

Relationship between Peer Interaction and Student Academic Performance

Misha Nadeem

COMSATS University, Islamabad

Email: mishanadeem05@gmail.com

Saba Bahareen Mansur

(Corresponding Author) PhD scholar

Muslim Youth University, Islamabad

Email: saba.b.mansur@gmail.com

Abstract

The research study aims to investigate the relationship between Peer Interaction and Student Academic Performance of undergraduate university students. It aims to explore how the peers play a role in influencing one another in terms of learning and impacts each other's academic performance. In the study the method employed was quantitative research. A sample comprised of N=100 undergraduate university students which was selected through random sampling technique. A questionnaire of peer interaction scale (Chen, 2008) was used as an instrument for data collection in the research. SPSS was used in statistical analysis of the data collected. Pearson Correlation along with linear regression was employed where the findings showed the presence of a positive correlation between peer interaction and academic performance of the undergraduate university students.

Keywords: Peers, interaction, academic performance

Introduction

The socialization process and peer interaction is one of the fundamental requirements of students in educational settings. Students tend to interact with their peers and classmates forming peer groups that also influences the students when it comes down to the academic field. The peer groups are defined as a small group of friends which are similar in age and engage in the same type of activities together. Students tend to spend a lot of time with their peers in university either it is engaging in socialization, extracurricular activities or working together in groups for academic purposes.

Thus interaction with peers tends to influence them which also involves their academic performance. In the educational settings the peer influence on academics of students is defined as the amount as well as the style in which the students receive help from their peers. It involves elements such as attitude towards value and expectations, effective relationships, and communication between peers (Temitope and Christy, 2015). According to an earlier research the students interaction with their peers tend to determine and influence their levels of engagement, motivation, and achievement in

school. The satisfaction obtained depends upon the context which influences the choices they make (Ryan 2000).

When viewed from the student's perspective their parents, teachers and peers all provide suggestions and feedback to them regarding their role in the society and influence their perceptions. Their peers serve as a source of influence in terms of their motivation, determination and engagement in academics. They also serve as models for them which incorporates observation along with cognitive and behavioral aspects. Cognitive aspect involving viewing other people's opinions on an aspect which is different from one's own while the behavioral aspect involves introduction to new roles or behaviors in the society serve as novel to them and play a role in influencing them as it also enlightens them to the consequences of the behavior which can be either positive or negative which also impacts their academic performance.

These peer groups tend to enable them with a sense of security and a feeling of identity and belonging. When viewed from the social identity theory by Albert Bandura, the students are greatly influenced by one another. Being part of some group allows the peers to answer some of these questions given that they spend much more time with their friends than their parents which also makes it an important element to study the influence of peers on students' life involving their academic performance.

The influence that peers have on each other can be positive or negative. While peer influence is often thought to encourage unsafe and unhealthy behaviors it also motivates the students to study harder, participate in sports and productive endeavors as well as volunteer for community and social services (De Guzman, 2007).

The peer groups that aren't motivated enough in academics tends to influence each other and have a negative impact on their academic performance (Ryan, 2000). It has been indicated by literature that the students who are interested in academics are more likely to associate with peers who share the same interest as themselves. They get involved in studying together, sharing course materials as well as information which help them in their academic performance (Mapesa, 2013).

Gaining a deeper sense of knowledge on how the peers interact with each other and have an effect on the academic achievement of the student along with its essential role in the whole education system is beneficial (Leka, 2015). There are several factors that play a role in the academic performance of the students including the guidance and motivation provided by the parents along with the healthy and harmonious interactions with the surroundings (Ezzarrooki, 2016). The interactions of the students with each other could help in enhancing their motivation and them seeking help from them than working alone which also helps increase the academic performance (Sotinis, Mirco & Michael, 2013).

The acceptance received by the peers improve the social relations of the peers and influences the learning security of an individual that is due to satisfying emotional tension also enabling them to perform the learning tasks. It also indicates that child acceptance by a social group has positive impacts on them as well for example they are also more inclined to study with the group as they are a source of motivation for them. They are also corrected by their peers wherever they are wrong which also impacts their academic performance and improves it. If the atmosphere of the group is warm, understanding and supportive, the group influence or motivation, task performance and achievement will most likely be positive.

