

LICENSURE EXAMINATION: STUDENTS' INTRINSIC AND EXTRINSIC FACTORS AS SUCCESS PREDICTOR

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Abstract

Preparation to pass the licensure examination is vital at the very first stage of college life. This study aimed to determine the freshmen students' intrinsic and extrinsic factors as success predictors for their licensure examination. The descriptive- correlation method was employed to determine the intrinsic and extrinsic motivation and the significant differences between the respondents' motivation among colleges and between the factors. One hundred ninety-four (194) students were utilized as respondents of this study. FGD with five (5) deans from different colleges were employed for validation and intervention. Results revealed that between the factors, intrinsic is the highest motivating factor. Respondents believe that to pass the board exam, their effort to develop their own skills will bring them success. They also believe that providing material things and other support for their family as an external motivation will just follow. The test on significant difference revealed that students' perception of motivation from among colleges have no significant difference. However, between the factors, a significant difference was noted. Activities on study habits and skills formation of students will boost intrinsic motivation and family-centered activities were seen as an effective intervention program.

Keywords: Board exam, Freshman, Goals, Personal and External Influences

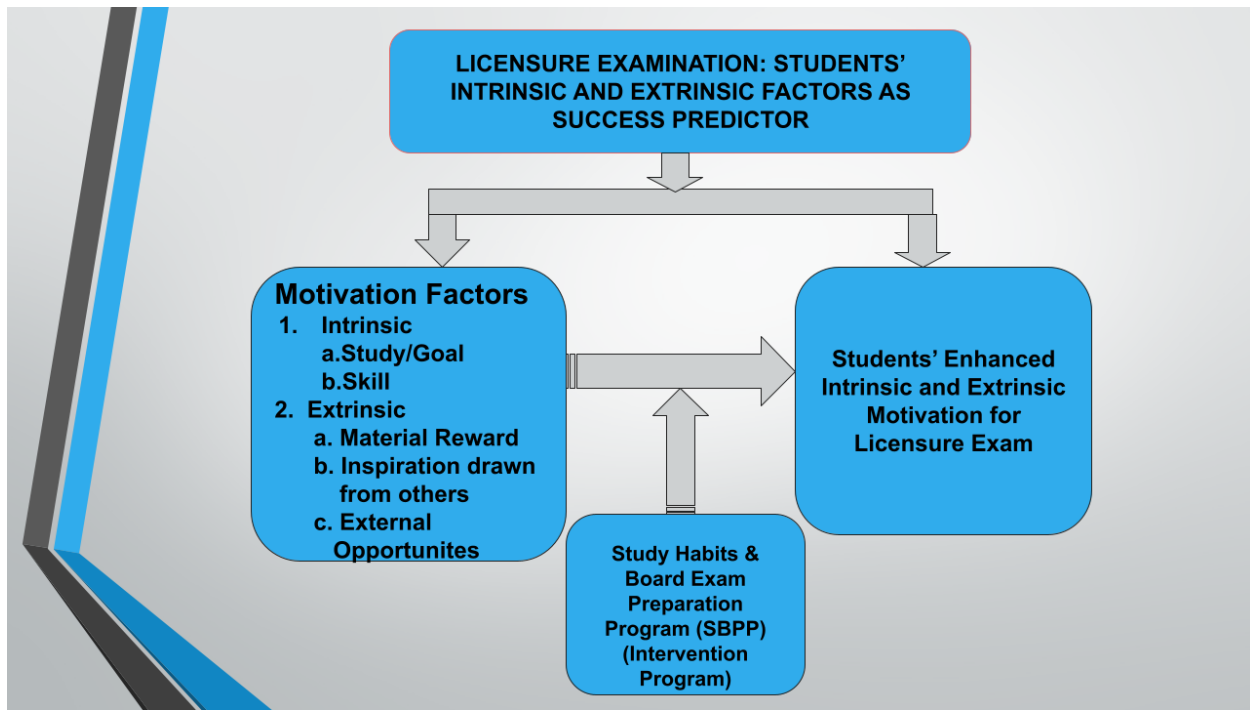
INTRODUCTION

Students' high performance in taking the Licensure Examination is the ultimate goal of all the endeavors of Higher Educational Institutions (HEI's). The University of Nueva Caceres, City of Naga, Philippines, has refocused its motto “ *Non Scholae Sed Vitae*” not of school but of life by ensuring a nurturing environment among its students. It is therefore highly expected that everyone will be able to make it at the culmination of their college education by passing their licensure examination. Hence, a challenge to every stake holder of the university to make it possible for all licensure exam takers to pass. It has been observed that a 100% or highest possible licensure passing rate in all colleges in UNC is always a target but still a great challenge. This may not be an isolated case since the trends and kinds of students being admitted in colleges and universities vary and many new factors brought about by the changes of time affects the overall demands of the society and the academe. Factors affecting the process of taking licensure examination must then be identified at the very start of college life. This could pave the way to the development and alignment of all other programs in the university that could lead to successful licensure exam preparations. The study of Pattaguan (2018) asserted that factors that lead to individual success and even topping licensure examinations can be identified.

