

To Establish How Social Media Use Influences Self-Esteem of the Students of Mount Kenya University, Thika Campus

Grace Wanjiru Gakinya¹, Florence K'Okul²

Abstract

Social media networks have created a phenomenon on the internet that has gained popularity over the last decade. People use social media sites such as Facebook, Twitter, and My space to create and sustain relationships with others. University students form a large proportion of users on social media networks. The use of social media, though having many advantages, could affect self-esteem of the users. The purpose of the study was therefore to establish how social media use influences self-esteem of the students Mount Kenya University, Thika campus. The study determined the level of self esteem of the students of Mount Kenya University; how students judged their feelings towards themselves and propose strategies that could be employed to promote high self esteem. The study was guided by The Theory of Planned Behaviour by Ajzen (1991) which posits that individuals' intentions are the proximal determinants of their behaviour, with intention conceptualized to capture individuals' motivation to perform a given behaviour. The study applied a descriptive research design targeting all the 7,265 undergraduate students enrolled in Mount Kenya University, Thika Campus. Out of the 7,265 students, 365 students were sampled for the study. The research instruments were the questionnaire. Both the qualitative and quantitative data was collected from the field. A pilot study was conducted among 30 sampled University students. Collected data was coded and entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS). Descriptive statistics including percentages and frequency counts was used to analyse the data obtained. The study established that use of social media results both to high and low self esteem of the students and also showed that student's self-esteem will be determined by the type of feedback they receive from their peers, whether positive or negative on their social media networks. The study therefore recommends that more attention needs to be placed on understanding social media and their impact on youth. Counselors need to not only be aware of what sites students are participating on, but also the significant role that these sites have in the lives of students such as self esteem. Finally counseling program should be introduced in the universities to manage issues related with social media and low self esteem of student due to use of social media.

Keywords: social media, self esteem, counselors, counseling

1. Introduction

University students form a large proportion of users on social media networks, with researchers such as Lenhart (2010) reporting that 72% of university students have a social media profile. Studies have also revealed that over 45% of university students use a social media site at least once a day (Sponcil & Gitimu, 2012). Most students use social media to communicate with family, friends, and even strangers. Social media sites have created new and non-personal ways for people to interact with others and young adults have taken advantage of this technological trend. The use of social media, though having many advantages, could affect self-esteem of the users. While some researchers such as Valkenburg & Peter (2006) and Gonzales & Hancock (2011) have found that social media can enhance self-esteem of the users, others such

¹Student Department of Psychology, Mount Kenya University

²Supervisor Department of Psychology, Mount Kenya University

as Joinson (2004) and Ehrenberg, Juckes, White & Walsh (2008) have reported that students with low self-esteem prefer social media use to avoid face-to-face communication. Furthermore, Russello (2009) argues that being exposed to thin-ideal images lowers self-esteem. This study sought to establish how social media use influences self-esteem of the students Mount Kenya University, Thika campus.

Scope of the Study

The study sought to analyse the addiction tendencies of social media use and its effects on self-esteem among students in Mount Kenya University, Thika campus. While there are many social networking sites that students use, this study confined itself to Facebook.

Relationship between Social Media Use and Self-Esteem

Self-esteem and well-being can be affected by the way people present themselves and information on social media sites like Facebook. High Facebook activity can result in unrealistic views of reality which can drastically affect self-image possibly because of how others present themselves in a narcissistic manner (Mehdizadeh, 2010). According to Junghyun, K., & Jong-Eun, R.L. (2011) there is a relationship between having more Facebook friends and subjective well-being and happiness. The research also suggests that relationships aided in computer-mediated communication are valued just as much as face-to-face relationships.

A number of studies have explored how social media use might be related to self-esteem and social well-being. Study by Kraut et al. (1998) found that heavier Internet use was associated with various measures of loneliness, depression and stress. They argue that this was because weaker ties generated online were replacing stronger offline ties with family and friends. In a follow-up study, Kraut et al. (2002) revealed that when examined over a longer period of time, Internet use was no longer associated with decreased communication and involvement with family and the associated measures of loneliness and depression. Indeed, the effects were generally positive. Of particular interest was their finding that measures of introversion and extraversion moderated the outcomes from Internet use, with extraverts more likely to experience benefits from their Internet use than introverts.