In accordance with this view the educational settings are required to use peer groups to enhance and promote learning This also makes it important to ensure the student realizes the importance of choosing their friends wisely as they can be a source of influence on them which is either positively or negatively. It also plays a role in identity formation and engraining the values as part of their personality that foster learning and effects their life along with their academic performance, career and future.

Objectives

1. To assess the relationship of peer influence on academic performance of undergraduate university students.
2. To explore the influence of peer interaction on their academic performance

Research Questions

1. Does peer interaction influence the academic performance of the undergraduate university students?
2. Does peer interaction in terms of motivation and academic activities performed together lead to higher GPA of students?

Grulund (1990) feel that acceptance by a peer group improved social relation. These have beneficial effects on individual learning insecurity that arises from satisfying emotional tension enables him to concentrate more on his assigned learning tasks.

This indicates that acceptance by the group may have positive effect on the child. A child who is not brilliant enough may do better if he is accepted by a group that is inclined to study. It has been observed that a child learns more easily within his peer group. Where he is wrong, he prefers to be corrected by a member of his peer group than by the teacher.

In support of this view, Ezewu (1992) advised that the school must therefore use peer group energies to promote rather than impede good learning. It is therefore necessary to let students realize the reason why they have to be careful in choosing their friends so that their attitudes toward learning would be improved as the peer group they belong can have effect on their learning negatively and positively. Peers are so critical to an adolescent's should provide boundaries from which teens form their identity, while peers form the cushion of support during the fragile time that identity is being formed.

These boundaries that enables him to internalize the values that form his character to foster his Grulund (1990) feel that acceptance by a peer group improved social relation. These have beneficial effects on individual learning insecurity that arises from satisfying emotional tension enables him to concentrate more on his assigned learning tasks.

This indicates that acceptance by the group may have positive effect on the child. A child who is not brilliant enough may do better if he is accepted by a group that is inclined to study. It has been observed that a child learns more easily within his peer group. Where he is wrong, he prefers to be corrected by a member of his peer group than by the teacher.

In support of this view, Ezewu (1992) advised that the school must therefore use peer group energies to promote rather than impede good learning. It is therefore necessary to let students realize the reason why they have to be careful in choosing their friends so that their attitudes toward learning would be improved as the peer group they belong can have effect on their learning negatively and positively. Peers are so critical to an adolescent's should provide boundaries from which teens form their identity, while peers form the cushion of support during the fragile time that identity is being formed. These boundaries that enables him to internalize the values that form his character to foster his Grulund (1990) feel that acceptance by a peer group improved social relation. These have beneficial effects on individual learning insecurity that arises from satisfying emotional tension enables him to concentrate more on his assigned learning tasks.

This indicates that acceptance by the group may have positive effect on the child. A child who is not brilliant enough may do better if he is accepted by a group that is inclined to study. It has been observed that a child learns more easily within his peer group. Where he is wrong, he prefers to be corrected by a member of his peer group than by the teacher.

In support of this view, Ezewu (1992) advised that the school must therefore use peer group energies to promote rather than impede good learning. It is therefore necessary to let students realize the reason why they have to be careful in choosing their friends so that their attitudes toward learning would be improved as the peer group they belong can have effect on their learning negatively and positively. Peers are so critical to an adolescent's should provide boundaries from which teens form their identity, while peers form the cushion of support during the fragile time that identity is being formed. These boundaries that enables him to internalize the values that form his character to foster his Grulund (1990) feel that acceptance by a peer group improved social relation. These have beneficial effects on individual learning insecurity that arises from satisfying emotional tension enables him to concentrate more on his assigned learning tasks.

This indicates that acceptance by the group may have positive effect on the child. A child who is not brilliant enough may do better if he is accepted by a group that is inclined to study. It has been observed that a child learns more

easily within his peer group. Where he is wrong, he prefers to be corrected by a member of his peer group than by the teacher.

In support of this view, Ezewu (1992) advised that the school must therefore use peer group energies to promote rather than impede good learning. It is therefore necessary to let students realize the reason why they have to be careful in choosing their friends so that their attitudes toward learning would be improved as the peer group they belong can have effect on their learning negatively and positively. Peers are so critical to an adolescent's should provide boundaries from which teens form their identity, while peers form the cushion of support during the fragile time that identity is being formed. These boundaries that enables him to internalize the values that form his character to foster hVariables.

