"The Impact of Tiktok Usage on the Self-Esteem of Elementary School Students in Carmen Bohol: A Quantitative Analysis"

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ABSTRACT

The study investigates the multidimensional impact of TikTok usage on the self-esteem of Grade 6 pupils in the Carmen District, comprising a sample of 147 respondents aged 11-12. Employing a descriptive-correlational research design, data was gathered through structured surveys that assessed both TikTok engagement and self-esteem levels. The statistical analyses employed include mode, multiple regression, and Pearson's chi-square, ensuring alignment with the research objectives and appropriateness for the data types. Findings indicate that TikTok is predominantly utilized by pupils for entertainment, educational purposes, and social trend engagement, with quantitative results revealing that 147 students of Carmen, Bohol. Notably, frequent engagement with TikTok content is associated with higher self-esteem scores among pupils; however, it is essential to emphasize the correlational nature of this relationship, which does not imply causation. In conclusion, while TikTok serves as a significant medium for entertainment and social interaction, it necessitates a critical examination of potential adverse effects on youth. Recommendations for responsible usage are posited for educators, parents, and curriculum developers, advocating for a balanced integration of social media literacy within educational frameworks.

Keywords: TikTok, self-esteem, descriptive-correlational design, Elementary School, Grade 6 pupils

INTRODUCTION

TikTok has become one of the most popular social media sites among young people in recent years, especially among primary school students. TikTok's distinctive format, which promotes creativity through brief video clips, enables users to express themselves, interact with trends, and establish connections with their peers. But TikTok's pervasiveness raises questions about how technology may affect kids' psychological growth and sense of self. This study is necessary since the impact of social media platforms on young people's self-perception has not been sufficiently examined in the literature to date. Despite its popularity, little is known about how TikTok use affects self-esteem among Grade 6 pupils, a crucial age marked by increased sensitivity to peer feedback. The widespread use of social media calls for a deeper look into how these platforms influences their self-view. Consequently, this study aims to illuminate the specific relationship between TikTok engagement and self-esteem levels among young learners. The guiding research questions for this study include: (1) What are the patterns of TikTok usage among Grade 6 pupils? (2) How does TikTok usage correlate with self-esteem scores in this demographic? (3) Are there particular content types or user interactions that significantly affect self-esteem? (4) What insights can be drawn from this relationship to inform educational practices? This research is framed within the context of theoretical perspectives, including User-Centric Theory and Rosenberg's Self-Esteem Theory. User-Centric Theory posits that users engage with media to fulfill personal needs and preferences. Yet, little is known about how this theory specifically applies to the developmental stage of Grade 6 pupils, a crucial time for self-identity formation. Additionally, Rosenberg's Self-Esteem Theory offers a framework for comprehending how social interactions and outside feedback influence one's sense of self. Nevertheless, little is known about how these theories relate to young students' use of TikTok. The existing literature on social media's impact on youth presents a fragmented view, often lacking synthesis and critical analysis. While studies such as Jan et al. (2017), Wang et al. (2019), Lu

(2021), and Zhang & Yongqi (2022) contribute valuable insights, they commonly offer descriptive overviews instead of integrated critiques that highlight contradictions and gaps. By employing a structured approach to literature review, this study aims to bridge these gaps and provide a comprehensive understanding of TikTok's influence on self-esteem, ultimately contributing to the fields of educational psychology and media studies.

METHODOLOGY

Research Design

This study employs a descriptive-correlational research design, which is suitable for exploring the relationship between TikTok usage and self-esteem among Grade 6 pupils. The descriptive aspect of the design allows for a detailed examination of how frequently and in what ways students engage with TikTok. The correlational aspect facilitates an analysis of the potential relationships between TikTok engagement and self-esteem levels. This section will clarify the specific correlational variables, explain how these variables were operationalized, and detail the integration of descriptive and correlational analyses.

Correlational Variables

The primary variable of interest is TikTok usage, operationalized through measures of frequency (hours per day spent on the app), type of engagement (content consumed vs. content created), and nature of interactions (likes, comments). The dependent variable, self-esteem, will be assessed using [insert self-esteem measurement tool here], ensuring clarity in how both variables are defined and measured.

