

The Mediating Effect of Self-Regulation Attitude Toward Social Support and Aggression Among Selected Senior High School Students in Davao Occidental

GLENN L. CINCO, ADRIAN G. MARUYA,
JONEL MARK D. SARNO

¹Bachelor of Science in Criminology, ³Research Innovation Development and Extension (RIDE) Office, ⁴Institute of Human Service (IHS) Southern Philippines Agri-business and Marine and Aquatic School of Technology (SPAMAST),
Poblacion, 8012 Malita, Davao Occidental, Philippines

ABSTRACT

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This study investigated how self-regulation attitude mediates the relationship between social support and aggression among senior high school students in Davao Occidental. Using a descriptive-correlational design, the research sample included 110 students from eight secondary schools. The study employed standardized questionnaires: Sarason et al. (1983) for social support, Miller and Brown (1991) for self-regulation attitude, and Gerevich et al. (2007) for aggression. Data were analyzed through Mean and Standard Deviation, Spearman's Rank-Order Correlation,

Medgraph, and the Sobel Z-Test. Results indicated that social support had a moderate grand mean (3.11), with appraisal support highest and self-esteem support lowest. Self-regulation attitude was also moderate (grand mean = 3.21), peaking in monitoring and lowest in receiving. Aggression, however, was high (grand mean = 3.79), with hostility at its highest and verbal aggression at its



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lowest. Statistical analysis revealed a significant negative correlation between social support and aggression ($r = -0.392, p < .001$), indicating that more social support is associated with less aggression. Additionally, there was a strong positive correlation between social support and self-regulation attitude ($r = 0.838, p < .001$), as well as a negative correlation between self-regulation and aggression ($r = -0.222, p < .020$). Mediation analysis identified self-regulation as a significant mediator between social support and aggression, with an indirect effect of 0.301 and a direct effect of -0.612. The Sobel test confirmed that increased social support boosts self-regulation, which subsequently leads to decreased aggression in students. These findings have significant implications for understanding and addressing adolescent aggression.

INTRODUCTION

Aggressive conduct is one of the most serious issues confronted by young adults in secondary schools today, and the rate of violence among senior high school students is concerning (Fayso, 2019). Some of the most common types are verbal aggression, physical aggression, emotional aggression, instrumental aggression, and relational aggression (Sandeep & Yadav, 2021). More so, aggression is one of the primary reasons for increasing violence, hatred, hostility, and crime, leading to decreased peace and harmony in our society (Bibi et al., 2020).

Aggression is a compound phenomenon that may be affected by several factors and their exchanges, including hormonal changes, genetics, familial or social background, and sometimes also education (Butovskaya et al., 2019). Aggression has the potential to differentiate students from their peers and increase their likelihood of rejection and exclusion (Paget et al., 2018). The victims of violence experience severe psychological health problems in addition to physical maladies, including desperation, suicide ideation, stress, anxiety, worry, uneasiness, nightmares, difficulties with memory, and post-traumatic stress disorder (Sangeetha et al., 2022). The psychological well-being of such children is compromised as they start to rationalize violence when it manifests in anger and violent actions, which start to show up in their daily interactions with those around them, whether in the home, classroom, or community (Shaikh et al., 2022).

The General Aggression Model (GAM) considers aggression as a compound of social, cognitive, personality, developmental, and biological factors (Allen et al., 2018). It explains how appraisal and the decision process are influenced by the circumstances, as well as one's cognition, feelings, and arousal, which in turn influence aggressive or non-aggressive behavioral outcomes. Meanwhile, social support, an essential factor in reducing parenting stress, may act as a buffer against the adverse effects of parenting stress on children's effortful control skills (Yildiz & Uzundag, 2024). Thus, self-regulation also addresses several key issues that have arisen since then, such

as how self-regulation differs from such related constructs as motivation and metacognition, and whether students can be taught self-regulatory skills (Schunk et al., 2023).

In this study, the United Nations Sustainable Development Goals (SDGs)-Peace, Justice, and Strong Institutions, Goal No. 16: Peace, Justice, Strong Institutions, must therefore serve as the study's focal point. This goal aims to create inclusive, peaceful societies that promote sustainable development. It will take stability, respect for human rights, and efficient governance to accomplish this goal. The researchers strive to understand better the underlying and interacting mediating effects of self-regulation attitude on the relationship between social support and aggression, focusing on senior high school students of Davao Occidental. The potential impact of this study's findings on policy and interventions is significant, as it could lead to the development of more effective strategies for violence prevention and student support. As a result, performing this study would assist the students in gaining knowledge about these variables, as this issue needs to be adequately studied in the Province of Davao Occidental. The findings of this study would aid in raising student awareness within the province.