Literature Review

There have been various studies conducted to assess the influence of peer interaction on academic performance of the students. In order to gain a deeper understanding of the topic it is also essential to view the theory base/conceptual framework for the given perspective. The influence that peers have on each other is explained through social learning theory.

The Social Learning Theory

Social learning theory was given by Bandura (1977). It emphasizes the observation and modelling of attitudes, emotional reactions as well as other people's behaviors. It is based on the view that the behavior can be learnt or unlearned. It has been stated by Bandura (1977) that learning would be a lengthy process if an individual relied entirely on their own actions for information and guidance. The several conditions in social learning theory involve:

Attention- It considers the aspect that various factors such as prevalence, affective valence, functional value, distinctiveness, and complexity increase or decrease the attention paid by the individual (Bandura, 1977).

Retention- It involves remembering what the individual had paid attention to which incorporate cognitive organization, mental images, symbolic coding, symbolic and motor rehearsal (Bandura, 1977).

Reproduction- It is the reproducing of what has been observed (Bandura, 1977).

Motivation- This involves the reason and motive to imitate the behavior such as past (traditional behaviorism), seeing or recalling the reinforced model as well as promised incentives (Bandura, 1977).

Identification- It involves identifying with the values, beliefs and attitudes that are observed (Bandura, 1977).

Modelling- This refers to change in an individual's thoughts and behaviors as a result of observation of a model (Ryan, 2000).

The Social Learning Theory has several real world application for instance it has been used to study how violence and aggression are transmitted through learning by observing others (Bandura, 1977). The theory also states the existence of innate potential of an individual which under certain environmental conditions display the model's behavior which explains how the adolescents consciously or unconsciously observe the behaviors and replicates them (Bandura, 1977). This also affirms the interrelation between one's personality, environment, and behaviors. Ryan (2000) states that observation of others viewpoints and behaviors different from one's own influences them, while Korir and Kipkemboi (2014) state that it enlightens them to the consequences of them which determines the likelihood of the beliefs and behaviours to be followed in the future.

This theory provides a framework for the understanding of how the peers and their interactions with one another tends to influence their academic performance. Several studies have been conducted and review of the literature further elaborates on the relationship and the role that peers play when seen in the educational field.

they consciously or unconsciously observe, imitate and display behaviour of models (Bandura, 1977). This affirmed that is interrelationship between one's personality, behaviour and environmental factors. Ryan

American Based Research Journal

Vol-10-Issue-3 Mar-2021

ISSN (2304-7151)

affirms that there is interrelationship between one's personality, behaviour and environmental factors. Ryan affirmed that observing others perform a particular behaviour or voice a certain opinion canThus, depending on the consequences, observation of a model can strengthen or weaken the likelihood that the observer will engage in such behaviour or adopt such beliefs.

A research was conducted by Bassey Inyang (2020) to assess the influence of peers on the academic performance of students in English Language in Calabar Municipality of Cross River State Nigeria. The sample comprised of N=200 respondents that were selected randomly through simple random sampling technique. The instruments used involved English Language achievement test and a questionnaire for the data collection. The findings of the study showed that peer groups significantly influenced the academic achievement of the students.

Peer groups serve as a predictor of academic achievement and performance in the education settings. Caltern (1998) conducted a study on students and found there to be a relatively strong relationship between peer acceptance and social adjustment of students. Other findings indicated that quality and good peer relations also impacted the academic performance based upon it

and determined the student's success. Their peers are a constant source of influence for them for example students being friends with a college dropout are influenced by their peers as they experience lower grades and hold same opinions in terms of motivation and achievement in studies.

In order to investigate the influence of peers on academics a study was conducted by Bankole and Ogunsakin. The sample comprised of 225 secondary school students from five mixed secondary schools in Ekiti State. The survey research design was used where the instrument involved Peer Group and Adolescent's Academic Performance (PGAAP) questionnaire. The study involved test-retest method where its reliability was ensured and findings showed that peer influence and the academic performance in students had a positive relationship between them.