Other researchers also argue that Internet use has positive impacts on self-esteem and psychological well-being (Bargh, & McKenna, 2004); (Shaw & Gant, 2002). Study by Bargh& McKenna (2004) attributed this to the increases in online interactions, which mitigate any loss in communication with others due to time spent online. In an experiment, Shaw & Gant (2002) found decreases in perceived loneliness and depression as well as increases in perceived social support and self-esteem following engagement in online chat sessions. In related research, Valkenburg& Peter (2007) found that socially anxious adolescents perceived the Internet to be more valuable for intimate self-disclosure than non-socially anxious participants, leading to more online communication.

In a study of the effects of Facebook exposure to self-esteem, Gonzales & Hancock (2011) posed contrasting hypotheses to test the effect of Facebook exposure on self-esteem. Objective Self Awareness (OSA) from social psychology and the Hyper personal Model from computer-mediated communication were used to argue that Facebook would either diminish or enhance self-esteem respectively. The results revealed that, in contrast to previous work on Objective Self Awareness (OSA), becoming self-aware by viewing one's own Facebook profile enhances self-esteem rather than diminishes it. Participants that updated their profiles and viewed their own profiles during the experiment also reported greater self-esteem, which lends additional support to the Hyper personal Model. These findings suggest that selective self-presentation in digital media, which leads to intensified relationship formation, also influences impressions of the self.

According to Van Der Heide et al., (2012) experiment whereby they presented various text and photo content to participants to measure their social orientation judgments. The results of the study suggest that the written content on Facebook has a stronger impact than images because there is less of a chance for misinterpretation. Facebook pages that have higher activity, and are visually attractive are more likely to have better social orientations therefore encouraging users to present themselves in a positive manner. The

content on Facebook pages leaves a strong impression on viewers thus users with low activity profiles, fewer friends and a non-attractive profile will have lower self-esteem because they will receive less positive feedback.

Excessive use of social media among students can negatively affect their overall well-being by lowering self-esteem among students mainly by causing depression and anxiety while using the sites in an excessive manner and also the rise of cyber bulling by means of social media. According to a study that involved an anonymous, online questionnaire done by teens and young adults that assessed whether the use of social media platforms, (schizoid, narcissistic, antisocial, compulsive, paranoid and histornic) and three mood mainly Facebook, would predict clinical symptoms of six personality disorders (major depression, dysthymia, and bipolar-mania), the more Facebook friends a user had, the more likely the person was to have clinical symptoms of bipolar, narcissism, and histrionic personality disorder (Rosen, et al. 2013). This study therefore sought to establish the relationship between social media use and self-esteem of students.

Objectives of the Study

The study addressed itself to the following research objectives:

- To determine the extent of social media use among students of Mount Kenya University, Thika campus.
- To establish the purposes for which students of Mount Kenya University Thika campus use social media.
- To establish how social media use influences self-esteem of the students of Mount Kenya University, Thika campus.
- To find out whether social media use causes addiction tendencies among students of Mount Kenya University, Thika campus.

2. Theoretical Framework

This study was based on the Theory of Planned Behaviour by (Ajzen, 1991). The Theory of Planned Behaviour posits that individuals' intentions are the proximal determinants of their behaviour, with intention conceptualized to capture individuals' motivation to perform a given behaviour (Ajzen, 1991). Thus, the likelihood of engagement in the behaviour increases when individuals' intentions to perform the behaviour are stronger. According to this theory, intention is determined by three constructs: attitude, subjective norm, and perceived behavioural control.

Attitude is conceptualised as referring to individuals' overall evaluations, either positive or negative, towards performing a given behaviour, and is posited to comprise affective for example, pleasant/unpleasant and instrumental example, easy/difficult evaluations towards the behaviour. Subjective norm refers to individuals' perceptions of social pressure from important referents such as peers to perform or not to perform the behaviour. Perceived behavioural control refers to the amount of control individuals perceive they have over performing the behaviour. Thus, when people are confident in their ability to perform behaviour, engaging in the behaviour is thought to be achievable which, in turn, increases their likelihood of forming a stronger behavioural intention (Ajzen& Madden, 1986). However, perceived behavioural control is also posited to predict behaviour when individuals are accurate in assessing their skills, resources, and other prerequisites needed to perform the behaviour. Thus, the Theory of Planned Behaviour posits that attitude, subjective norm, and perceived behavioural control indirectly predict behaviour mediated via intention, while intention and perceived behavioural control directly predict behaviour.