Participants and Sampling Method

About 147 sixth graders from three elementary schools in Carmen, Bohol, will participate in the study. To guarantee that the sample appropriately represents the general population in terms of demographic characteristics like gender, age, and socioeconomic background, a stratified random sampling technique will be used. Students who actively use TikTok will be included in the inclusion criteria, and those who do not have access to the platform will be excluded. To improve the study's representativeness, these standards will be made clear.

Demographic Breakdown

In the following sections, we will provide a detailed demographic overview of participants, including gender distribution, age ranges, and socio-economic backgrounds based on data collected during the survey.

Instruments

TikTok Usage Questionnaire: A self-developed questionnaire will be utilized to assess various aspects of TikTok engagement. This questionnaire will undergo expert review and pilot testing to ensure content validity and reliability. An explanation of how the validity of the instrument will be tested and references to similar studies that have used comparable measures will be included to support its credibility.

Self-Esteem Assessment: The Rosenberg Self-Esteem Scale (RSES) will be utilized in this research. Previous studies that have successfully employed this scale will be cited, along with its reported reliability coefficient (e.g., Cronbach's alpha), to establish its appropriateness for the target population. We will also provide clear scoring rubrics and interpretive guidelines for how scores are categorized across the specified domains.

Data Collection Procedure

To maintain ethical standards throughout the data collection process, a set of systematic steps will be used: Informed Consent: Before students participate, parental consent and student assent will be obtained. In plain language, parents and participants will receive comprehensive information on the study's goals, methods, risks, and advantages. Data protection and confidentiality: Steps will be taken to protect participant privacy, such as anonymizing answers and safely keeping data. Before the research is conducted, ethical approval from the

College of Teacher Education at BISU-Bilar will be acquired.

Data Analysis Techniques

Quantitative data will be analyzed using multiple regression analysis to identify relationships between TikTok usage and self-esteem scores, with clear definitions of independent and dependent variables outlined. The assumptions of regression analysis, including linearity, homoscedasticity, and normality, will be checked, and appropriate methods of handling any violations will be described.

Qualitative data from open-ended survey items or interviews (if applicable) will be coded and analyzed thematically, focusing on key themes that emerge from participants' experiences with TikTok.

Descriptive statistics will summarize demographic data and overall trends, while correlations will be calculated to explore relationships between variables. The rationale for each analytical approach will be clearly explained to ensure transparency and replicability of the findings.

RESULTS AND DISCUSSIONS

Table 1. The descriptive data presented in Table 1 reveal that a substantial proportion of pupils engage with TikTok frequently, with 44.22% using it daily and a predominant preference for entertainment content such as dance trends (68.71%) and music videos (63.95%). While these figures highlight popular usage patterns, the discussion remains superficial, lacking exploration of what these behaviors imply psychologically or socially. For instance, the high evening usage (66.33%) could be linked to after-school routines, peer interaction, or social anxiety, yet such interpretations are absent. Comparing these findings with prior research (e.g., Smith & Lee, 2020) would have contextualized whether these patterns are typical among similar age groups or indicative of specific behavioral tendencies.

Table 1: Frequency of TikTok usage n=147

	Frequency	**Percentage**
TikTok Usage		
Daily	65	44.22
Several times a week	53	36.05
Once a week	22	14.97
Once a month	7	4.76
Never	0	0
Time Spent		
Less than 30	48	32.65
30 minutes to 1 hour	47	31.97
1 to 2 hours	25	17.01
More than 2 hours	27	18.37
Time of the Day		
Morning	25	17
Afternoon	33	22.45
Evening	57	38.78
Throughout the day	32	21.77

Table 1.2 Regarding content preferences (Table 1.2), the dominance of dance and music videos suggests a focus on entertainment and self-presentation. However, the discussion does not delve into how such preferences might influence self-esteem—either by fostering social belonging or by reinforcing appearance-based comparisons—particularly when linked to the self-esteem domains measured later. The assumption that content interest is "just for fun" ignores the potential psychological impacts of social comparison or identity construction associated with these content types, as supported by Social Comparison Theory.

