Mini Proposal: The Offline Adolescent Peer Group as a Mediator Between Social Media Usage and Body Image

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Initial Statement

Adolescence is a key developmental stage marked by vast cognitive, social, and physical changes (Salomon & Brown, 2019). These changes impact adolescents' height, weight, identity (Papageorgiou et al., 2022), self-awareness (Chua & Chang, 2016), tendency to engage in social comparison (Mazzeo et al., 2024), and the importance of their peer groups (Khan et al., 2016). Taken together, these changes work to complicate adolescents' thoughts and feelings about their physical appearance, otherwise known as their body image (Salomon & Brown, 2019). At the same time, adolescents are increasingly active on social media and engaging with appearance focused content through apps such as Instagram and Snapchat (Jarman et al., 2021). In fact, current research indicates that up to 97% of adolescents use social media regularly (Woods & Scott, 2016). Unfortunately, the use of such platforms has been associated with body dissatisfaction among both adolescent girls and boys (Vuong et al., 2021). However, it is evident that social media varies in the degree of its impact on adolescent body image (De Vries et al., 2019). Given the heightened importance of offline peers in adolescence and individual differences in the degree to which social media affects adolescent body image, it is crucial to examine the potential role of offline peers as mediators between social media usage and body image. If a link is identified between offline peers, social media, and body image this could aid future research aimed at helping reduce the negative outcomes associated with poor body image in adolescence.

Statement of the Problem

As adolescents utilize social media and experience developmental changes, they become increasingly vulnerable to developing a poor body image (Jarman et al., 2021). Latiff et al. (2018) highlighted the prevalence of body image issues in adolescence by reporting that over 60% of adolescents experience body dissatisfaction. This finding was also supported in a study by Aanesen et al. (2017) which identified that 50% of 14-year-old boys and 74% of 14-year-old girls desire to alter their physical appearance. This high occurrence of body image issues in adolescence is significant because it places adolescents at greater risk for negative physical and psychological outcomes (Vuong et al., 2021). Thus, it is crucial to gain understanding of all factors that relate to body image issues in adolescence in order to alleviate the potential consequences that follow. Although the social environment is proposed to influence adolescent body image (Thompson et al., 1999), there remains uncertainty in how an adolescents offline peer group interacts with their social media experiences to shape their body image.

Purpose of the Study

Rather than only examining how online social media interactions and interventions directly affect adolescent body image, this study extends its focus to the impact of an adolescents offline social sphere on how they perceive social media interactions and subsequently form ideas about their appearance. A goal of this study is to explore if offline peer groups play a role in determining how adolescents' body image is affected upon using social media applications. Particularly, an aim of this study is to determine if adolescents' offline peer groups can act to mitigate and/or exacerbate the negative impacts of social media on the body image of adolescents. The hope is that a link will be identified between adolescent peer groups, social media use, and body image perceptions which could inform future research.

Research Questions

The research questions that this study will attempt to answer include the following:

- Do offline peer groups play a role in buffering or enhancing the impacts of social media usage on body image in adolescence?
- If so, what characteristics of an adolescent's offline peer group increase the risk that the adolescents will experience body dissatisfaction when utilizing social media?
- Additionally, what characteristics of an adolescent's offline peer group assist in mitigating the impact of social media on feelings of body dissatisfaction, if any?

Significance of Study

Research suggests that body dissatisfaction is common among adolescents and can lead to low self-esteem, eating disorders, and depression (Salomon &Brown, 2019). Though support has been found that adolescent's social environment is important to their development of body image and that it can influence how social media effects their body image (De Vries et al., 2019). Research has focused on online peer interactions and offline parental support, rather than offline peer interactions. Thus, this research study is significant because it attempts to fill a gap in the literature which could be important in understanding how social factors combine to influence body image.

Literature Review

Though no research currently exists directly linking the impact of adolescent's social media usage on their body image to characteristics of their offline peer groups, related research provides context for the proposal to follow. In this review, several areas of relevant research will be covered

including the identified impact of social media on body image and the importance of peers for body image development in adolescence.

Social Media and Body Image

Social media usage and its effects on body image in adolescence have been extensively studied due to the prevalence of social media use in adolescence, the unrealistic beauty ideals portrayed though social media platforms, and the susceptibility of adolescents to body image issues. The sociocultural theory has served as a guide for much of this research (De Vries et al., 2019; Vuong et al., 2021; Jarman et al., 2021; Salomon & Brown, 2019; Papageorgiou et al., 2022) and will serve as a guide for the current proposal. When applied to body image, the sociocultural theory proposes that adolescents internalize messages about the way they should look from sources including parents, peers, and media (Thompson et al., 1999). These messages then serve as ideals that adolescents compare their own physical appearance to, leading to body image dissatisfaction when the way they look does not align to these often unattainable ideals (Jarman et al., 2021). One way these messages are conveyed is through social media images.