The Theory of Planned behaviour was applied in this study to predict and later establish how social media use influences self-esteem of the students Mount Kenya University, Thika campus. An intention to communicate with friends and peers, do research and leisure motivates the students in using Facebook. This

was due to personal attitude being positive or negative, pleasant or unpleasant, easy or difficult. Social pressure from peers, the environment they are in, and the type of gadgets they have influenced then to access or not to access Facebook. This in turn resulted in altering of personal self-esteem which refers to the way students perceive and value themselves.

3. Research Design and Methodology

The study utilized the descriptive survey research design. A survey, according to Groves et al., (2004), is a systematic method for gathering information from (a sample of) entities for the purposes of constructing quantitative descriptors of the attributes of the larger population of which the entities are members. According to Kothari, (2004) the major purpose of descriptive research is description of the state of affairs as it exists at present. The descriptive survey was the most appropriate for this study because in the study, the researcher will collect information on the state of affairs among the students in the University, without manipulating any variables.

The target population was all the undergraduate students enrolled in Mount Kenya University Thika campus. According to statistics from the Commission for University Education (CUE) (2013), Mount Kenya University, Thika campus had 7,265 undergraduate students, among them 4,150 males and 3,115 females. These students comprised the study population.

From the accessible population of 7,265 undergraduate students, a representative sample was determined using the formula by Krejcie& Morgan (1970), which is used to calculate a sample size (S), from a given finite population (P) such that the sample was within plus or minus 0.05 of the population proportion with a 95 per cent level of confidence. This formula is presented below.

Where:
$$S = \frac{X^2 N P (1 - P)}{d^2 (N - 1) + X^2 P (1 - P)}$$

 X^2 = table value of Chi-Square for 1 degree of freedom at the desired confidence level (in this case 3.84)

N = the population size, in this case 7,265 students at Mount Kenya University

P =the population proportion (assumed to be 0.5 since this would provide the maximum sample size)

d – The degree of accuracy expressed as a proportion (0.05)

Computing the desired sample size using this formula gives 365 as the minimum number of students that should be selected from a population of 7,265 students. Consequently 365 students were selected to participate in the study. The 365 students were selected proportionately from male and female students to ensure representativeness. To determine the number of male students to be selected, we divided the total sample (365) by the total population (7,265) and multiplied by the number of male students (4,150). This gave a sample of 208 male students. A similar approach for females gave a sample of 157 female students. Consequently, the study sample was comprised of 208 male and 157 female students, a total of 365 undergraduate students.

Description of Research Instrument

The study employed questionnaires as the research instruments for data collection. Study by Kiess, & Bloomquist (1985) observed that a questionnaire offers considerable advantages in the administration: it presents an even stimulus potentially to large numbers of people simultaneously and provides the investigation with an easy accumulation of data. According to Gay, (1992) maintains that questionnaires give participants freedom to express their views or opinion and also to make suggestions. This

questionnaire was administered to students to collect data. The questionnaire had both open and closed-ended questions.

Pilot testing was conducted in the school of pharmacy for being the smallest in the university. 30 University students were used and they did not take part in the actual study. According to Johanson, & Brooks (2010), a pilot sample of 30 representative participants from the population of interest is a reasonable minimum recommendation for a pilot study where the purpose is preliminary survey. The pilot study data was useful in determining the reliability and improving validity of the instruments, and in the adjustment of the questionnaire where necessary.

The split-half technique of measuring reliability was used. This involved splitting the pilot questionnaires into two halves (odd and even) then calculating the correlation coefficient (r) for the two halves. To do this, the Spearman's Rank Order Correlation Coefficient (r) was used. A correlation coefficient of 0.7 or higher for the two halves was considered sufficient. The researcher aimed at producing questionnaires that gave this reliability result for data collection.

All assessments of validity are subjective opinions based on the judgment of the researcher (Wiersma, 1985). The piloted questionnaires were assessed for clarity and those items found to be inadequate or vague was modified to improve the quality of the research instrument thus increasing its face validity. According to Borg & Gall (1989), validity of an instrument is improved through expert judgment. As such, the researcher sought assistance of her supervisors, in order to help improve content validity of the instrument.

Data Collection Procedure

The researcher obtained an introduction letter from Mount Kenya University and a research permit from the National Council for Science and Technology. After this, the researcher visited the University and administered the questionnaires herself. The participants were given instructions and assured of confidentiality after which they was given enough time to fill in the questionnaires, after which the researcher collected the filled-in questionnaires.