Table 1.2: Type of content n=147

Contents	Frequency	%
Comedy skits	67	45.58
Dance Trends	101	68.71
Educational videos	55	37.41
Music videos	94	63.95
DIY and life hacks	50	34.01
Sports and fitness	57	38.78
Art and creativity	44	29.93
Others	37	25.17

Table 1.3 Highlights a notable gap: while 70% of pupils express interest in creating videos, only 10.67% post daily. This discrepancy warrants discussion—possibly due to social anxieties, parental restrictions, or lack of technical skills—yet none are explored. Furthermore, the core research question about whether active creators have higher self-esteem remains unaddressed; such an analysis could have been conducted via t-tests or regression comparisons, offering valuable insights into the impact of active participation.

Table 1.3 Frequency of Creating and Posting Videos n=147

	Frequency	Percentage
Creating Videos		
Yes	103	70.07
No	44	29.93
Posting Videos		
Daily	11	10.67
Several times a week	22	21.35
Once a week	46	44.66
Less than a week	24	23.30

Table 1.4 In examining the purpose of TikTok use (Table 1.4), entertainment dominates, yet the implications for cognitive development, digital literacy, or educational engagement are overlooked. Given that only 4.7% of pupils use TikTok for educational purposes, discussion about curriculum gaps, the role of teachers in guiding meaningful media use, or the potential for educational integration would have enriched the analysis.

Table 1.4: Purpose of Using TikTok n=147

Statements	Frequency	%
To watch funny videos	120	81.63

To learn new things	100	68.03
To connect with friends	69	46.94
To follow trends	78	53.06
To create and share videos	59	40.14
To stay informed about current events	60	40.82
For educational purposes	77	52.38
Others	23	15.65

Table 2 indicates that most pupils reported high family self-esteem, with the modal response being "I feel good about how much my family cares for me" (Mode = 4). This suggests that most pupils perceive their family relationships positively, which aligns with the protective role of family support in adolescent development. However, the presence of responses indicating dissatisfaction, such as "I wish my family liked me more," highlights underlying vulnerabilities. These mixed responses point to a nuanced self-view within the family domain, where general satisfaction coexists with unmet expectations. Given that family support often buffers negative peer or school experiences, it would be insightful to explore whether high family self-esteem correlates with overall self-esteem or moderates the impact of TikTok usage. The current analysis, however, treats this domain in isolation, missing the opportunity to examine these interactions.

Table 2: Level of Self-Esteem in Peers n=147

	Statement	**Mode**	**DI**	**Interpretation**
Q1	I am as popular with kids my age as I want to be.	3	A	HSE
Q7	I am as good as I want to be at making new friends.	4	SA	VHSE
Q13.	I have as many close friends as I would like to have.	3	A	HSE
Q19	I am as well-liked by other kids as I want to be.	3	A	HSE
Q25	I feel good about how well I get along with other kids.	4	SA	VHSE
Q30	I wish my friends liked me more than they do.	4	SA	VHSE
Q35	I feel good about how much my friends like my ideas.	4	SA	VHSE
	General mode	**4**	**SA**	**VHSE**

Legend:

1- Strongly Disagree   *Low Self-esteem*

2- Disagree   *Moderate Self-esteem*

3- Agree   *High Self-Esteem*

4- Strongly Agree   *Very High Self-Esteem*

Table 2.1 The data suggest that pupils generally feel positive about peer acceptance, with the most common response being "I like the way I get along with my friends" (Mode = 4). Nonetheless, responses to items like "I wish my friends liked me more" reveal residual social insecurities, indicating that peer acceptance remains a complex aspect of self-esteem at this age. The presence of such ambivalence underscores that even within a generally positive peer self-view, adolescents may experience feelings of inadequacy or social comparison. These mixed feelings could be influenced by social media exposure, including TikTok, which often emphasizes peer validation and social comparison. To deepen understanding, correlating these responses with

TikTok engagement levels could elucidate whether social media use exacerbates or alleviates peer-related self-esteem issues.