Kuh (2007) in his article “How to help students achieve” asserted that institutions can take concrete steps to engage students beginning in their first year level such as teach first-year students as early as possible how to use college resources effectively, make the classroom the locus of community, develop networks and early-warning systems to support students, and remove obstacles to student engagement and success. This paper aimed to look into the extrinsic and intrinsic factors that could be a predictor of licensure exam success of students starting from the very first day of their college life. Owing to the beginning with the end in mind perspective, this study aimed at laying down the foundation for the creation of interventions to make the process smooth and achievable. Walberg's (1981) Theory of Educational Productivity was used to underpin this study. Walberg's model specifies that: psychological characteristics of individual students and their immediate environments influence students' cognitive, behavioral, and attitudinal outcomes (Reynolds & Walberg, 1992). Walberg identified nine specific factors within his theoretical model: student ability/prior achievement, motivation, age/developmental level, quantity of instruction, quality of instruction, classroom climate, home environment, peer group, and exposure to mass media outside of school (Walberg, Fraser, & Welch, 1986) Another theory to be used is the Self-Efficacy Theory by Bandura (1994). Bandura proposed that perceived self-efficacy influences what coping behavior is initiated when an individual is met with stress and challenges, along with determining how much effort will be expended to reach one's goals and for how long those goals will be pursued (1999). He posited that self-efficacy is a self-sustaining trait; when a person is driven to work through their problems on their own terms, they gain positive experiences that in turn boost their self-efficacy even more.

These theories anchored for the investigation of the factors influencing the students motivation towards taking their licensure examination. The result of this study is geared towards the designing of a university-wide program that can enhance students' intrinsic and extrinsic motivation for the preparation of licensure examination.

Conceptual Framework



This study was directed to the investigation of the motivation factors of the freshmen students along the dependent variables intrinsic and extrinsic factors. The intrinsic factor indicators are study/goal and skill. The Extrinsic include material reward, inspiration drawn from others, and external opportunities. The result of the investigation is hoped to boost the motivational level of students toward their preparation in taking their board examination. This study investigated the University of Nueva Caceres, City of Naga Philippines, freshmen students' level of motivation in taking licensure examination , S/Y 2020-2021. Specifically, this paper aimed to achieve the following: 1) Identify the level of freshmen students' licensure examination motivation in taking licensure examination along intrinsic and extrinsic factors. 2). Find out whether there is a significant difference in the students' motivation among colleges and between factors. 3).Propose an intervention to enhance the existing university licensure examination preparation that could boost students' motivation. This study is delimited to the intrinsic and extrinsic factors affecting the students' perspective in taking the licensure examination. The intrinsic motivation was gauged along the study/goal and skill factors whereas extrinsic was gauged on material reward, inspiration drawn from others and external opportunities. The respondents were enrolled for the first semester S/Y 2020-2021. These

students were under the Flexi Tech (with stable wifi connection) modality. Students under Flexi Kit (with limited wifi connectivity) were not required/expected to answer the google form survey during the data collection.