METHODOLOGY

Study Area

The research was conducted in the Province of Davao Occidental, which has eight (8) selected secondary schools. The study was focused on all eight of these schools, namely: Heracleo Casco Memorial National High School, Agro Industrial College, INC., Sta. Maria Institute INC., Basiawan National High School, Mariano Peralta National High School, Benjamin V. Bautista Sr. National High School, Tubalan Comprehensive National High School, and Fishing Village Comprehensive National High School. These schools were selected as they were deemed most suitable for the study. Surveys and questionnaires were administered to students either in their schools or in locations of their choice. The Province of Davao Occidental was chosen for this research because it offers valuable insights into senior high school students.

Figure 1
The Map of the Province of Davao Occidental



LEGEND

- MPNHS
- BNHS
- BVNHS
- HCMNHS
- FVCNHS
- SMI Inc.
- TCNHS
- AGRO Inc.

Sample Collection

This study employed snowball sampling techniques to select the respondents. These initial respondents are then asked to refer other people they know who meet the study’s eligibility criteria. The sample group grows like a rolling snowball, hence the name. The process continues, with each new respondent referring additional respondents, and it is based on the data gathered at eight (8) selected schools in Davao Occidental. The process of snowball sampling or chain referral sampling of a concealed population commences with a convenience sample of the initial subject. The population would not be restricted as concealed if a random sampling could be conducted. This initial subject serves as “seeds,” through which wave one subject is recruited; wave one subject, in turn, recruits wave two subjects; and the sampling consequently expands wave by wave like a snowball growing as it rolls down a hill (Etikan et al., 2016).

Furthermore, the study’s respondents were senior high school students

who had been reported as aggressive. The respondents, who are senior high school students, are coming from different schools in Davao Occidental. This enabled the researchers to determine the mediating effect of self-regulation attitude concerning social support and aggression among selected senior high school students in Davao Occidental.

Thus, the participants' understanding of the study was primarily connected to their daily experiences, whether at school or home. The researchers made it clear that the individuals chosen for the study had already encountered similar challenges in their lives, which was a key reason why they were selected as respondents. This prior experience allowed participants to relate to the study and provide valuable insights.

Data Analysis

Social Support

To determine the level of social support, the following scale was used:

Table 1. *Table of Interpretation on the Level of Social Support*

Range of Means	Descriptive Level	Interpretation
4.21 - 5.00	Very High	This implies that senior high school students always receive support from their social circle.
3.41 - 4.20	High	This implies that senior high school students often receive support from their social circle.
2.61 - 3.40	Moderate	This implies that senior high school students sometimes receive support from their social circle.
1.81 - 2.60	Low	This implies that senior high school students rarely receive support from their social circle.
1.00 - 1.80	Very Low	This implies that senior high school students never receive support from their social circle.

Self-Regulation Attitude

To determine the level of Self-Regulation Attitude, the following scale was used:

Table 2. *Table of Interpretation on the Level of Self-Regulation Attitude*

Range of Means	Descriptive Level	Interpretation
4.21 - 5.00	Very High	This indicates that senior high school students have an excellent self-regulation attitude.
3.41 - 4.20	High	This indicates that senior high school students have an excellent self-regulation attitude.
2.61 - 3.40	Moderate	This indicates that senior high school students have a moderate self-regulation attitude.
1.81 - 2.60	Low	This indicates that senior high school students have a poor self-regulation attitude.
1.00 - 1.80	Very Low	This indicates that senior high school students have a deplorable self-regulation attitude.

Aggression

To determine the level of aggression, the following scales are utilized in the study.

Table 3. *Table of Interpretation on the Level of Aggression*

Range of Means	Descriptive Level	Interpretation
4.21 - 5.00	Very High	This indicates that senior high school students are very aggressive.
3.41 - 4.20	High	This indicates that senior high school students are aggressive.
2.61 - 3.40	Moderate	This indicates that senior high school students are moderately aggressive.
1.81 - 2.60	Low	This indicates that senior high school students are less aggressive.
1.00 - 1.80	Very Low	This indicates that senior high school students do not tend to be aggressive.

RESULT AND DISCUSSION

Level of Social Support of Senior High School Students

Table 4. *Level of Social Support of Senior High School Students in Davao Occidental*

