satisfied)</td>
<td>4.28 (0.87)</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>Rosenberg Self Esteem Scale</td>
<td>1 to 6 (higher=more self esteem)</td>
<td>4.22 (0.65)</td>
</tr>
<tr>
<td>Friend-Based Social Support</td>
<td>Multidimensional Scale of Perceived Social Support</td>
<td>1 to 6 (higher=higher sense of support)</td>
<td>4.82 (1.04)</td>
</tr>
<tr>
<td>Family-Based Social Support</td>
<td>Multidimensional Scale of Perceived Social Support</td>
<td>1 to 6 (higher=higher sense of support)</td>
<td>4.14 (0.98)</td>
</tr>
<tr>
<td>Motivations for Usage- Positive</td>
<td>Social Media Questionnaire</td>
<td>1 to 5 (higher=more frequently exhibited)</td>
<td>2.83 (0.84)</td>
</tr>
<tr>
<td>Motivations for Usage- Negative</td>
<td>Social Media Questionnaire</td>
<td>1 to 5 (higher=more frequently exhibited)</td>
<td>1.93 (0.89)</td>
</tr>
</tbody>
</table>
### Table 3

*Regression for Life Satisfaction*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$R^2$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (male=0)</td>
<td>.17</td>
<td>1.5</td>
<td>.21</td>
</tr>
<tr>
<td>Usage Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Difference Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation Difference Score</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (male=0)</td>
<td>-.14</td>
<td>.45</td>
</tr>
<tr>
<td>Usage Frequency</td>
<td>-.10</td>
<td>.55</td>
</tr>
<tr>
<td>Support Difference Score</td>
<td>.21</td>
<td>.24</td>
</tr>
<tr>
<td>Motivation Difference Score</td>
<td>.37</td>
<td>.04</td>
</tr>
</tbody>
</table>
Table 4

*Regression for Self Esteem*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$R^2$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (male=0)</td>
<td>.12</td>
<td>1.04</td>
<td>.40</td>
</tr>
<tr>
<td>Usage Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Difference Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation Difference Score</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| $\beta$                          | .02   | .05  | .32  | .19  
| Sig.                             | .89   | .79  | .08  | .29  |