Unfortunately, the research has continually highlighted social media's negative impact on adolescent body image specifically for those that internalize the appearance ideal messages they receive on these platforms. For instance, in a longitudinal study of 1153 adolescent boys and girls, Vuong et al. (2021) found that the use of social media platforms including Instagram and Snapchat was significantly associated with body dissatisfaction, especially for those with higher levels of thin and muscular internalization. Additionally, Jarman et al. (2021) found that higher appearance-focused use of social media was with positively associated poor body image among adolescents and

was generally associated with internalization of thin and muscular appearance ideals portrayed thorough the applications.

Interviews with adolescents have provided further insight into this connection. For example, in a study consisting of in-depth interviews with adolescents on their experiences with social media, one teen explained that social media made her feel self-conscious about the way she looked because people in accounts that were popular looked nothing like her (Weinstein, 2018). This sentiment was echoed by adolescent girls participating in semi-structured interviews who reported that they felt insecure and self-conscious about their own appearance after viewing images of other girls on social media, particularly Instagram (Papageorgious et al., 2022).

The negative impact of social media on body image is often attributed to the number of users that post highly edited images of themselves featuring unattainable beauty standards (Mazzeo et al., 2024). Kleemans et al. (2018) supported this claim by finding that adolescent girls exposed to Instagram images of peers that had been manipulated showed significantly lower body satisfaction than those exposed to unedited Instagram photos. Despite adolescents often being aware that others modify their physical appearance in social media posts, they still report appearance comparisons leading to body image issues (Papageorgious et al., 2022). However, even unedited photos have been linked to body dissatisfaction, though to a lesser extent (Kleemans et al., 2018). Thus, it is evident that unattainable ideals depicted in social media cannot completely account for the negative effects of social media on body image.

Importance of Peers on Body Image in Adolescence

In addition to media, peers are also an important source where adolescents can learn about cultural and societal ideals concerning appearance according to the sociocultural theory (De Vries et

al., 2019). Though the influence of peers in shaping adolescent body image has received some research attention, the potential of offline peers to act as mediators between social media usage and body image has not been examined. Instead, research has either focused on the impact of peers on body image without considering social media's potentially interconnected influence (Kenny et al., 2017) or has examined how online peers can affect adolescent body image without considering the importance of broader offline sociocultural influences on body image (Vuong et al., 2021).

A focus group study conducted by Kenny et al. (2017) found that peers place significant pressure on adolescents to conform to their appearance ideals which often leads to body dissatisfaction, however, the effect of peers on body image was not purely negative. Romo et al. (2016) supported these finding in interviews with Mexican American adolescent girls who explained that peers both critiqued and reassured them about their appearance leading variable effects on body image. On social media, peers have been identified to act as imaginary audiences, judges, comparison targets and sources of vicarious learning (Chua & Chang, 2016). This has mostly led to negative consequences for adolescents' body images as it is difficult to meet the standards of beauty their peers enforce through social media (Chua & Chang, 2016). Together, these studies revealed that peers exert significant influence on body image in adolescents. Given the sociocultural theory's proposition that multiple influences work together to shape body image, it becomes crucial to fully examine how peer influence works together with social media usage to shape adolescents' perceptions of their body. The current study plans to fill this gap in the literature.

Design and Methodology

In the following sections, details will be provided on the proposed research study. This will include information on the research approach and its rationale as well as the procedures for data

collection and analysis. Additionally, it will include hypotheses stating the study's anticipated findings and potential limitations of the research.

Approach

The approach for the current study is quantitative. Though both quantitative and qualitative approaches could provide insight into the potential connection between adolescent social media usage, their offline peer groups, and body image. A quantitative approach was chosen due to its emphasis on collecting a larger breath of data than the qualitative approach which typically focuses on depth. Thus, the quantitative approach of the current study will be more useful in meeting the goal of the study which is to identify a pattern across the entire adolescent population that utilizes social media. If a correlation is found between the offline adolescent peer group, social media usage and body image, future qualitative research could provide further insight into the connection. Though this is beyond the scope of the current study.

Participants

Participants for the current study will be both male and female adolescents aged 12-18 years old who utilize at least one appearance-focused social media platform. This will include Instagram, Snapchat, and Facebook. Since well over 100,000 adolescents in the United States fit this population (Weinstein, 2018), this study will include a sample size of 1,067 adolescents to ensure accuracy within ±3% given a 95% confidence level (Cozby & Bates, 2018).

To recruit participants, school administrators across the United Stated will be contacted via email and telephone to inform them of the current study and its goals. Additionally, permission will be requested to promote the study to potential participants, and their parents and/or guardians through the schools' email list and newsletter. Information about the study and contact information for the

researcher will be included on emails and school newsletter announcements directed at potential participants and their parents and/or guardians. Since the majority of study participants will be minors, parental consent and minor assent will be collected prior to any data collection. Parental consent will be collected through an informed consent form that parents and/or guardians of adolescents who meet the criteria to participate and express interest in participating will receive via email. This form will need to be signed and returned through the parent's email address. Assent will be confirmed by adolescents just prior to data collection by ensuring that they understand the purpose of the study, it associated risks, and that their participation is optional. For adolescents who are 18 years of age, parental consent will still be collected since the study will be promoted in a school setting, though this is not legally required. Additionally, 18-year-old adolescents participating in the study will fill in an informed consent form just prior to data collection.