PARTICULARS	MEAN	STD. DEVIATION	DESCRIPTION
Appraisal Support	3.2	1.02	Moderate
There are several people whom I trust to help solve my problems.	3.3	1.217	Moderate
There is someone with whom I feel comfortable talking about intimate personal problems.	3.35	1.275	Moderate
There is someone who can give me an objective view of how I am handling my problems.	3.2	1.235	Moderate
There is someone I can turn to for advice about handling problems with my family.	3.09	1.267	Moderate
When I need suggestions on how to deal with a personal problem, I know someone I can turn to.	3.17	1.298	Moderate
There is someone whom I can trust to give me sound financial advice.	3.36	1.179	Moderate
If a family crisis arose, it would not be difficult to find someone who could offer me sound advice on how to handle it.	2.97	1.161	Moderate
There is at least one person I know whose advice I trust.	3.27	1.203	Moderate
Tangible Support	3.1	0.969	Moderate
If I need help fixing an appliance or repairing my vehicle, there is someone who would help me.	3.23	1.188	Moderate
If I needed a ride to the bus terminal very early in the morning, I would have no trouble finding someone to take me.	2.96	1.248	Moderate
If I were sick and needed someone to take me to the doctor, I would not have trouble finding someone.	3.39	1.279	Moderate
If I needed a place to stay for a week because of an emergency, I could easily find someone who would put me up.	3.17	1.27	Moderate

If I were sick, I could easily find someone to help me with my daily chores.	3.1	1.256	Moderate
If I needed an emergency loan for a large amount of money, there is someone I could get it from.	2.89	1.199	Moderate
If I had to go out of town for a few weeks, it would not be difficult to find someone who would look after my home.	2.92	1.047	Moderate
If I were stranded in a place far from home, there is someone I could call who would come and get me.	3.17	1.21	Moderate
It would not be difficult to find someone who would lend me their vehicle for a few hours.	3.06	1.198	Moderate
If I needed some help in moving to a new house or apartment, I would not have a hard time finding someone to help me.	3.07	1.239	Moderate
Self-Esteem Support	3.02	1.005	Moderate
Most of my friends are not more interesting than I am.	2.79	1.076	Moderate
There is someone who takes pride in my accomplishments.	2.91	1.307	Moderate
Most people I know think highly of me.	3.01	1.211	Moderate
I think that my friends feel that I am very good at helping them solve their problems.	3.01	1.249	Moderate
I am as good at doing things as most other people are.	3	1.223	Moderate
In general, people have confidence in me.	3.01	1.249	Moderate
I am more successful at making changes in my life than most of my friends are.	3.1	1.176	Moderate
I am more satisfied with my life than most people are with theirs.	3.14	1.21	Moderate
I am closer to my friends than most people are to their friends.	2.97	1.281	Moderate
I would not have a hard time keeping pace with my friends.	3.23	1.361	Moderate
Belonging Support	3.11	1.075	Moderate

When I feel lonely, there are several people I can talk to.	3.27	1.172	Moderate
I often meet or talk with family or friends.	3.38	1.334	Moderate
I feel like my circle of friends always includes me.	2.99	1.317	Moderate
There are several different people I enjoy spending time with.	3.2	1.22	Moderate
If I wanted to go on a trip for a day (e.g., to the mountains, beach, or another province), I would not have a hard time finding someone to go with me.	3.1	1.442	Moderate
If I suddenly decide one afternoon that I want to watch a movie that evening, it would be easy for me to find someone to go with me.	2.99	1.281	Moderate
Most people I know enjoy the same things I do.	3.21	1.273	Moderate
I often get invited to do things with others.	2.87	1.212	Moderate
If I wanted to have lunch with someone, I could easily find someone to join me.	3.2	1.333	Moderate
I know someone who would throw a birthday party for me.	2.93	1.403	Moderate
GRAND MEAN	3.11	0.979	Moderate

Table 5 presents the level of social support among the senior high school students of Davao Occidental, measured with the following domains: appraisal support, tangible support, self-esteem support, and belonging support. As shown in Table 5, the appraisal support, as the first domain of Social Support, obtained the highest category mean score of 3.20 (moderate), which implies that senior high school students of Davao Occidental received an average level of appraisal from their social circle. Their appraisal support entails having trustworthy and responsible persons on whom students may depend, seek advancement, and rely for assistance with problem-solving and decision-making. Senior high school students who receive an average level of appraisal from their social circle tend to experience a balanced sense of self-esteem. They may feel moderately accepted and valued by their peers, which can encourage healthy social interactions and a steady development of social skills.

However, these students might also feel a lack of recognition or standout achievements, leading them to seek more validation and opportunities to shine. This balanced appraisal helps them navigate social dynamics without

