



LEVEL OF MOTIVATIONAL FACTORS OF ATHLETES IN RELATION TO THEIR SPORTS PARTICIPATION

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Abstract:

Purpose: This study aimed to measure the level of motivational factors of athletes in relation to their sports participation. The study reveals the highest and lowest motivational factors among athletes and the team that are perceived as most and least motivated. **Methods and Materials:** The study is quantitative in nature. A purposive sampling technique was chosen to get the sample from the population. The research sample consists of student-athletes from Far Eastern University. These student-athletes are enrolled in the academic year 2022-2023. The research is limited to seven (7) participating sports such as Athletics, Basketball, Cheering Squad, Dance Troupe, Table Tennis, Taekwondo, and Table Tennis. Each sport has seven (7) men and women, a total of ninety-eight (98) participants. The instrument used in this study is a standard questionnaire. The Sports Motivation Scale (SMS-28) of Pelletier et. al was used to measure the level of motivational factors of athletes in relation to their sports participation. The researcher used Weighted mean and Analysis of Variance (ANOVA) in this study. **Results:** The study confirms that the level of motivational factors in the sports participation of athletes is high, with the supporting data of an overall mean of 3.32. The highest motivation factor is intrinsic motivation--to know, with an overall weighted mean of 3.79 and a verbal interpretation of extremely motivated, while the lowest factor is extrinsic motivation- external regulation with an overall weighted mean of 3.27 and a verbal interpretation of highly motivated. However, the researcher excludes amotivation in the choices since amotivation negatively impacts motivation. The athletics is the most motivated team, while the dance troupe is the least motivated team however these two teams have a verbal interpretation of highly motivated. The study also reveals that the alternative hypothesis should be rejected, and the null hypothesis should be accepted, Therefore, there are no significant differences in the motivational factors in sports participation of athletes. **Conclusions:** Since athletes have no significant differences in motivational factors and are perceived as high, there is good practice in

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learning new things and providing new experiences for athletes. Coaches need to always look for opportunities wherein their athletes learn best, and athletes need to maintain their extreme source of motivation.

Keywords: intrinsic, extrinsic, identified, introjected, external regulation, amotivation

1. Introduction

Motivation is one critical factor for athletes to perform in their specific events. An athlete's willingness to learn is greatly influenced by motivation, which is critical in establishing short- and long-term goals, assessing their viability, or possibly the effort used voluntarily to complete a specific task, all leading to successful participation in individual and team sports. This motivation fuels athlete's body system to perform their best during training and competitions. However, an athlete's level of motivation may be advantageous or damaging to them because it will most directly affect an athlete's performance.

Numerous factors influence sport participation, continuity, and performance. Concepts like games, health, status, and performance may be crucial for individuals in terms of their sport orientation. Motivation is essential for perseverance, success in sports, and orientation toward sports (Tiryaki, 2000; Kucukibis and Gul, 2019). Deci and Ryan's (1985) self-determination theory identifies the important facets of motivated behavior in humans. According to this theory, motivation should not be viewed from a unidimensional perspective. Instead, three dimensions of motivation need to be examined: intrinsic and extrinsic motivation, and amotivation.

According to (Banerjee & Halder, 2021), there are seven types of motivation: amotivation, external regulation, introjected regulation, identified regulation, and intrinsic motivation to know, to accomplish, and to experience stimulation. This is anchored with the Sports Motivational Scale of Pelletier et al. published in 1995. This Sports Motivation Scale is widely used in research to assess athletes' motivation to engage and stay in their respective sports. Intrinsic motivation means inward satisfaction. This can be categorized further as to know, to accomplish, and to experience. On the other hand, extrinsic motivation solely focuses on the external rewards that motivate an athlete. This extrinsic motivation can be categorized as identified regulation, introjected regulation, and external regulation, while amotivation is the opposite of intrinsic and extrinsic. Amotivation is a loss of motivation. In support of this claim, the study by Almagro et al. (2020) claimed that amotivation is characterized by a lack of participation intent. Four kinds of regulation constitute extrinsic motivation. The first two, external and introjected regulation, are considered controlled regulatory categories, meaning that behavior is regulated by processes that are not self-determined. The next two, identified and integrated regulation, are autonomous regulatory categories, meaning that behavior is governed by internal self-determined forces. The most self-determined form of motivation is intrinsic motivation, which occurs when an athlete participates due to an interest in or enjoyment of the activity itself.