METHODOLOGY

This study used the descriptive-correlation method. The descriptive method was used to assess the students' motivation along intrinsic and extrinsic factors. The correlation was used to find out if there were significant differences among the respondents' answer from among the colleges and between the factors. Due to health protocols under the pandemic restrictions, data gathering was done using the online using google form. Deans and faculty members per college were asked to send the survey link to their group chats and instruct freshmen students to answer the survey. The data gathering was done during the last two weeks of February (Feb 14-27, 2020) and after the enrollment for the first semester of school year 2020-2021 closed on February 16, 2021. One hundred ninety-four (194) first year students were used as respondents for this study. The colleges include: Education 35 (18%), Nursing 28 (14%), Business and Administration 60 (30%), Arts and Sciences 30 (15%), Engineering and Architecture 28 (14%) and Criminal Justice Education 15 (7.7%). Purposive sampling technique was employed. The google form survey questionnaire has two parts. The first part measured the intrinsic motivation of the students that were seen predictors of their future success in taking the licensure exam. The Self-Efficacy Questionnaire developed in 2015 by Research Collaboration, an organization attached to the University of Kansas Center for Research on Learning that aims to improve education for students and professional development for educators was adopted. The first part was further classified into two groups which are study/goal and skill. The second part is a researcher- made questionnaire. It determined the students' extrinsic motivation. It was checked and validated by the UNC -URC office. To gauge the depth of the result, it was also grouped into 3: material reward, inspiration drawn from others, and opportunities in the external environment.

To validate the responses, a focused group discussion (FGD) for both students and school administrators were conducted. The researchers invited five freshmen students and the FGD was done via Google Meet. Five college deans and program heads were also interviewed face to face to draw out suggestions for the output of this research. Weighted Mean and Ranking were used

to interpret the results. The 5-Point Likert Scale was used. Below is the scale used to interpret the result.

Interval Range	Verbal interpretation
4.51 - 5.0 -	Extremely High (EH)
3.51 - 4.5 -	Very High (VH)
2.51 - 3.5 -	High
1.51 - 2.5 -	Low
1.0 - 1.5 -	Very Low

Two-Way ANOVA was also used to determine the significant difference of the students' responses among colleges and between the intrinsic and extrinsic factors.

RESULTS AND DISCUSSION

This section presents the result on the investigation of intrinsic factors along the study/goal and skill. The level of students' licensure examination motivation in taking licensure examination along the intrinsic factors is reflected on Table 1. Along the Study/Goal indicator, the highest (rank 1) motivating factors were both given to "Once I've decided to accomplish something that's important to me, I keep trying to accomplish it, even if it is harder than I thought" and "I believe hard work pays off" with a 4.5 weighted mean and interpreted as extremely high. It is followed by I am confident that I will achieve the goals that I set for myself, 4.2, very high, (rank 3). These results suggest that the freshman students are already aware of the importance of self-determination in becoming successful. This result found similarity in the work of Leal et al (2013) on their analysis of students' motivation. Their work found that the motivation for learning was quite diverse among the students studied. However, some students were concerned with deepening their level of expertise or achieving adequate foundations for their future role. Others were concerned only with getting their diploma or were present in classes simply to meet attendance requirements.

The least two factors that were rated are "When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged, (rank 6), 3.9, interpreted as very high motivation. The last (rank 7) is "I can learn what is being taught in class this year with a weighted mean of 3.6 and interpreted as very high motivation. This result suggests that the respondents are least motivated by what they can learn from the classroom and struggles and difficult tasks are not motivators for them. This could also mean that students' see classroom

teaching and learning as a stressful thing and that they can learn independently through the use of Study Guide and work at their own pace.

These behaviors of the respondents are found in consonance with the behavior of students under online or distance learning modalities from previous studies. The work of Paul and Jefferson (2019) e.i., showed that traditional students and online students when tested to determine which instructional modality generated better student performance yielded no significant difference in student performance between online and face-to-face (F2F) in all variables tested. The study further suggested the use of the flexibility of online learning to teach core concepts of their curriculum.

Table 1. Intrinsic Factors

Indicators	WM	V.I.	Rank
Study/Goal 1.I can learn what is being taught in class this year	3.6	VH	7
2. Once I've decided to accomplish something that's important to me, I keep trying to accomplish it, even if it is harder than I thought	4.5	EH	1.5
3 .I am confident that I will achieve the goals that I set for myself	4.2	VH	3
4. When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged;	3.9	VH	6
5. I will succeed in whatever career path I choose	4.1	VH	4
6. I will succeed in whatever college major I choose	3.91	VH	5
7. I believe hard work pays off	4.5	EH	1.5
Total	4.1	VH	

Skill	4.2	VH	4
1. I can figure out anything if I try hard enough			
2..If I practiced every day, I could develop just about any skill	4.1	VH	5
3. My ability grows with effort;	4.42	VH	1.5
4.. I believe that the brain can be developed like a muscle; skill	4.42	VH	1.5
5. I think that no matter who you are, you can significantly change your level of talent; skill	4.21	VH	3
6.. I can change my basic level of ability considerably	3.97	VH	6
Total	4.22	VH	