Landau (2002) supported this conclusion found in the study by stating that students who are more concerned about learning will associate themselves more with peers who are similar to them in terms of their academic interest as compared to other students. The values that people attach to a characteristic also tends to determine the individual's response to change. A study was conducted in 2019 to assess the role of peer group and their interactions on the academic performance of the students. The sample comprised of undergraduate students from Babcock University, Ogun State. They were from five different department in the school of education and humanities. The sample comprised of 116 students selected through stratified random sampling technique. The instrument used in the study involved a questionnaire that was administered on them along with ex post facto design. The data collected was then analyzed using Pearson product moment correlation coefficient and linear regression. The findings of the study indicated significant impact of peers on the student's academic performance. The researcher recommended supervision of peers in terms of the peer groups they form and provision of counselling to parents of children who are negatively impacted by their peers. Alongside the researchers recommended the school counselors to play a leading role in terms of peer group influence through organization of lectures, seminars and career talks to encourage awareness of the influence of peers on the academic performance of undergraduate university students.

Similarly, a study was conducted in 2016 to investigate the relationship of peer influence and academic performance of students. The study was conducted in five secondary schools in Atiba Local Government Area in Ohio State. The sample comprised of students selected through simple random sampling technique. The instrument used was a questionnaire which was a 4-point Likert Scale. The findings indicated that students were found to be closer to their peers as compared to their parents. Their peers influence

their learning along with some other aspects such as socio-economic status while their parents tend to monitor their children's peer groups.

However, there are certain limitations to the study which involve the fact that the study was conducted on selected junior secondary schools in Atiba Local Government area in Ohio State due to finance accompanying research who limited them to selected 5 secondary schools. The researcher is also limited to school size and time factor which can be improved in studies to increase the generalizability.

In order to assess the influence of peers on students Biddle, Bank, and Marlin (2001) conducted a study. The study comprised of a sample of 149 adolescent students in Midwestern State. The data was collected from them through interviews and quota-sample design was used. It was ensured that the age, sex, race, residence area and social class was kept balanced in respondents. The sample comprised mostly of blacks and some others who were living in rural areas. The sample was also obtained from within single Midwestern State and comprised mostly of adolescents, while in other aspects the sample was representative. The results of the study found that the peers tend to influence students more than their parental norms and serve as models for them (Biddle, Bank, & Marlin, 2001).

Cohen (1983) had suggested that whether socialization of peers leads to reinforcement of beliefs and behaviors leading towards change is dependent upon similarity. Peers tend to seek for similarity in characteristics when forming friendships and face pressure to remain that way. While if they are different from each other they will try to be more similar with one another. It has been stated by Ryan (2000) that selection focuses on characteristics that are central to ones identity and valued characteristics. The students tend to overestimate their similarity with peers which also leads them open to their influence.

The students that associate with other students who have a positive affect onwards school enhanced their own satisfaction as compared to other students which decreased this level of satisfaction in them. When viewed from social competency perspective it's likely that the students who form good peer relationships also leads to good academic performance. The findings emphasize on the important aspects that affect academic achievement. This serves as a need to examine other aspects of friendship beyond the similarity in academic success in order to further assess the relationship of peers on academic performance of the students.

It has been argued by Coleman (1988) that having access to friends that play a supportive role has a greater influence on their academic success but the dynamics of friendship formation and its influence on academic performance needs more understanding. While Frank et al. (2008) argues that even though peers are a key feature in students' academic performance, but we yet do not have a greater understanding of how friends are made. This poses as a gap in research which they state is due to the issues in methodology as friends

and achievement are endogenous to one another and change in adolescents and students' life. The research requires distinguishing the direction of the relationship between friends and achievement and incorporating dynamics into models of friend selection.

While the research that have been carried out assessing the influence of peers on academic performance have supported the relationship, however assessing the friendship dynamics and formation along with these factors in research can further lead to greater understanding and findings on the topic.

Methodology

Sample

The population and sample comprise of undergraduate students in the age range of 19-25. Simple random sampling technique was employed in the research to assess the relationship between peer interaction and academic performance of the students.