Data Collection

Data for this study will be collected through a close-ended survey presented to the adolescents online. To limit the possibility that the surveys will be filled out by individuals other than the intended participants, school administrators will be provided a list of participating adolescents and will allow these students time during one of their usual classroom periods to complete the survey in one of the school's computer labs. At the beginning of data collection, adolescents will once again confirm that they meet the requirements to complete the study (see Appendix A). If they meet the criteria to participate, they will then independently respond to a variety of questions and statements concerning their social media usage, offline peer group, and body image. Both questions and statements will include five labeled response alternatives from which the adolescent will choose the option that is most fitting to their feelings and/or experiences. This scale was chosen to ensure that

the adolescents have a clear understanding of the meaning of their responses. Additionally, it will provide more insight into their responses than dichotomous agree-disagree scales.

Multiple variables will be examined through this study including the usage of social media, offline peer group characteristics, and body image. For the purposes of clarity, reliability, and communication of results, operational definitions of the study's variables have been identified. In this study, social media usage, the independent variable, is defined as having an account on one or more of the following social media platforms (Instagram, Snapchat and/or Facebook). Additionally, it will refer to viewing content posted from other users on these platforms for a minimum of one hour daily. The dependent variable, body image, is defined in the current study as the level of esteem or confidence adolescents report about the way they look. Adolescents who report feelings of happiness about their physical appearance and do not desire to alter their appearance will be deemed to have a positive body image. On the other hand, adolescents who report feeling discontent with the way they look, negatively comparing their body to others, or having the desire to change physical features will be deemed to have a poor body image. Finally, the mediator variable in this study, the offline peer group, will be defined as the individuals that adolescents interact with regularly in their community and at school. Characteristics of the offline peer group including providing support and reassurance, perpetuating narrow body ideals, and criticism will be measured in the current study through the perceptions of the participant adolescents.

Data Analysis

Once all data has been collected, surveys that have not been completed will be removed from before data analysis as to not interfere with the results. Next, all labeled response alternatives will be given a coded meaning by the researcher. SAS (Statistical Analysis Software), a form of SEM

(Structural Equation Modeling), will be an important tool in analyzing the data for the current study. First, PROC FORMAT will be used in SAS to convert all of the participants responses to coded numerical meanings which will aid in identifying patterns and later with the statistical analysis of the data. Next, PROC MEANS will be used in SAS to determine descriptive statistics from the data including the mean, median, and standard deviation of the data set. Following these procedures, a multiple regression analysis will be conducted using PROC REG in SAS. The results of this analysis will show if offline peer groups are in fact a mediator between adolescent social media usage and body image. Finally, the information will be converted into graphs to assist with data visualization. For simplicity, SAS will also be used in the creation of graphs.

Hypotheses

One hypothesized finding of the current study is that it will confirm previous findings that both peers and social media influence the body image of adolescents. Additionally, adolescents with offline peer groups characterized as often providing support and reassurance for their physical appearance are hypothesized to experience fewer of the negative effects of social media on body image. However, adolescents with offline peer groups that reinforce the narrow body ideals promoted through social media or who often criticized their appearance are hypothesized to experience more of the detrimental effect of social media on body image.

Limitations

This study has several limitations. First, limitations arise due to the study's design. For instance, since only quantitative information is collected through this study, adolescents are unable to provide detailed information allowing further insight into the connection or lack thereof between their offline peer group, social media usage, and body image. Additionally, since all data is collected

from participants at one point in time, there is no way to establish that offline peer groups directly cause any observed effects. Rather, the current study can only prove correlation between variables. Another limitation of the study is that adolescents may misinterpret questions or may not accurately report characteristics of their offline peer group, their social media usage or their body image. Finally, other factors that are not accounted for in this study's design may alter its outcome. For instance, future research and/or analysis may be needed to identify if there are differences in outcomes depending on an adolescent's gender, grade level, SES, etc.

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Appendix A- Participant Screening Tool

Name: _____ Age: _____

Gender:_____

Phone Number: _____

Parent/Guardian Name: _____

Parent/Guardian Phone Number: _____

School: _____ Grade: _____

Are you between 12 and 18 years old, including both 12 and 18 years of age? _____

Do you have an account on Instagram, Snapchat, and/or Facebook? _____

If you have an account on Instagram, Snapchat and/or Facebook, do you view content posted by others for an hour or more daily? _____

Are you willing to answer online questions about your friends and your experiences using Instagram, Facebook and/or Snapchat? _____

Do you understand that participation in this study is completely voluntary and that you can stop answering questions at any point for any reason? _____

If you have any questions and/or concerns please contact the researcher of this study using the information provided below:

Researcher: Sydney Garcia
Researcher Phone:832-492-8323
Researcher Email: Sjamison1@twu.edu