Legend:

Interval Range	Verbal interpretation
4.51 - 5.0 -	Extremely High (EH)
3.51 - 4.5 -	Very High (VH)
2.51 - 3.5 -	High
1.51 - 2.5 -	Low
1.0 - 1.5 -	Very Low

Along the Skill factor, rank 1 is given to both “My ability grows with effort” and “I believe that the brain can be developed like a muscle” with a weighted mean of 4.31 interpreted as very high motivation respectively. These results suggest that the respondents have high regards and belief that their own efforts will lead to skills development. The last two rated indicators are “If I practiced every day, I could develop just about any skill”, rank 5, with a weighted mean of 4.1, very high motivation, and rank 6 is “I can change my basic level of ability considerably”, 3.97, very high motivation. It can be gauged from these results that although they are fully motivated by their belief on the effect of exerting effort to develop their skills, engaging in everyday activities to develop and raise the level of their skills is not extremely motivating. This result echoes the study of Steinmayr et al (2019) whose analyses revealed that

domain-specific ability self-concept, motives, task values and learning goals but not performance goals explained a significant amount of variance in grades above all other predictors of which ability self-concept was the strongest predictor.

Table 2. Summary Table of Intrinsic Factors

Intrinsic Factors	WM	V.I.	Rank
Study/Goal	4.1	VH	2
Skill	4.22	VH	1
Total	4.16	VH	

Between the two indicators of intrinsic motivation, Skill has a weighted mean of 4.22, very high, rank 1. Study and/Goal follows with a weighted mean of 4.1, very high, rank 2. Skill is highest in motivational level in the indicator that the respondents believe that their ability grows with effort. It suggests that the freshmen students understand that determination coupled with action is important in achieving their goals. The work of Wernersbach (2011) confirms that her study on the Impact of study skills courses on academic self-efficacy in college students indicated that students identified as academically underprepared did indeed have lower levels of skill and academic self-efficacy than students not enrolled in study skills courses, and students enrolled in study skills courses had greater increases in academic self-efficacy than comparison students.

Extrinsic Factors

The level of students' licensure examination motivation in taking licensure examination along the extrinsic factors is reflected on Table 3.

Table 3. Extrinsic Factors

Indicators	WM	V.I.	Rank
Material Rewards 1. I want to graduate and become professional because I want a good salary to buy what I like	4.34	VH	2

2. I want to graduate so that I can also buy things for my family	4.71	EH	1
Inspiration Drawn from others	3.35	H	3
1. My parents chose this course for me and expect that I graduate and pass the board exam.			
2. I want to be a professional so that I can be popular.	2.48	L	6
3. It is my parents who will be proud of me if I become a professional someday.	4.36	VH	1
4. Most of my family members are professional so I am forced to be a professional like them.	2.67	H	5
5. I like being praised everytime I do something good.	3.06	H	4
6. I want my parents, family, friends and my community to be proud of me so I will strive to become a professional someday.	4.17	VH	2
7. My gf/bf/friends are my reason for enrolling in college.	2.02	L	7
Opportunities in the external environment	4.30	EH	1
1. My good grades will give me opportunities to join companies/jobs that I like.			

2. I believe that my profession will make me famous and helpful to people.	3.31	H	3
3. I believe that good grades will help me in joining civic duties someday	3.84	VH	2

For the indicator material reward, rank 1 is “I want to graduate so that I can also buy things for my family with a weighted mean of 4.71, interpreted as extremely high. Rank 2 is “I want to graduate and become professional because I want a good salary to buy what I like”, 4.34, very high. These results suggest that they believe that graduating from their courses will enable them to provide the material things they need for themselves and their families.

For the indicator Inspiration Drawn from others, rank 1 was given to the indicator “ it is my parents who will be proud of me if I become a professional someday” with a weighted mean of 4.36, very high. Rank 2 is “I want my parents, family, friends and my community to be proud of me so I will strive to become a professional someday” 4.17, very high motivation. These results manifest that freshmen students of the University are respectful to parents. FGD results also confirm that they love their parents and wanted to give back to them as they are also generous in supporting their studies.