the pressures of extreme highs or lows in their peer relationships. On the other hand, self-esteem as the third domain generated the lowest category mean score of 3.024 (moderate) across all domains of social support. Consequently, this implies that senior high school students of Davao Occidental must receive validation and recognition from peers and social connections, and they must be appreciated for their unique traits and achievements, in order for the students to have a positive self-image, and supportive people must surround the students. Senior high school students who receive substantial validation and recognition from their peers and social connections tend to experience heightened levels of self-esteem and confidence. This positive reinforcement can foster a sense of belonging and accomplishment, encouraging them to engage actively in academic and extracurricular activities. However, the firm's reliance on peer approval may also lead them to prioritize others' opinions over their own, potentially influencing their decision-making and self-identity. Hence, social support received a grand mean score of 3.11 (moderate), which implies that senior high school students in Davao Occidental are being monitored, taken care of, and supported by other people in the society, which improves, enhances, and gives a positive impact towards the students psychological and behavioral aspects which will significantly help the students. To support the study's result, Taylor (2016) conducted a similar study and found that social support has a significant impact on a student through care from others and having a reliable network to turn to when needed in everyday situations or specific moments of crisis. It can be perceived from three sources, such as family, friends, and significant others. Meanwhile, Santini et al. (2017) added that social support and the frequency of support actions towards students that are provided by others will lead to the betterment of students' behavior, and it can be understood as the subjective feeling of being supported (Santini et al., 2017).

Level of Self-Regulation Attitude of Senior High School Students

Table 5. *Level of Self-Regulation Attitude of Senior High School Students in Davao Occidental*

Particulars	Mean	Std. Deviation	Description
RECEIVING	3.13	0.86	Moderate
1. I usually keep track of my progress toward my goals.	3.47	1.18	High
2. Do not notice the effects of my actions until it is too late.	2.99	1.1	Moderate
3. It is hard for me to notice when I have "had enough" (alcohol, food, sweets).	2.92	1.16	Moderate

4. I am usually careful not to overdo it when working, eating, or drinking.	3.16	1.19	Moderate
5. I do not learn well from punishment.	2.83	1.11	Moderate
6. I usually judge what I am doing by the consequences of my action.	3.37	1.23	Moderate
7. Most of the time, I do not pay attention to what I am doing.	2.94	1.05	Moderate
8. Often, I do not notice what I am doing until someone calls it to my attention.	2.97	1.02	Moderate
9. I learn from my mistakes.	3.54	1.34	High
EVALUATING	3.21	0.97	Moderate
1. My behavior is not that different from that of other people.	3.1	1.09	Moderate
2. My behavior is similar to that of my friends.	2.99	1.25	Moderate
3. I think a lot about what other people think of me.	3.29	1.25	Moderate
4. I tend to compare myself with other people.	3.2	1.18	Moderate
5. I have personal standards, and try to live up to them.	3.29	1.21	Moderate
6. I do not care if I am different from most people.	3.34	1.3	Moderate
7. I try to be like people around me.	3.01	1.2	Moderate
8. I think a lot about how I am doing.	3.33	1.37	Moderate
9. I know how I want to be.	3.37	1.29	Moderate
TRIGGERING	3.2	0.93	Moderate
1. Others tell me that I keep on with things too long.	3.06	1.13	Moderate
2. It is hard for me to see anything helpful about changing my ways.	3.17	1.07	Moderate
3. I am willing to consider other ways of doing things.	3.3	1.19	Moderate
4. I enjoy a routine, and like things to stay the same.	3.15	1.22	Moderate
5. I am set in my ways.	3.29	1.11	Moderate

6. As soon as I see things are not going right, I want to do something about it.	3.33	1.24	Moderate
7. I tend to keep doing the same thing, even when it does not work.	3.04	1.14	Moderate
8. Usually, I see the need to change before others do.	3.17	1.19	Moderate
9. It bothers me when things are not the way I want them.	3.34	1.15	Moderate
SEARCHING	3.24	0.98	Moderate
1. I doubt I could change even if I wanted to.	3.05	1.24	Moderate
2. I can accomplish goals I set for myself.	3.3	1.21	Moderate
3. If I wanted to change, I am confident that I could do it.	3.34	1.22	Moderate
4. I have sought out advice or information about changing.	3.14	1.1	Moderate
5. As soon as I see a problem or challenge, I start looking for possible solutions.	3.38	1.29	Moderate
6. There is usually more than one way to accomplish something.	3.42	1.12	High
7. I can usually find several different possibilities when I want to change something.	3.25	1.21	Moderate
8. I am good at finding different ways to get what I want.	3.18	1.14	Moderate
9. I call in others for help when I need it.	3.1	1.18	Moderate
FORMULATING	3.14	0.92	Moderate
1. I have trouble making up my mind about things.	3.18	1.17	Moderate
2. I put off making decisions.	2.78	1.14	Moderate
3. When it comes to deciding about a change, I feel overwhelmed by the choices.	3.2	1.28	Moderate
4. I can come up with lots of ways to change, but it is hard for me to decide which one to use.	3.06	1.14	Moderate
5. I have a hard time setting goals for myself.	3.04	1.21	Moderate
6. I have trouble making plans to help me reach my goals.	3.01	1.24	Moderate