4. Data Analysis

Data collected from the field was coded and entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS) Version 18. Descriptive statistics including percentages and frequency counts was used to analyse the data obtained. Study by Borg & Gall (1989), also hold that the most widely used and understood standard proportion is the percentage. According to Bell (1993), when making the results known to a variety of readers, simple descriptive statistics such as percentages have a considerable advantage over more complex statistics. Statistical analysis was carried out using the Pearson Correlation coefficient at the 0.05 level of significance. The results of data analysis were presented in frequency tables, bar graphs and pie charts.

Ethical Considerations

The researcher obtained a research permit from National Council for Science and Technology. Also the participants were assured of utmost confidentiality regarding the data obtained.

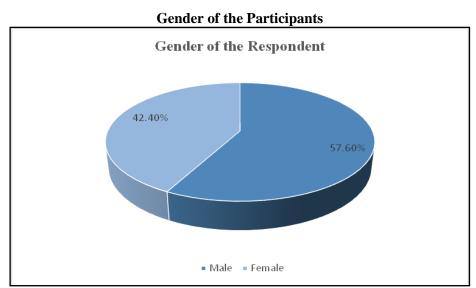
Participation were purely voluntary

Data Analysis, Presentation and Interpretation

	Frequency	% response rate
Non response	63	17.2%
Actual participants	302	82.8%
Targeted participants	365	100%

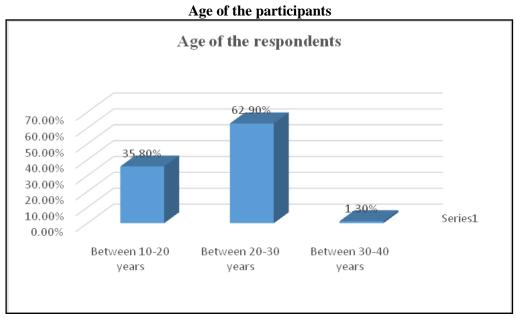
Source: Author (2014)

The above table reveals the correct number of the questionnaires that were returned out the total number of what was sent out, and again to check whether the number was adequate for data processes to continue, Borg and Gall (2008). The study targeted 365 participants, 302 participants out of the 365 sample participants filled-in the questionnaires making a response rate of 82.7%. This reasonable response rate was achieved after the researcher made physical visits to remind the respondent to fill-in the questionnaires. According to Babbie & Earl (2009), 50% response rate is deemed adequate and one can proceed with data analysis. The response rate was satisfactory response rate as according to Babbie & Earl (2009), thus 50% is deemed adequate and one can proceed with data analysis.



Source: Author (2014)

The figure above shows the gender of the participants. The study found out that 57.6% of the participants were male while the remaining 42.4% were female. It is clear that the male participants dominated as shown by the participants.



Source, Author (2014)

Studies in Social Sciences and Humanities

The figure above revealed the age distribution of participants. Majority of participants 62.9% were between 20-30 years while 35.8% were between 10-20 years. 1.3% of the participants were above between 30-40 years. It was clear from the study most of the participants were between 20-30 years.

Social Media Use

	Mean	Std. Deviation
I feel that I am a person of worth	4.5596	1.04774
I feel that I have a number of good qualities	4.7020	.65511
All in all, I am inclined to feel that I am a failure	2.0497	1.50332
I am able to do things as well as most other people	4.1291	1.30163
I feel that I do not have much to be proud of	2.8278	1.59843
I take a positive attitude towards myself	4.4437	1.11549
On the whole, I am satisfied with myself	4.4338	.99195
I wish I could have more respect for myself	3.6358	1.54655
I certainly feel useless at times	2.0762	1.36063
At times I think I am no good at all	1.6424	1.12563

Source: Author (2014)

The study reveals that the participants agreed on the statements that they feel that they are persons of worth, they have a number of good qualities, they are able to do things as well as most other people, they take a positive attitude towards themselves, they are satisfied with themselves and they also wish to have more respect for themselves. Each had a mean of 4.5596, 4.7020, 4.1291, 4.4437, 4.4338, and 3.6358 respectively. The participants disagreed on the statements that they are inclined to feel that they are failures; they feel that they do not have much to be proud of and they certainly feel useless at times as indicated by means of 2.0497, 2.8278 and 2.0762 respectively. Similarly the participants strongly disagreed that at times they think they are not good at all with a mean of 1.6424. This study supported finding of Mitchell (2002) who argued that activities adolescents engage in social media plays a vital role in youth psychological

well-being in terms of their social connectedness and closeness to friends which can affect their self-esteem.