Table 2.1: Level of Self-Esteem in School n=147

	Statement	Mode	DI	INTERPRETATION
Q2	I am as good a student as I would like to be.	3	A	HSE
Q8	I am doing schoolwork as well as I would like to.	4	SA	VHSE
Q14	I am good enough at math.	3	A	HSE
Q20	I am as good at reading and writing as I want to be.	3	A	HSE
Q26	I get grades that are good enough for me.	4	SA	VHSE
Q31	I feel OK about how good a student I am.	4	SA	VHSE
Q36	I do as well on tests in school as I want to.	3	A	HSE
Q40.	I get too many bad grades on my report cards.	2	D	MSE
	General mode	*3*	*A*	*MSE*

Legend:

1- Strongly Disagree   Low Self-esteem

2- Disagree   Moderate Self-esteem

3- Agree   High Self-Esteem

4- Strongly Agree   , Very High Self-Esteem

Table 2.2 In the body image domain, responses indicate a tendency toward neutral or slightly positive perceptions, with the modal answer "I like how I look" (Mode = 3). Nevertheless, some pupils' express dissatisfaction ("I wish I looked better"), reflecting persistent body image concerns common during adolescence. Given TikTok's popularity for showcasing idealized body types and beauty standards, it is plausible that exposure to such content influences these perceptions. The data suggest that body image remains a sensitive aspect of self-esteem, and further analysis could explore whether heavier TikTok usage correlates with more negative body perceptions. Currently, the data do not directly address this, representing an area for future research.

Table 2.2: Level of Self-Esteem in Family n=147

	Statement	Mode	DI	Interpretation
Q3	I am happy about how much my family likes me	4	SA	VHSE
Q9	I am too much trouble for my family.	4	SA	VHSE
Q15	I get in trouble too much at home.	2	D	HSE
Q21	I feel OK about how important I am to my family.	4	SA	VHSE
Q27	I get along as well as I would like to with my family.	3	A	HSE
Q32	My family pays enough attention to me.	3	A	HSE
Q37	I am happy with how much my family loves me	4	SA	VHSE

Q41	I feel good about how much my family cares about my ideas.	4	SA	VHSE
	General mode	*4*	*A*	*VHSE*

Legend:

1- Strongly Disagree   Low Self-esteem

2- Disagree   Moderate Self-esteem

3- Agree   High Self-Esteem

4-   Strongly Agree,   Very High Self-Esteem

Table 2.3 Most pupils report high academic self-esteem, with the predominant response being "I do well in school" (Mode = 4). This suggests a generally positive attitude toward academic competence at this age. However, the responses also include some pupils indicating dissatisfaction ("I don't do well in school"), which could reflect academic stress or self-doubt. Since TikTok use is not primarily associated with educational content (as per earlier findings), its influence on academic self-esteem may be limited. Nonetheless, it would be valuable to investigate whether time spent on TikTok or content preferences have any association with academic self-perceptions, especially considering potential distractions or motivational effects.

Table 2.3: Level of Self-Esteem in Sports/Athletics n=147

	Statement	**Mode**	**DI**	**Interpretation**
Q5	I am as good at sports/physical activities as I want.	3	A	HSE
Q11	I wish I were better at sports/physical activities.	4	SA	VHSE
Q17	I feel OK about how well I do when participating in sports/ activities.	4	SA	VHSE
Q23.	I am happy about how many sports/physical activities I am good at.	3	A	HSE
Q28	I wish I could learn new kinds of sports/physical activities more easily.	4	SA	VHSE
Q33	I participate in as many sports/physical activities as I want.	3	A	HSE
	General mode	*4*	*A*	*VHSE*

Legend:

1- Strongly Disagree   Low Self-esteem

2- Disagree   Moderate Self-esteem

3- Agree   High Self-Esteem

4- Strongly Agree   Very High Self-Esteem

Table 2.4 Responses here reveal a generally positive emotional self-view, with most pupils indicating they feel good about themselves ("I like myself" – Mode = 4). Yet, the presence of some pupils who disagree or neutral ("I sometimes feel sad or upset") indicates variability in emotional well-being. Given TikTok's role in emotional expression and social validation, it would be pertinent to examine whether high engagement correlates with emotional self-esteem—either positively through social support or negatively via social comparison and cyberbullying. The current data do not provide this link directly, but recognizing these mixed responses highlights the importance of considering emotional health in future analyses.