7. Once I have a goal, I can usually plan how to reach it.	3.3	1.25	Moderate
8. I usually think before I act.	3.25	1.3	Moderate
9. Before making a decision, I consider what is likely to happen if I do one thing or another.	3.41	1.1	High
IMPLEMENTING	3.19	0.94	Moderate
1. I get easily distracted from my plans.	3.08	1.13	Moderate
2. I have so many plans that it is hard for me to focus on any one of them.	3.34	1.22	Moderate
3. I have trouble following through with things once I have made up my mind to do something.	3.26	1.15	Moderate
4. I can stick to a plan that's working well.	3.32	1.29	Moderate
5. I have much willpower.	3.13	1.26	Moderate
6. I can resist temptation.	3.29	1.27	Moderate
7. I have rules that I can stick by no matter what.	3.27	1.28	Moderate
8. Little problems or distractions throw me off course.	3.24	1.24	Moderate
9. I give up quickly.	2.79	1.27	Moderate
ASSESSING	3.35	0.98	Moderate
1. I reward myself for progress towards my goal.	3.36	1.27	Moderate
2. I change the way I do things when I see a problem with how things are going.	3.47	1.19	High
3. I do not seem to learn from my mistakes.	2.82	1.24	Moderate
4. I usually only have to make a mistake once in order to learn from it.	3.26	1.2	Moderate
5. When I am trying to change something, I pay much attention to how I am doing.	3.46	1.19	High
6. I set goals for myself and keep track of my progress.	3.46	1.19	High
7. If I resolve to change something, I pay much attention to how I am doing.	3.3	1.28	Moderate

8. I feel bad when I do not meet my goals.	3.51	1.25	High
9. I usually decide to change and hope for the best.	3.5	1.31	High
GRAND MEAN	3.2	10.89	Moderate

As shown in Table 6, the assessing domain of self-regulation attitude got the highest category mean score of 3.35 (Moderate) among seven domains, which implies that senior high school students of Davao Occidental use a variety of methods, techniques, and tools to determine the extent to which they have achieved their learning goals or standards.

On the contrary, receiving garnered the lowest category mean score of 3.13 (Moderate) among seven domains of Self-Regulation Attitude, which implies that senior high school students of Davao Occidental are deliberate and mindful of their behavior; students consciously accept and process external feedback or stimuli to support their personal growth and adaptive behavior. Furthermore, the students usually keep track of their progress towards their goals and are careful not to overdo it while in the process. Hence, the Self-Regulation Attitude received a grand mean score of 3.21 (Moderate), which implies that senior high school students of Davao Occidental have a mindset, beliefs, and approach towards self-regulation that significantly affects their cognitive and behavioral aspects. Their cognitive and emotional aspects significantly influence how a student manages their behavior, thoughts, and emotions to achieve specific goals or outcomes.

Level of Aggression of Senior High School Students in Davao Occidental

Table 6. *Level of Aggression among Senior High School Students in Davao Occidental*

PARTICULARS	MEAN	STD. DEVIATION	DESCRIPTION
Physical Aggression	3.73	0.99	High
If I must resort to violence to protect my rights, I will.	4.18	1.151	High
I have become so mad that I have broken things.	3.67	1.321	High
Occasionally, I cannot control the urge to strike another person.	3.66	1.251	High

Given enough provocation, I may hit another person.	3.71	1.213	High
If somebody hits me, I hit back.	3.63	1.276	High
Some people pushed me so far that we came to blows.	3.52	1.386	High
Verbal Aggression	3.68	0.963	High
I tell my friends openly when I disagree with them.	3.83	1.129	High
I cannot help getting into arguments when people disagree with me.	3.63	1.269	High
I have threatened people I know.	3.3	1.36	Moderate
When people annoy me, I may tell them what I think of them.	3.8	1.121	High
My friends say that I am somewhat argumentative.	3.81	1.328	High
Anger	3.8	0.9	High
Some of my friends think I am a hothead.	3.72	1.165	High
I wonder why sometimes I feel so bitter about things.	3.68	1.263	High
I am an even-tempered person.	3.65	1.237	High
I flare up quickly but get over it quickly.	3.9	1.193	High
I am sometimes consumed by jealousy, which is why I become angry.	3.86	1.113	High
At times, I feel I have gotten a raw deal out of life.	4.07	1.106	High
I have trouble controlling my temper.	3.76	1.108	High
I often find myself disagreeing with people.	3.82	1.156	High
I sometimes feel like a powder keg ready to explode.	3.75	1.159	High
Hostility	3.96	0.875	High
When people are especially friendly to me, I wonder what they want.	4.04	0.962	High

I am suspicious of overly friendly strangers.	4.02	1.018	High
I can think of no good reason for ever hitting a person.	3.96	1.165	High
I sometimes feel that people are laughing at me behind my back.	4.13	1.208	High
Other people always seem to get the breaks.	3.9	1.075	High
I know that “friends” talk about me behind my back.	4.02	1.184	High
Sometimes I fly off the handle for no good reason.	3.97	1.137	High
I get into fights more than the average person.	3.62	1.464	High
GRAND MEAN	3.79	0.832	High