Measure/Instrument

The study involves the use of a standardized instrument, where data collection was carried out through the use of a questionnaire by Chen 2008. The independent variable involves peer influence while academic performance (Current GPA) will be the dependent variable. The questionnaire is a valid and reliable instrument to be used for the study. It is based upon a 5-point Likert scale which involve 1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree where the respondents are asked to rate their peer interactions.

Analysis Scheme

IBM Statistical Package for Social Sciences (SPSS), version 20 was used to analyze the raw data collected. Pearson Correlation Coefficient and descriptive statistics were employed to analyze the findings, where the Pearson Correlation Coefficient was used to assess the relationship between peer interaction and academic performance of undergraduate university students.

Results and Findings

Table 1: Correlation of peer influence and current GPA (N=100)

		Current GPA of the respondent.	PIS_total
Current GPA of the respondent	Pearson Correlation	1	.671**
	Sig (2-tailed)	—	.000
	N	100	100
PIS_total	Pearson Correlation	.671**	1
	Sig (2-tailed)	.000	—
	N	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows the statistical analysis of Pearson Correlation where the findings show a positive correlation between peer influence and Current GPA of the respondent. The Pearson Correlation Coefficient value is $r = .671$ which is significant ($p < .001$ for a two-tailed test) based on $N=100$ complete observations. These results show the existence of positive correlation between peer influence and academic performance, where greater peer interaction leads to higher Current GPA of the undergraduate university students.

Table 2: Linear Regression Analysis

a) (Model Summary)

Std Error of Model	R	R Square	Adjusted R square
1	.671 ^a	.450	.444
			.31859

Table 2b) ANOVA^a

Sum of squares	df	Mean Square	F	Sig
Regression	8.126	1	8.126	80.065
Residual	9.947	98	.101	.000 ^b
Total	18.073	99		

a. Dependent Variable: Current GPA of the respondent

b. Predictors: (Constant), PIS_total

Table 2 c) Coefficients^a

Standardized Model	Standardized B	Coefficient Std. Error	Coefficient Beta	Coefficient t	Sig
Constant	1.598	.214		7.483	.000
PIS_total	.048	.005	.671	8.948	.000

a. Dependent Variable: Current GPA of the respondent

The results in Table 2b found the F-ratio value of 80.065 which is significant at $p < .001$, which indicates that the regression model predicts the academic performance of students very well. The significance value as denoted in Table 2b and 2c was found to be .000 ($p < .001$) showing the result is significant and the presence of positive correlation between the variables of peer interaction and academic performance of students as indicated by the significance value in linear regression analysis.

Discussion

The aim of the study was to assess the relationship between peer interaction and academic performance of undergraduate university students. The sample comprised of N=100 both male and female students, where a peer influence questionnaire was used, and their Current GPA was asked to assess their academic performance.

The present study examines peer influence in terms of providing inspiration, motivation, achievement as well as academic activities performed together and the role it plays on the students Current GPA. The findings of the study show the presence of a positive relationship between peer influence and academic performance of the undergraduate students. The statistical analysis of Pearson Correlation shows a positive correlation between peer influence and Current GPA of the respondent with a Pearson Correlation Coefficient value of $r = .671$ which is significant ($p < .001$ for a two-tailed test) based on N=100 complete observations. These results show the existence of a positive correlation between peer influence and academic performance, where greater peer interaction leads to higher CGPA of the undergraduate university students.

The relationship has also been supported by several literature reviews which have shown there to be a significant link between peer interactions and their academic performance. This can be assessed by the fact that the students who aren't well accepted by their peers tend to have lower academic performance (Guldemond et.al 1994) lower scores on achievement tests (Buhs, Ladd, & Herald, 2006; Diehl, Lemerise, Caverley, Ramsay, & Roberts, 1998; Ladd, Coleman, & Kochendorfer, 1997; Vandell & Hembree, 1994; Zettergren, 2003), lower graduation rates (Risi, Gerhardstein, & Kistner, 2003) along with increased drop out rates (Hymel, Comfort, Schonert-Reichl, & McDougall, 1996; Jimerson, Egeland, Sroufe, & Carlson, 2000; Parker & Asher, 1987).