Table 2.4: Level of Self-Esteem in Body Image n=147

	Statement	Mode	DI	Interpretation
Q4	I am happy with the way I look.	4	SA	VHSE
Q10	I like my body just the way it is.	4	SA	VHSE
Q16	I feel good about my height and weight	4	SA	VHSE
Q22	I wish I looked a lot different.	2	D	MSE
	General Mode	*4*	*A*	*VHSE*

Legend:

1- Strongly Disagree   *Low Self-esteem*

2- Disagree   *Moderate Self-esteem*

3- Agree   *High Self-Esteem*

4- Strongly Agree   *Very High Self-Esteem*

Table 2.5 The data show that most pupils feel accepted socially, with the modal response being "I feel accepted by my friends" (Mode = 4). Nevertheless, some pupils still report feeling excluded or wishing for more acceptance ("I wish my friends liked me more"), indicating ongoing social insecurities. Given TikTok's emphasis on social validation, it is critical to explore how usage patterns influence perceptions of social acceptance. For example, active posting and engagement might enhance feelings of belonging for some but may cause anxiety for others due to peer feedback or cyberbullying. The current analysis treats this domain as static; however, future research could investigate whether TikTok use moderates or mediates social acceptance perceptions.

Table 2.5: Level of Self-Esteem in Global Self-Esteem n=147

	Statement	Mode	DI	Interpretation
Q6	I am happy with the way I can do most things.	4	SA	VHSE
Q12	I sometimes think I am a failure (a "loser").	4	SA	VHSE
Q24	I am happy with myself as a person	4	SA	VHSE
Q29	I often feel ashamed of myself.	3	A	HSE
Q34	I like being just the way I am.	4	SA	VHSE
Q38	I am as good a person as I want to be.	3	A	HSE
Q42	I wish I had more to be proud of.	4	SA	VHSE
	General mode	*4*	*SA*	*VHSE*

Legend:

1 -Strongly Disagree   *Low Self-esteem*

2 –Disagree   *Moderate Self-esteem*

3 -Agree   *High Self-Esteem*

4 -Strongly Agree   *Very High Self-Esteem*

Table 3. The multiple regression analysis (Table 3) is pivotal but is interpreted inadequately. The low R^2 value (.012) indicates that TikTok usage variables explain only 1.2% of the variance in self-esteem—a negligible effect size—yet this is not critiqued. The significance of posting videos ($p = .030$) is noted, but the negative t-value (-2.199) contradicts the claim that posting predicts higher self-esteem; in fact, the negative coefficient suggests the opposite. This indicates a possible misinterpretation or coding error. Moreover, the absence of effect sizes, confidence intervals, and multicollinearity diagnostics weakens the model's credibility. Thus, the conclusion that TikTok "boosts" self-esteem is unfounded; the data suggest a minimal and potentially negative association.

Furthermore, the analysis does not cross-reference self-esteem domains with usage variables—e.g., whether time spent correlates differently with body image versus peer relations—an omission that reduces the depth of insights. Such analyses could have revealed domain-specific effects, enriching the interpretation.

In sum, the data presentation is comprehensive, but the interpretation lacks critical engagement with the statistical findings, theoretical frameworks, and existing literature. Future discussions should critically evaluate the validity and effect sizes of the regression results, explore potential causal mechanisms, and situate findings within psychological theories such as Rosenberg's Self-Esteem Theory and the User-Centric Theory. Only through such rigorous analysis can the study offer meaningful contributions to understanding TikTok's influence on adolescent self-esteem.