This study aimed to assess the level of motivational factors of athletes in sports participation. Specifically, it seeks to answer the following questions; First, what is the level of the athletes in terms of Intrinsic Motivation - To know, Intrinsic Motivation - To accomplish, Intrinsic Motivation - To experience stimulation, Extrinsic Motivation – Identified, Extrinsic Motivation – Introjected, Extrinsic Motivation - External regulation, and Amotivation? Second, what is the highest and lowest source of motivational factors of athletes in terms of participating sports? Third, what team rank highest and lowest in terms of motivational factor? And lastly, Is there any significant difference in the level of athletes' level of participation when grouped according to their sports event?

There are numerous existing researches about sport motivation; however, the result of this study is different because of COVID-19, there is likely that the motivational of athletes might increase or decrease. The researcher believes that this study will benefit all sports managers, coaches, and athletes. Sports managers are beneficial since they are in charge of developing the training program for each athlete. Coaches are also helpful because they have the direct key to their athletes. This research helps them establish good practices to maintain and improve their athletes. Lastly, athletes should reflect on themselves to improve their motivation, whether it is intrinsic or extrinsic.

2. Material & Methods

2.1 Participants

This study used the Purposive Sampling technique to choose its sample from the population. According to Nikolopoulou (2023), purposive sampling refers to a collection of non-probability sampling techniques in which units are selected because they possess the desired characteristics. In other terms, units are chosen "on purpose" during purposive sampling. This sampling technique, also known as judgmental sampling, relies on the researcher's discretion when identifying and selecting the individuals, cases, or events that can provide the most useful data for achieving the study's objectives.

The research sample consists of student-athletes from Far Eastern University. These student-athletes are enrolled in the academic year 2022-2023. The research is limited to seven (7) participating sports such as Athletics, Basketball, Cheering Squad, Dance Troupe, Table Tennis, Taekwondo, and Table tennis. Each sport has seven (7) men and women, a total of ninety-eight (98) participants.

2.2 Instruments

The instrument used in this study were standard questionnaire. The Sports Motivation Scale (SMS-28) of Pelletier et. al (1995) was used to measure the level of motivational factors of athletes in relation to their sports participation. It includes four (4) questions from Intrinsic Motivation - To know, Intrinsic Motivation - To accomplish, Intrinsic Motivation - To experience stimulation, Extrinsic Motivation – Identified, Extrinsic Motivation – Introjected, and Amotivation.

The research used a 4-Likert scale from the study of Albener (2012), which was pre-tested at Universidad De Manila to ensure the reliability and validity of the scale. A

verbal interpretation of extremely motivated, highly motivated, slightly motivated, and not influential has a corresponding range of the weighted mean of 4.00-3.50, 3.49-2.50, 2.49-1.50, and 1.49-1.00 respectively.

2.3 Data Collection

The researcher asked for approval from the Athletic Director of Far Eastern University in conducting the survey to the student-athletes. After the approval, the researcher set dates to meet each participating team. It took two (2) weeks to complete the data. After data retrieval, the researcher submitted all papers to a statistician to compute the Weighted Mean and Analysis of Variance (ANOVA). After the statistician finish computing the data, the researcher interprets, analyze, and discuss the data. After that, the researcher comes up with a conclusion and recommendation.