As shown in Table 7, the Hostility domain of Aggression got the highest category mean score of 3.96 (High) among four domains, which implies that senior high school students of Davao Occidental exhibit aggressive behaviors and attitudes driven by intense emotions such as rage and the desire to maintain their self-control or exert influence over others. It asserts that the students are suspicious of overly friendly gestures by strangers and sometimes believe that their friends are talking about them. According to Henderson et al. (2020), senior high school students whose aggressive behavior and attitudes are driven by intense emotions may experience significant challenges in managing stress and interpersonal conflicts. These students could be reacting to underlying issues such as academic pressure, social tension, or personal struggles, which manifest as aggression. This intense emotional response might hinder their ability to form healthy relationships and excel academically.

However, the domain that got the lowest category mean score of 3.68 (High) across all domains was acquired by the Verbal Aggression, which implies that senior high school students’ spoken expressions are detrimental or intimidating towards an individual. Also, the students openly tell their friends when they disagree; however, they cannot help getting into arguments when their friends disagree with them. Senior high school students whose spoken expressions are detrimental or intimidating towards an individual can significantly impact the mental and emotional well-being of their peers. Such negative interactions may lead to feelings of isolation, anxiety, and depression in the targeted individuals. Additionally, a culture of intimidation can discourage open communication and collaboration, affecting the overall learning environment.

Additionally, the aggression variable of selected senior high school

students of Davao Occidental obtained a grand mean of 3.79 (High), which implies that the series of actions exerted by the selected senior high school students of Davao Occidental intentionally harms, threatens, or attempts to hurt others through physical or verbal means, as well as their behavior displaying hostility and anger.

To support the study's findings, Fite et al. (2017) explained that aggression is the most significant psychopathological risk factor among children and adolescents, especially students. In social psychology, aggression refers to behaviors that are used to harm another person. Also, the definition of aggression falls into two categories: instrumental aggression and hostile aggression. The application of aggressive language, such as yelling and screaming, that causes hurt emotions and impairs a person's value is called verbal aggression (Allen & Anderson, 2017). Social aggression refers to actions to harm others' social statuses and friendships (Galen & Underwood, 2017). In 2018, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) estimated that approximately 30% of all students annually experienced some aggression at school (UNESCO, 2018).

Correlation Analysis between Social Support and Aggression of Senior High School Students.

Table 8. *Relationship between Social Support and Aggression*

r-VALUE	DESCRIPTION	p-VALUE	DECISION
-0.392	Low Correlation	< 0.001	Reject Null Hypothesis No. 1

Table 8 presents the correlation analysis between social support and aggression of the senior high school students of Davao Occidental. It was found that an r-value represents the strength of the correlation between the two variables, and a p-value indicates whether or not the correlation is statistically significant. Thus, social support and aggression have an r-value of -0.392 which means that Social Support and the Aggression of senior high school students of Davao Occidental has a low and negative correlation inverse correlation across all domains, and even more convincing is the fact that their p-value is <.001, indicating that there is a significant relationship between social support and aggression which leads to the rejection of the first null hypothesis. The result aligns with the result of the study conducted by Alradaydeh and Alorani (2017), which found that social support from family had an inverse or negative correlations with various domains of aggression, highlighting the importance of social support in mitigating aggressive tendencies and the relationship between social support and aggression revealed a low inverse correlation with a correlation coefficient r-value of -0.35 and a p-value of <.001. These findings indicate that as social support increases, aggression decreases slightly, with the relationship being statistically significant. Similarly, Ma et al. (2022) concluded that social support plays a crucial role in reducing aggression

among adolescents, emphasizing the need to enhance social support systems to reduce aggressive behaviors effectively.

Correlation Analysis between Social Support and Self-Regulation Attitude of Senior High School Students.

Table 7. *Relationship between Social Support and Self-Regulation Attitude*

r-VALUE	DESCRIPTION	p-VALUE	DECISION
0.838	Very High Correlation	< .001	Reject Null Hypothesis No. 2

Table 9 presents the correlation analysis between Social Support and Self-Regulation Attitude of Senior High School students in Davao Occidental. As shown in table 9, social support and self-regulation attitude have an r-value of 0.838 which means that there is a very high and positive correlation of social support and self-regulation attitude across all domains and even more convincing is the fact that the p-value is < .001, indicating that there is a significant relationship between social support and self-regulation attitude, which leads to the rejection of the second null hypothesis.