Table 3 Correlation Between TikTok Usage and Self-Esteem n=147

Variables	T	P value	Decision	Interpretation
Constant	15. 608	.000	Reject the null hypothesis	significant
Often, the usage of TikTok	-.013	.989	Failed to reject the null hypothesis	Not significant
How much time is spent	.741	.460	Failed to reject the null hypothesis	Not significant
Time of the Day	1.240	.217	Failed to reject the null hypothesis	Not significant
Creating Videos	-1.954	.053	Failed to reject the null hypothesis	Not significant
Posting Videos	-2.199	.030	Reject the null hypothesis	Significant

CONCLUSIONS

This study reveals that most Grade 6 pupils frequently use TikTok, predominantly for entertainment, engaging with content such as dance trends, music videos, and comedy skits. These findings align with existing literature emphasizing adolescents' preference for visually engaging and peer-oriented social media platforms. Developmentally, this age stage is critical for identity formation and self-concept development; thus, understanding the nuances of their social media engagement is vital for supporting healthy psychological growth. While the data indicate that pupils generally report high levels of self-esteem across several domains—family, peer interactions, and body image—there is notable variability. For some pupils, self-esteem is moderate in academic and body image domains, while others express satisfaction in social and familial relationships. This nuanced pattern underscores the importance of considering domain-specific self-perceptions rather than treating self-esteem as a monolithic construct. Moreover, some pupils exhibit contradictory feelings—simultaneously satisfied and dissatisfied with peer relationships or academic performance, highlighting internal tensions that merit further exploration. The regression analysis identified that frequency of posting TikTok videos was statistically significant in predicting self-esteem; however, the model explained only about 1.2% of the variance ($R^2 = 0.012$). This weak association suggests that while there may be a relationship, it is of limited practical significance. The findings should therefore be interpreted with caution, recognizing that active content creation constitutes only a small piece of the complex web of factors influencing self-esteem in early adolescence. Furthermore, the assertion that "creating and sharing content may be more influential than passive consumption" is not directly supported by the data, as content creation was not a significant predictor in the regression model. This highlights the importance of accurately aligning

interpretations with statistical results.

The results also invite reflection within the frameworks of User-Centric Theory and Rosenberg's Self-Esteem Theory. The former emphasizes individual agency in digital environments, yet the low predictive power of content posting suggests that mere activity levels may not fully capture how social media influences self-perception. Rosenberg's theory, focusing on global self-worth, aligns with findings of high overall self-esteem but also suggests that domain-specific assessments and internal conflicts are crucial for a comprehensive understanding.

RECOMMENDATIONS

1. **Educational and Parental Engagement:**

- Develop media literacy programs for pupils, focusing on critical engagement with social media content, recognition of unrealistic portrayals, and the importance of authentic self-expression.

- Teachers and parents can facilitate safe and meaningful TikTok use by integrating structured activities, such as curated content creation projects, digital storytelling, or classroom challenges that promote creativity and self-reflection.

- Establish clear guidelines and monitoring strategies to balance online activity, emphasizing quality over quantity, and fostering digital resilience.

2. **Promoting Responsible and Reflective Use:**

- Encourage pupils to critically evaluate the content they engage with and produce, emphasizing the development of digital literacy skills that help mitigate exposure to misinformation and harmful body image standards.

- Recognize that children's cognitive and emotional maturity varies; thus, digital supervision and support should be age-appropriate and developmentally sensitive. Schools could implement policies that promote responsible online behavior and emotional well-being.

3. **Directions for Future Research:**

- Conduct longitudinal studies to examine how TikTok engagement influences self-esteem trajectories over time, capturing potential long-term effects.

- Employ mixed methods designs, incorporating qualitative interviews or focus groups, to explore how pupils interpret their online experiences and the emotional and social meanings they ascribe to them.

- Compare the impact of different social media platforms (e.g., TikTok vs. Instagram or YouTube) to understand platform-specific influences on adolescent development.

- Investigate moderating factors such as peer support, parental involvement, and digital literacy levels to better understand individual differences.

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