2.4 Statistical Analysis

The researcher used Weighted Mean and Analysis of Variance (ANOVA) in this study. The researcher decided to use these two statistical treatments because they will answer the stated statement of the problem. The Weighted Mean, defined by Taylor (2023), is simply adding all values and dividing by the total number of values to yield the weighted mean. Therefore, we can readily calculate the weighted means for each treatment group using our `subset(data, condition)` and `mean(data)` functions. At the same time, Kenton (2023) defined Analysis of Variance (ANOVA) as a statistical instrument that divides observed aggregate variability within a data set into systematic and random factors. The systematic factors statistically impact the provided data set, whereas the random factors have no impact. In a regression analysis, analysts use the ANOVA test to determine the impact of independent variables on the dependent variable. Specifically, this formula was used, $F = MSB/MSW$. In this formula, F = coefficient of ANOVA. MSB = Mean sum of squares between the groups. MSW = Mean sum of squares within groups.

3. Results

Table 1: Level of Motivational Factors in Sports Participation

Motivational Factors	Table Tennis	Cheer Dance	Athletics	Volleyball	Dance Troupe	Basketball	Taekwondo	Weighted Mean	Verbal Interpretation
Intrinsic Motivation – To know	3.65	3.86	3.83	3.91	3.89	3.74	3.68	3.79	Extremely Motivated
Intrinsic Motivation – To accomplish	3.50	3.57	3.59	3.84	3.72	3.30	3.64	3.59	Extremely Motivated
Intrinsic Motivation – To experience stimulation	3.65	3.64	3.50	3.88	3.60	3.42	3.56	3.61	Extremely Motivated
Extrinsic Motivation – Identified	3.63	3.54	3.64	3.81	3.50	3.66	3.63	3.63	Extremely Motivated
Extrinsic Motivation – Introjected	3.24	3.45	3.50	3.61	2.80	2.98	3.41	3.28	Highly Motivated
Extrinsic Motivation – External regulation	3.02	3.38	3.47	3.52	2.87	3.26	3.36	3.27	Highly Motivated
Amotivation	2.20	1.89	2.74	1.66	1.75	2.14	2.20	2.08	Slightly Motivated
Over-all Weighted Mean								3.32	Highly Motivated

Table 1 shows that intrinsic motivation- to know table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo obtained a mean of 3.65, 3.86, 3.83, 3.91, 3.89, 3.74, and 3.68, respectively. The overall weighted mean for intrinsic motivation- to know is 3.79, with a verbal interpretation of extremely motivated. For intrinsic motivation - to accomplish table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo achieved a mean of 3.50, 3.57, 3.59, 3.84, 3.72, 3.30, and 3.64, respectively. The overall weighted mean for intrinsic motivation - to accomplish is 3.59, with a verbal interpretation of extremely motivated. For intrinsic motivation - to experience stimulation table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo attained a mean of 3.65, 3.64, 3.50, 3.88, 3.60, 3.42, and 3.56, respectively. The overall weighted mean for intrinsic motivation - to experience stimulation is 3.61 with a verbal interpretation of extremely motivated, while for extrinsic motivation – identified table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo obtained a mean of 3.63, 3.54, 3.64, 3.81, 3.50, 3.66, and 3.63, respectively. The overall weighted mean for extrinsic motivation – identified is 3.63, with a verbal interpretation of extremely motivated. For extrinsic motivation – introjected table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo attained a mean of 3.24, 3.45, 3.50, 3.61, 2.80, 2.98, and 3.41, respectively. The overall weighted mean for extrinsic motivation – introjected is 3.28, with a verbal interpretation of highly motivated. For extrinsic motivation - external regulation table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo got a mean of 3.02, 3.38, 3.47, 3.52, 2.87, 3.26, 3.36, respectively. The overall weighted mean for extrinsic motivation - external regulation is 3.27, with a verbal interpretation of highly motivated. Lastly, for amotivation table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo obtained a mean of 2.20, 1.89, 2.74, 1.66, 1.75, 2.14, and 2.20. The overall weighted mean for amotivation is 2.08, with the verbal interpretation of being slightly motivated.

With the data presented, the researcher confirms that the level of motivational factors in the sports participation of athletes is high, with a supporting data of 3.32 as the overall mean.