The lowest rates were given to “I want to be a professional so that I can be popular” 2.48, low motivation, rank 6 and “ My gf/bf/friends are my reason for enrolling in college” 2.02, low motivation, rank 7. This result suggests that popularity does not motivate them and that their bf/gf/friends are not the reason why they want to succeed at this stage of their lives.

The last indicator is opportunities in the external environment. Rank 1 is the indicator “My good grades will give me opportunities to join companies/job that I like” with a weighted mean of 4.30, extremely high motivation. Rank 3 or lowest in rank is “I believe that my profession will make me famous and helpful to people” 3.31, high motivation. It can be gauged from this result that the respondents’ extreme motivation is to get good grades because it will give them better opportunities and accomplish more things they like in the future.

Table 4. Summary table for extrinsic motivation factors

Extrinsic Factors	WM	V.I.	Rank
Material Reward	4.5	EH	1
Inspiration Drawn from others	3.15	H	3
Opportunities in the external environment	3.81	VH	2

Between the indicators of extrinsic motivation, material reward was rated highest with a weighted mean of 4.5, extremely high motivation. The respondents are extremely motivated to be successful to buy things for their family. This result suggests that they have high regards to the material needs of their family. This result echoes the study of Liu R. & Chiang Y. (2019). Their study was focused on who is more motivated to learn which revealed that the roles of family background are related to students' learning motivation.

Inspiration drawn from others is the lowest in rank with a weighted mean of 3.15, high motivation. Among the three indicators, making their parents proud when they become successful does not give them extreme motivation.

Table 5. Summary table of factors affecting students' motivation

Factors	WM	V.I.	Rank
Intrinsic	4.16	VH	1
Extrinsic	3.9	VH	2

Table 5 shows the summary table for the intrinsic and extrinsic factors. Intrinsic factor is revealed to have the highest level of motivation with a weighted mean of 4.05, very high. This means that the highest motivating factor for the respondents to strive to pass the board exam is their effort to develop their own skills. Extrinsic motivation got a weighted mean of 3.9, very high. This suggests that the least motivating factor between the two areas is material reward. It also means that respondents understand that their skill will eventually enable them to get the material rewards for their families.

The general finding of this study is confirmed by the study of Odanga S. (2018) findings revealed that students expected that when they are facilitated to have high levels of self-discipline, own and plan their work and time with guidance and support from fellow students, parents and teachers, then they would develop high levels of self-motivation. The said study also concluded that promoting self-discipline, goal orientation, integrated extrinsic motivation, time management and autonomy-supportive teaching and learning environment are strategies that might increase students' self-motivation.

The second objective of this research is to find out if there is a significant difference in the respondents' answer among college and between factors. Table 6 shows the result of the Two-Way ANOVA computation for the significant differences in the responses among colleges and between factors.

Table 3

Two-Way ANOVA for the Significant Differences in the Responses among Colleges and between Factors.

<i>Source of Variation</i>	<i>SS</i>	<i>d f</i>	<i>MS</i>	<i>Computed F-Value</i>	<i>Critical Value@5% F-</i>	<i>Interpretation</i>
Colleges	0.07 1	5	0.01 4	0.387	5.050	Not Significant
Factors	0.92 1	1	0.92 1	25.069	6.608	Significant
Error	0.18 4	5	0.03 7			
Total	1.17 6	1 1				

Legend:

Significant - If computed value \geq critical value

Not Significant - If computed value $<$ critical value

Among colleges, the computed F-value of 0.387 is less than the corresponding critical F-value 5.050, the test is not significant, and therefore there is no significant difference in the responses among the six colleges. It can be inferred that the different colleges have the same perceptions on the factors that affect the licensure exam success.

Between the factors, the computed F-value 25.069 is greater than the corresponding critical F-

value of 6.608, the test is significant, therefore, there is a significant difference between the intrinsic and extrinsic factors affecting the examination success of the students with the higher mean of 4.11. It means that the effect of intrinsic is higher than the extrinsic factor. This also suggests that students can be more successful as their intrinsic motivation is fully developed and focused towards their preparation for the board examination.

This result corroborates with previous studies revealing that intrinsic motivation has higher impact on the students' performance than extrinsic factors. The study of Abun, et al (2019) found that students have moderate levels of extrinsic aspirations but very high levels of intrinsic motivation. Further, the study concluded that there is no correlation between extrinsic aspirations and academic performance but there is extensive correlation between intrinsic aspirations and academic performance. Likewise the work of Balacuit and Inabangan (2019) in the field of Physical Education found out that their respondents have an extreme intrinsic motivation than extrinsic motivation. However, it also revealed that intrinsic motivation cannot directly affect the academic performance in Games and Sports as their field of specialization because extrinsic motivation showed a significant relationship to their academic performance in Games and Sports. Consequently, the respondents are more extrinsically motivated when they are appreciated by their instructors and classmates.