Correlation Analysis between Self-Regulation Attitude and Aggression of Senior High School Students

Table 8. *Relationship between Self-Regulation Attitude and Aggression*

r-VALUE	DESCRIPTION	p-VALUE	DECISION
-0.222	Low Correlation	< .020	Reject Null Hypothesis No. 3

Table 10 presents the correlation analysis between self-regulation attitude and aggression of senior high school students of Davao Occidental. According to the statistical results in Table 10, it was found that self-regulation attitude and aggression have an r-value of -0.222, which indicates that there is a low and negative correlation between self-regulation attitude and aggression across all domains. Even more convincing is the fact that the p-value of self-regulation attitude and aggression is < .020, indicating a significant relationship between self-regulation attitude and aggression, which leads to the rejection of the third null hypothesis.

The Mediating Analysis of Self-Regulation Attitude in the Relationship to Social Support and Aggression of Senior High School Students

Table 9. *The Mediating Analysis of Self-Regulation Attitude in the Relation to Social Support and Aggression of Senior High School Students*

EFFECT	ESTIMATES	STD. ERROR	LOWER CI	UPPER CI
Indirect Effect	0.301*	0.123	0.059	0.542
Social Support → Self-Regulation Attitude	0.779*	0.045	0.691	0.866
Self-Regulation Attitude → Aggression	0.386*	0.157	0.079	0.693
Direct Effect				
Social Support → Aggression	-0.612*	0.142	-0.891	-0.332
Total Effect	-0.311*	0.075	-0.459	-0.163

*p<0.05; SE=Standard Error; CI= Confidence Interval

The mediating analysis of self-regulation attitude about social support and aggression of senior high school students of Davao Occidental is presented in Table 11. It was found that the level of social support significantly affects the level of self-regulation attitude, with a regression coefficient of 0.779. This means that as the social support level of the students increases by one standard deviation, their self-regulation attitude level also increases by 0.779. Meanwhile, results also showed that the self-regulation attitude of senior high school students of Davao Occidental had a significant effect on their aggression, with a regression coefficient of 0.386, which implies that as the self-regulation attitude level increases by one standard deviation, their aggression level increases by 0.386.

The overall indirect effect is 0.301, which is the product of the effects of social support on self-regulated attitude and self-regulated attitude on aggression, with a standard error of 0.123. On the other hand, the direct effect of social support on the aggression of senior high school students has a regression coefficient of -0.612 with a standard error of 0.142. This implies that social support had a significant effect on the aggression of senior high school students. It means that as the social support level increases by one standard deviation, their aggression increases by -0.612. Moreover, the total effect has a regression coefficient of -0.311, which is the sum of indirect and direct effects. The indirect effect is 0.301, which means that the mediation of self-regulation attitude to the relationship between social support and aggression of senior high school students is about -96.78%, which is 0.301 divided by -0.311 times 100. On the other hand, the direct effect of social support on aggression is 196.78%, which is -0.612 divided by -0.311 times 100.

Since the indirect effect of self-regulation attitude to the relationship between social support and aggression and the direct effect of social support

to aggression is nonzero and is significant, we can say that the mediation exhibited in the model is a partial mediation, which implies that there is not only a significant relationship between the mediating variable and the dependent variable, but also some direct relationship between the independent variable and the dependent variable. To check whether the mediation exists is significant, the Sobel Test was employed, and the result is presented in Table 12. Since the p-value is less than the 0.05 level of significance, the fourth null hypothesis is rejected, and it is concluded that the mediation effect of self-regulation attitude on the relationship between senior high school students' social support and aggression is significant.

In a comprehensive mediation analysis of social support, self-regulation, and aggression among students, social support (IV) is directly linked to reduced aggression (DV), suggesting that higher social support provides emotional and psychological stability, thus lowering aggression levels (Direct Effect Estimate: -0.612). Furthermore, social support also enhances self-regulation attitudes (MV), which involves managing emotions and behaviors effectively, subsequently leading to reduced aggression (Indirect Effect Estimate: 0.301). Combining these pathways, the total effect (Estimate: -0.311) illustrates that social support, both directly and through improved self-regulation, significantly reduces aggression.

In practical terms, schools should provide strong social support systems like counseling and peer mentoring, and include self-regulation training in the curriculum to help students manage their emotions and behaviors. This comprehensive approach not only decreases aggression but also creates a positive school environment, helping educators and policymakers develop effective interventions for improving student behavior. This result indicates that the direct effect constitutes 196.78% of the total effect, implying that the indirect effect (the difference between the total and direct effects) operates in the opposite direction. Consequently, the total effect's magnitude is diminished compared to the direct effect alone. In simpler terms, the indirect effect counteracts the total effect's strength, resulting in the observed percentage exceeding 100%. Specifically, this suggests that the indirect effect is -96.78% of the total effect, with the negative sign highlighting that its direction opposes that of the total effect. This opposition indicates that the mediator variable is effectively reducing the overall impact of the total effect.