The study sought to establish the feeling of students towards themselves. It was established that the participants indicated that they mostly judge themselves as; quiet, nervous, lazy, agreeable, uncreative, unworried, vengeful, imaginative, introverted and weak-willed as indicated by the means of 2.1689, 2.4735, 2.2781, 2.1358, 2.3113, 2.1987, 2.3179, 2.1656, 2.4868 and 2.1424 respectively. The participants further indicated that they very much judge their feeling toward themselves as; outgoing, thorough, anxious, gentle, unartistic, sociable, self-assured, responsible, antagonistic, original, reserved, tense, quitting, flexible, realistic, joiner, hardy, orderly, critical and curious. Each had a mean of 1.8510, 1.9967, 1.9702, 1.6325, 1.9669, 1.5828, 1.6291, 1.4967, 1.6490, 1.6788, 1.7947, 1.9768, 1.9040, 1.7285, 1.5695, 1.5629, 1.6424, 1.4801, 1.5033 and 1.6987 respectively. This study results are similar to one of Valkenburg, Peter, & Schouten, (2006) who showed that adolescents' self-esteem will be determined by the type of feedback they receive from their peers, whether positive or negative on their social media networks.

Feelings towards Students

reenings towards Students			
	Mean	Std. Deviation	
Quiet	2.1689	.85179	
Nervous	2.4735	.77607	
Lazy	2.2781	.89412	
Agreeable	2.1358	.91759	
Uncreative	2.3113	.79605	
Outgoing	1.8510	.82384	
Unworried	2.1987	1.01497	
Thorough	1.9967	.86073	
Vengeful	2.3179	1.10793	
Imaginative	2.1656	1.60535	
Introverted	2.4868	1.91640	
Anxious	1.9702	1.47485	
Weak-willed	2.1424	1.10402	
Gentle	1.6325	.98864	
Unartistic	1.9669	1.24114	
Sociable	1.5828	.79748	
Self-assured	1.6291	.74812	
Responsible	1.4967	.69525	
Antagonistic	1.6490	.77501	
Original	1.6788	.81889	
Reserved	1.7947	.88033	
Tense	1.9768	.86042	
Quitting	1.9040	.89705	
Flexible	1.7285	.83075	
Realistic	1.5695	.74718	
Joiner	1.5629	.78250	
Hardy	1.6424	.86914	
Orderly	1.4801	.78900	
Critical	1.5033	.76357	
Curious	1.6987	.89216	

5. Discussion, Conclusion and Recommendations

Influences Social Media Self-Esteem

The study established that use of social media results both high and low self esteem of the students of Mount Kenya University, Thika campus. This study results are similar to one of Valkenburg, Peter, & Schouten, (2006) who showed that adolescents' self-esteem will be determined by the type of feedback they receive from their peers, whether positive or negative on their social media networks. This study support finding of Mitchell (2002) who argued that activities adolescents engage in social media plays a vital role in adolescent psychological well-being in terms of their social connectedness and closeness to friends which can affect their self-esteem.

Conclusions

The study concludes that majority of the Mount Kenya University, Thika campus students use social media. The study concludes that the use of social media can cause both high and low self esteem of the students. Social media users' self-esteem is determined by the type of feedback they receive from their peers, whether positive or negative on their social media networks. Activities adolescents engage in social media plays a vital role in adolescent psychological well-being in terms of their social connectedness and closeness to friends which can affect their self-esteem.

Recommendations

Based on the above conclusions, the results of this project have shown that more attention needs to be placed on understanding social networking sites and their impact on youth. Social networking sites, such as Facebook, are not only gaining popularity each year, they are becoming the primary form of communication between university students when they are at home. Advising a student to stop participating in these sites would not be recommended. As previous studies have shown, these sites are important to adolescent identity-forming and communication (Tufekci, 2008). University counselors should build upon the positive attributes that these sites have, such as the ability for students to join student groups or meet others from school. One way to do this would be to give classroom presentations on the risks and benefits of social networking, highlighting the problematic behaviors associated with these sites but also educating students on how these sites can improve their lives socially and academically. University counselors can help students set boundaries for themselves when appropriate and teach them about social media use and safety. Finally counseling program such as open discussion (debates), seminars and workshops should be introduced in the universities to manage issues related with social media addiction and low self esteem of student due to use of social media.

Recommendations for Further Study

The number of limitations in this study suggests that further research needs to be done on the influence of social networking participation on student academic performance and/or attitudes. This research should be done with a large amount of students and encompass many different grade levels. In addition to surveying students about how this technology is impact their academics, much more importance should be focused on how these sites impact their relationships with other students. Social networking causes more social and behavioral problems than academic problems and should be addressed. Though young adults tend to spend a lot of time on these sites, what is more important than this is what types of behaviors these people are engaging? Research should be done to find out how this communication is affecting young adults and their relationships with peers.