Suggested program to enhance the existing University Licensure preparation that could boost students' motivation

The third and last objective of this study deals with the suggested program that can boost the motivation of freshmen students. The researchers draw out suggestions from the deans and program heads of the different colleges as well as students during the conduct of FGD. This program is in generic presentation since each college has a unique program and need. Each college may adapt or modify the suggested program.

For boosting the intrinsic and extrinsic motivation of students, the following program is hereby suggested.

Program Title : **STUDY HABITS & BOARD EXAM PREPARATION PROGRAM (SBPP)**

Rationale : Higher educational institutions (HEI's) practically aim at achieving a 100% board exam passing rate among their graduates. Intrinsic and extrinsic factors are among those areas that are crucial in the preparation of board examination. Early preparation is tantamount to success. Setting a clear direction right at the start of the students' experience in college will ensure that motivation will be directed towards the achievement of their goals.

Hindrances may be encountered along the way but research suggests that motivation can be manipulated through certain instructional practices Lai (2011). Hence, this program aimed at giving the necessary intervention to boost the motivation of students along the intrinsic and extrinsic factors.

Target Period of Implementation: Semestral or School Year

Activities	Brief Description	Person Involve	Materials Needed
Study Habit Formation (Intrinsic Motivation)			
1. Peer Study/Support Group/Team-Based Learning	Students are engaged in peer or study group during study session	Department/faculty assigns/determine the groupings	Study session rooms for face to face
2. Scholarships/Awards for achievers	Achievers get an award of recognition. Awards should have corresponding monetary equivalents.	Dean, faculty, students, parents	Monetary equivalent from the department's budget
3. IQ and Aptitude test	Students should have an IQ and aptitude test as they enrolled in the University and it must be reevaluated as they advance to the next level.	Students Colleges Guidance office	Test documents
4. School Resources Utilization	Students are required to monitor and report their progress (semestral clearance) on their use of library and internet resources, clinic, laboratories, Guidance office and other student services.	Students Colleges Students services	Clearance card
5. Mentoring/Coaching	Faculty/ senior students (can be counted as their community service hours) are given students to coach mentor	Faculty/Senior Students (Mentors) Students (Mentee)	Consultation rooms
FAMILY CENTERED ACTIVITIES (Extrinsic)			

<p>6. Activity day</p>	<p>A day set aside for student activities. These activities may include family day (parents should have a direct participation during the activities not just attending meetings), skills development day etc.</p> <p>Teachers may also engage in faculty meetings, research etc.</p>	<p>Students, Faculty, Parents</p>	<p>Activity hall</p>
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CONCLUSION

This section presents the general conclusion for the result of this study. Recommendations are also presented.

Conclusions

The highest intrinsic motivator of freshmen students is along the area of skill. The respondents rated themselves extremely high on their belief that their ability grows with effort. Freshmen students understand that determination coupled with action is important in achieving their goals. For extrinsic motivation, material reward is the highest motivation of the respondents. The respondents are extremely motivated to be successful to buy things for their family. Between the two factors, intrinsic factor serves as their highest motivator. To pass the board exam, it is their effort to develop their own skills that will lead them to success. There is no significant difference in the perception of students on the factors affecting the licensure examination among colleges. Between the factors, there is a significant difference between the intrinsic and extrinsic factors affecting the examination success of the students. The significant difference is that the effect of intrinsic is higher than the extrinsic factor. Study habit formation as suggested in the intervention program can enhance the students' intrinsic motivation, whereas; family centered activities can possibly address the extrinsic motivation factors.

The following are hereby suggested: Freshmen students must be exposed to various activities that will develop or enhance discipline and skills necessary for success. Activities to boost the motivation level of students for both the intrinsic and extrinsic factors should be

adapted by each college. Colleges may modify the suggested activities according to the unique needs of their students. Study Habit Formation activities must be given attention by the school administration and colleges. Family centered activities should be a requirement to encourage parents/family participation. The Skills Study Habits & Board Exam Preparation Program (SBPP) intervention program should be validated.

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