Table 10. *Summary of the Sobel Test of Mediation*

INDIRECT EFFECT	ESTIMATES	SE	p-VALUE	INTERPRETATION
Social Support → Self-Regulation Attitude	0.779*	0.045	<0.001	Significant
Self-Regulation Attitude → Aggression	0.386*	0.157	<0.014	Significant

Examining the components of the mediation process, the estimates for the paths Social Support → Self-Regulation Attitude (0.779*) and Self-Regulation Attitude → Aggression (0.386*) are both statistically significant, indicating that social support significantly influences self-regulation attitude. In turn, a self-regulation attitude influences aggression.

Figure 2. *The Mediating Analysis of Self-Regulation Attitude in the Relation to Social Support and Aggression of Senior High School Students*

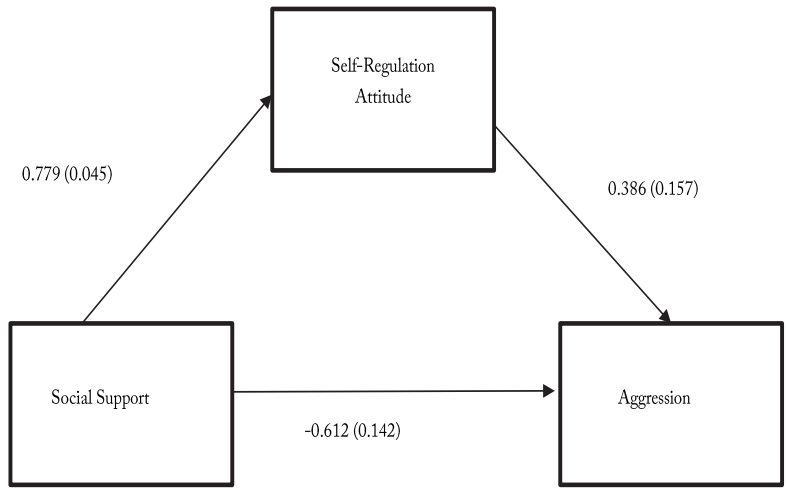


Figure 3 is the diagram showing the mediating analysis of self-regulation attitude about social support and aggression of senior high school students. The findings of the study revealed that social support serves as a significant predictor of aggression among senior high school students. This highlights the importance of nurturing social support networks within the school environment to reduce students’ aggressive behaviors. Social support, which encompasses emotional, informational, and instrumental assistance from peers, family, and teachers, plays a vital role in mitigating the psychological stressors that can lead to aggression. By fostering a supportive atmosphere, schools can help students cope with challenges in a healthier manner, ultimately leading to a decrease in aggressive tendencies.

Together, these studies reinforce the idea that self-regulation and social support are crucial factors in managing aggression and promoting positive behavioral outcomes among adolescents. Moreover, other studies have shown that interventions focusing on both social support and self-regulation have been particularly effective in reducing aggression. For instance, a study by Wang et al. (2021) demonstrated that social support programs in schools, combined with self-regulation training, led to significant reductions in aggressive behaviors among high school students. This suggests that integrating social support with self-regulation development can provide a holistic approach to

addressing aggression, enhancing both emotional well-being and interpersonal relationships among adolescents.

CONCLUSION

The respondents displayed a moderate level of social support with a mean score of 3.11, indicating that the senior high school students of Davao Occidental sometimes receive support from their social circle. Further, the respondents have displayed a moderate level of self-regulation attitude with a mean score of 3.21, meaning that the senior high school students of Davao Occidental have a moderate self-regulatory skill. Further, the respondents also displayed a high level of aggression with a mean score of 3.79, which means that the senior high school students of Davao Occidental are aggressive and display hostile or unpleasant behavior.

Meanwhile, senior high school students' social support is significantly correlated to aggression across all domains with a p-value of $< .001$. This implies that as the social support level decreases, the aggression of senior high school students will significantly increase. In addition, it was found that senior high school students' social support is also significantly correlated to self-regulation attitude across all domains with a p-value of $< .001$, which implies that as the social support level increases, the self-regulation attitude of senior high school students will also significantly increase.

Senior high school students' self-regulation attitude is also significantly correlated to aggression across all domains, with a p-value of < 0.020 , which is below the 0.05 level of significance. This implies that as the self-regulation attitude level increases, the aggression of senior high school students will also significantly decrease. The self-regulation attitude of senior high school students in Davao Occidental significantly mediates the relationship between their social support and aggression, implying that social support has a direct effect on aggression and an indirect effect through their self-regulation attitude.

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CONFLICT OF INTEREST

Authors declare no conflict of interest.

DECLARATION OF REGENERATIVE AI

AI was used as a tool for proofreading to enhance grammar and check for misspelled words only.

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