References

- Ajzen, I. & Madden, T. J. (1986). Prediction of goal-directed behaviour: Attitudes, intentions and perceived behavioural control. Journal of Experimental Psychology, 29: 71-90.
- Ajzen, I. (1991). The theory of planned behaviour. OrganisationalBehaviour and Human Decision Processes, 50: 179-211.
- Bargh, J. A., & McKenna, K. Y. (2004). The Internet and social life. Annual Review of Psychology, 55, 573–590.
- Bell, A. W. (1993). Education Research. New York: New York Publishers.
- Borg, R. W. & Gall M. D. (1989). Educational Research; an Introduction.. Longman Inc, New York.
- Ehrenberg, A., Juckes, S., White, K. M., & Walsh, S. P. (2008). Personality and self-esteem as predictors of young people's technology use. Cyber psychology and Behavior, 11: 739-741.

- Gonzales, A. L., &Hancock, J. T. (2011). Mirror, mirroron my Facebook wall: Effects of Facebook exposure on self-esteem, Cyberpsychology, Behavior, and Social Networking, 14(January/February), 79–83.
- Johanson, G.A. & Brooks, G. P. (2010). Initial Scale Development: Sample Size for Pilot Studies. Educational and Psychological Measurement 70(3), 394–400.
- Joinson, A. N. (2004). Self-esteem, interpersonal risk, and preference for e-mail to face-to-face communication. Cyber Psychology and Behavior, 7: 472-478.
- Junghyun, K., & Jong-Eun, R.L. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. Cyberpsychology, Behavior, and Social Networking, 14, 359-364.
- Kiess, H. O. &Bloomquist, D. W. (1985). Psychological Research Methods: A Conceptual Approach. Boston. Allyn and Bacon.
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet paradox revisited. Journal of Social Issues, 5 8,49-74.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukhopadhyay, T., &Scherlis, W. (1998). The Internet paradox: A social technology that reduces social involvement and psychological well-being. American Psychologist, 53, 1017-1032.
- Krejcie, R. V. & Morgan, D. W. (1970): Determining sample size for research activities. Educational and Psychological Measurement. 30, 607-610.
- Lenhart, A. (2010). Cyberbullying 2010: What the research tells us. Pew Internet & American Life Project.
- Mehdizadeh, S. (2010). Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook. Cyberpsychology, Behavior & Social Networking, 13(4), 357-364. oi:10.1089/cyber.2009.0257
- Peter, J., Schouten, A., and Valkenburg, P. (2006). Friend networking sites and their relationship to adolescents' wellbeing and social self-esteem. Cyber Psychology and Behavior, 9, 584-590. doi: 10.1089/cpb.2006.9.584
- Rosen, L. D., Whaling, K., Rab, S., Carrier, L. M., & Cheever, N. A. (2013). Is facebook rtechnology use, attitudes and anxiety. Computers in Human Behavior, 29(3), 1243-1254.
- Russello, S. (2009). The impact of media exposure on self-esteem and body satisfaction in men and women. Journal of Interdisciplinary Undergraduate Research, 1(4): Available online at: http://knowledge.e.southern.edu/cgi/viewcontent.cgi?article=1023&context=jiur
- Shaw, B., & Gant, L. (2002). In defense of the Internet: The relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. Cyber Psychology & Behavior, 5, 157–171.
- Sponcil, M. & Gitimu, P. (2012). Use of social media by college students: Relationship to communication and self-concept. Journal of Technology Research
- Tufekci, Z. (2008). Grooming, gossip, facebook and myspace: What can we learn from those who won't assimilate? Information, Communication, and Society, 11, 544-563. doi: 10.1080/13691180801999050
- Valkenburg, P. M., & Peter, J. (2007). Preadolescents' and adolescents' online communication and their closeness to friends. Developmental Psychology, 43, 267–277.
- Valkenburg, P. M., Peter, J., & Schouten, M. A. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. Cyber psychology and Behavior, 9, 584-590.
- Van Der Heide, B., D'Angelo, J.D., &Schumaker. E.M. (2012). The effects of verbal versus photographic self-presentation on impression formation in facebook. Journal of Communication. 98-120.

Studies in Social Sciences and Humanities

Wiersma, W. (1985). Research Methods in Education. An Introduction, 3rd Edition London Alyn and Bacon Inc.