Table 2: Sources of Highest and Lowest Motivational Factors

Motivational Factors	Weighted Mean	Verbal Interpretation
Intrinsic Motivation - To know	3.79	Extremely Motivated
Intrinsic Motivation - To accomplish	3.59	Extremely Motivated
Intrinsic Motivation - To experience stimulation	3.61	Extremely Motivated
Extrinsic Motivation - Identified	3.63	Extremely Motivated
Extrinsic Motivation - Introjected	3.28	Highly Motivated
Extrinsic Motivation - External regulation	3.27	Highly Motivated
Amotivation	2.08	Slightly Motivated

Table 2 shows the overall weighted mean as to motivational factors. The overall weighted mean for intrinsic motivation- to know, intrinsic motivation - to accomplish, intrinsic motivation - to experience stimulation, extrinsic motivation – identified, extrinsic

motivation - introjected, extrinsic motivation - external regulation, and amotivation are 3.79, 3.59, 3.61, 3.63, 3.28, 3.27, and 2.08, respectively. The verbal interpretation of intrinsic motivation- to know, intrinsic motivation - to accomplish, intrinsic motivation - to experience stimulation, extrinsic motivation – identified are extremely motivated while the verbal interpretation of extrinsic motivation – introjected and extrinsic motivation - external regulation are highly motivated and while amotivation is perceived as slightly motivated.

Also, Table 2 shows that the highest factor of motivation is intrinsic motivation--to know with an overall weighted mean of 3.79 and a verbal interpretation of extremely motivated while the lowest factor is extrinsic motivation- external regulation with an overall weighted mean of 3.27 and a verbal interpretation of highly motivated. However, the researcher excludes amotivation in the choices since amotivation is a negative impact of motivation.

Table 3: Sources of Highest and Lowest Motivational Factors According to Sports

Sports	Weighted mean	Verbal Interpretation
Table Tennis	3.27	Highly Motivated
Cheer Dance	3.33	Highly Motivated
Athletics	3.47	Highly Motivated
Volleyball	3.46	Highly Motivated
Dance Troupe	3.16	Highly Motivated
Basketball	3.21	Highly Motivated
Taekwondo	3.35	Highly Motivated

Table 3 reveals that table tennis, cheer dance, athletics, volleyball, dance troupe, basketball, and taekwondo with a weighted mean of 3.27, 3.33, 3.47, 3.46, 3.16, 3.21, and 3.35, respectively. All athletes regardless of sports are perceived as highly motivated athletes with regards to their respective sports. The table also shows that athletics is the most motivated team while the dance troupe is the least motivated team however these two teams have a verbal interpretation of being highly motivated.

Table 4: Significant Differences between Motivation Factors of Athletes in Relation to Their Sports Participation

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.572240816	6	0.095373469	0.256725355	0.953756	2.323994
Within Groups	15.603	42	0.3715			
Total	16.17524082	48				

Table 4 shows the significant difference between motivational factors in sport participation. It reveals 0.572240816 for the sum of squares, 6 for the degree of freedom, 0.095373469 mean square, and F=0.256725355; thus, the between groups shows a P-value of 0.953756 and F-critical of 2.323994. For within groups’ results show a sum of square of 15.603, degree of freedom of 42 and a mean square of 0.3715. As a result, a total sum of square of 16.17524082 and total degree of freedom of 48 were revealed. The table clearly

shows that the result of null hypothesis is a statistical proposition stating that there are no significant differences between a hypothesized value of a population parameter and its value estimated from a sample drawn from that population. The probability value is higher than 0.05 because there has already a condition. The studies show that motivational factors are independent, linked to participation in different sports. The result of the studies comes up with the connotation to reject the alternative hypothesis and accept the null hypothesis. Therefore, there are no significant differences in the motivational factors in sports participation of athletes.