Linear regression model has also been used for assessing the relationship between the two variables. The results in Table 2a shows the presence of correlation between the two variables with R value of .671. The results in Table 2b found the F-ratio value of 80.065 which is significant at $p < .001$, which indicates that the regression model predicts the academic performance of students very well. The significance value as denoted in Table 2b and 2c was found to be .000 ($p < .001$) showing the result is significant and the presence of a positive correlation between peer interaction and academic performance of students as indicated by the significance value in linear regression analysis.

Studies also support that peer interaction plays an essential role in students' academic performance. This is due to the fact that it also leads to involvement in academic activities and academic support (Berndt, Laychak, & Park, 1990; Ladd, 1990; Vandell & Hembree, 1994; Wentzel & Caldwell, 1997) as well as in their academic performance (Diehl et al., 1998; Ladd et

al., 1997). Students tend to form friendships with peers which are more similar to them and their engagement in peer interaction also impacts their academic performance.

Similarly meta-analysis of studies conducted by Ide, Parkerson, Haertel, and Walberg (1981) to examine the students list of close friends and similarity found in best friends. Across the ten studies conducted it was found that friends were quite similar in terms of academic achievement where there was found to be a correlation between the friend's grades and scores while they were also similar regarding college aspirations which shows the influence that peers have on their academics.

While in another study by Bankole and Ogunsakin assessed how the peers impacted academics and used survey research design. The study involved test-retest method where its reliability was ensured and findings showed that the peers interaction significantly impacted the academic performance in students.

Another research finding demonstrates that the student's interaction with their peers tend to determine and influences their levels of engagement, motivation, and achievement in academics as well as in life (Ryan 2000). Hence the findings of the present study also show that peer interactions play an essential role in their academic performance where more peer interaction leads to higher Current GPA of the undergraduate university students.

Conclusion and Recommendations

The present study had aimed to assess the relationship between peer interaction and academic performance of undergraduate university students. The study was quantitative where peer interaction scale (Chen 2008) was used to assess the peer interaction where they rated their peer interactions on a 5-point Likert scale, while CGPA was also asked in order to assess the student's academic performance.

The findings of the study showed there to be positive correlation between them, where greater peer interaction (in terms of academic motivation, inspiration and academic activities performed together), lead to a higher CGPA in undergraduate university students.

The recommendations for increasing of peer interaction are through several ways. These involve building of social skills as well as communication skills of students, providing classroom environment to encourage peer interaction as well as engaging the students in group activities.

Social skills can be built through teaching and modeling social as well as emotional learning strategies which include self-awareness and self-reflection. Where the students are encouraged to reflect on their actions and its consequences which can help them in better and healthy peer interactions. This can also be done through creating opportunities for the students to practice their social skills and refine them through the use of positive

reinforcements, praises and redirection for some behaviors through the use of role plays which provide a great opportunity for enhancing peer interactions.

Teaching of good communication skills also play a great role in enhancing peer interaction which involves listening to others, taking turns in conversation, suggesting ideas etc. Students can be provided opportunities to practice their social and communication skills to increase their peer interactions. This can be incorporated through role plays, games as well as through practice.

Once the students have built on their social and communication skills the teachers can also aid in increasing peer interactions in academic settings. This can be achieved through providing leaning environments that are conducive to peer interactions and enhancing academic performance of students. The teachers can assign the students with group activities, assignments and projects which encourage greater peer interaction, learning and enhance their academic performance.

References

- Chen, J.(2008). Grade-level differences: relations of parental, teacher, and peer support to academic engagement and achievement among hong Kong students. *School Psychology International*, 29(2), 183-198.<https://doi.org/10.1177/0143034308090059>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, 94(1), S95-S120.<https://doi.org/10.1086/228943>
- Ajibade, Basit. (2016). Influence of Peer Group Relationship on the Academic Performance of Students in Secondary Schools (A Case Study of Selected Secondary Schools in Atiba Local Government Area of Oyo State). *Global Journal of Human Social Sciences: Arts and Humanities-Psychology*, 16(4). <https://doi.org/10.13140/RG.2.2.19746.15049>
- Bandura, A. (1977). Social Learning Theory. New York: General Learning Press. *Health*, 7(11).
- Bassey, Inyang. (2020). Peer Group Influence and Academic Performance of Secondary School Students in English Language. *Social Science Research Network*. <http://dx.doi.org/10.2139/ssrn.3606183>
- Berndt, T. J., Laychak, A. E., & Park, K. (1990). Friends' influence on adolescents' academic achievement motivation: An experimental study. *Journal of Educational Psychology*, 82(4), 664–670. <https://doi.org/10.1037/0022-0663.82.4.664>
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes

- that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology*, 98(1), 1–13. <https://doi.org/10.1037/0022-0663.98.1.1>
- Caltern, N., M. (1998). No strong relationship between school adjustment behaviour and peer acceptance. *International Journal of Psychology*, 4(1), 112 – 130.
- Chen, J.(2008). Grade-level differences: relations of parental, teacher, and peer support to academic engagement and achievement among hong Kong students. *School Psychology International*, 29(2), 183-198.<https://doi.org/10.1177/0143034308090059>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, 94(1), S95-S120.<https://doi.org/10.1086/228943>
- Diehl, D. S., Lemerise, E. A., Caverly, S. L., Ramsay, S., & Roberts, J. (1998). Peer relations and school adjustment in ungraded primary children. *Journal of Educational Psychology*, 90, 506–515. <https://doi.org/10.1037/0022-0663.90.3.506>
- Frank K. A., Muller, C., Schiller, K. S., Riegle-Crumb, C., Mueller, A. S., Crosnoe, R., & Pearson, J. (2008) The Social Dynamics of Mathematics Course-Taking in High School. *American Journal of Sociology*, 113(6), 1645-1696. <https://doi.org/10.1086/587153>
- Ide, J. K., Parkerson, J., Haertel, G. D., & Walberg, H. J. (1981). Peer group influence on educational outcomes: A quantitative synthesis. *Journal of Educational Psychology*, 73(4), 472–484. <https://doi.org/10.1037/0022-0663.73.4.472>
- Korir, D. K., & Kipkemboi, F. (2014). The impact of school environment and peer influences on students' academic performance in Vihiga County, Kenya. *International Journal of Humanities and Social Science*, 4(5), 240 – 251.
- Moldes, Vangie & Biton, Cherry & Gonzaga, Divine & Moneva, Jerald. (2019). Students, Peer Pressure and their Academic Performance in School. *International Journal of Scientific and Research Publications*, 9(1), 2250-5153. <http://dx.doi.org/10.29322/IJSRP.9.01.2019.p8541>
- Ollendick, T. H., Weist, M. D., Borden, M. C., & Greene, R. W. (1992). Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology*, 60(1), 80–87. <https://doi.org/10.1037/0022-006X.60.1.80>
- Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*, 102(3), 357–389. <https://doi.org/10.1037/0033-2909.102.3.357>

- Ryan, A. M. (2000). Peer groups as a context for the socialization of adolescents' motivation, engagement, and achievement in school. *Educational Psychologist*, 35(2), 101–111. https://doi.org/10.1207/S15326985EP3502_4
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Temitope, B.E., & Christy, O.F. (2015). Influence of Peer Group on Academic Performance of Secondary School Students in Ekiti State. *International journal of innovative research and development*, 4 (1).324-331
- Vangie M. Moldes, Cherry Lyn L. Biton, Divine Jean Gonzaga, Jerald C. Moneva (2019); *Students, Peer Pressure and their Academic Performance in School*. *International Journal of Scientific and Research Publications*. 9(1). <http://dx.doi.org/10.29322/IJSRP.9.01.2019.p8541>
- Wentzel, K. R., & Caldwell, K. (1997). Friendships, peer acceptance, and group membership: Relations to academic achievement in middle school. *Child Development*, 68, 1198–1209. <https://doi.org/10.1111/j.1467-8624.1997.tb01994.x>
- Wigfield, A., Eccles, J. S., & Rodriguez, D. (1998). The development of children's motivation in school contexts. *Review of Research in Education*, 23, 73–118. <https://doi.org/10.2307/1167288>
- Zettergren, P. (2003). School adjustment in adolescence for previously rejected, average and popular children. *British Journal of Educational Psychology*, 73(2), 207–221. <https://doi.org/10.1348/00070990360626949>