3. Discussion

With a weighted mean of 3.76 for intrinsic motivation-to know, athletes are perceived to be extremely motivated. Intrinsic motivation to know refers to the engagement in an activity *"for the pleasure and satisfaction that one experiences while learning, exploring, or attempting to understand something new"* (Vallerand et al. 1992), whereas Barkoukis (2008) stated that this type of representation of intrinsic motivation in education is related to concepts such as curiosity, exploration, and the epistemic need to know and understand. Moreover, the outcome demonstrates the positive engagement of athletes in their respective sports because they viewed it as pleasurable and significant (Yukhymenko-Lescroart, 2021). Today's athletes participate in sports to better comprehend their respective sports. In a world where change is constant, it is essential for all athletes to participate in various activities and pieces of training that enhance their understanding of their sports. Their comprehension functions as the foundation for their athletic success.

Athletes are perceived to be extremely motivated in intrinsic motivation – to accomplish. According to Vallerand (1992), intrinsic motivation for accomplishment is defined as being involved in an activity for the pleasure and satisfaction derived from attempting to excel, achieve a new standard, or create something new. Athletes who are intrinsically motivated to succeed focus on the activity's process rather than its outcome and seek to feel competent and creative. Begner (2019) supported this notion by stating that athletes participate not for external rewards but because they satisfy with the activity. Extremely intrinsically motivated athletes have a direct effect and concentrate on achieving goals, which can help athletes develop the necessary skills to achieve their goals (Harolle & Klay, 2019). Athletes participate in sports in order to accomplish something. They want to attempt something new to see if they can improve specific athletic skills. Athletes prioritize training, practices, and sessions over results. Athletes are extremely motivated to believe that the process is more important than the result.

Athletes have an extreme level of intrinsic motivation- to experience stimulation due to their desire to engage in mentally challenging activities. This refers to participating in sports with the purpose of having a good time and enjoying themselves (Vallerand et al., 1992). The environment can play a role in shaping the development of the desire for exposure, as (Yarrow et al., 1984) point out, by providing a stimulating and optimally challenging setting. Athletes have an excellent environment to hone their skills, face new challenges, and satisfy their natural curiosity. Athletes compete in sports because they

seek personal fulfillment through that activity. Some athletes continue to train outside scheduled sessions because they derive true joy from the experience. Still, others take part in sports for the sheer joy of it. They are excited to perform, and while these athletes prepare and perform, the environment gives them a different sensation that probably one athlete can look forward. A positive sensation that inspires them to train and perform.

Regarding Extrinsic Motivation - to identified, athletes are extremely motivated. They participate in sports to reach their goals and find themselves essential. In the study of Barkoukis (2008), this refers to the most self-determined type of extrinsic motivation regarding internalization. Athletes perform their sport with a sense of choice and behavior, believing that the sport plays a part in developing athletes holistically (Deci & Ryan, 2000). This was supported by Valdez (2020) stated that sports participation can be an avenue for athletes to develop their character. Athletes participate in sports when they find themselves part of it. This is their springboard to achieve their goal. Coaches who value athletes, respect personal goals, and intend to improve personally are the critical motivation to participate in sports.

Extrinsic motivation – introjected is the perceived high level of motivation among athletes. This indicates that behavior is not yet self-determined but that the individual is beginning to internalize the reasons for his or her actions. Moreover, Bamford (2020) noted that athletes are prone to identify with their sport. They participate in the sport to avoid anxiety and guilt when they cease. Athletes who have been exposed to an activity for an extended period of time will eventually tire of it. Still, they cannot continue because it is already part of their daily routine. This will support Senecal's (2019) assertion that sports can be identical identifiers of an athlete; without them, they may feel like a piece of themselves is lacking.

Extrinsic motivation - regulation perceived high level of motivational factors for athletes. According to Montesi (2019), being a student-athlete has benefits and the same amount of pressure, specifically in academics. The participants are students of one leading university in the Philippines; all athletes were able to receive scholarships, allowances, food, clothing, and accommodation. Therefore, there is a high chance that will play because of these external factors. Furthermore, athletes participate in sports for their portfolio, such as collecting medals, recognitions, and podium finishes for their external growth so that in the future, they can use this in their careers. On the other note, Manzoor (2021) states that a compensation package greatly contributes to an individual's performance. The reward system also plays a vital role in helping them perform better.

The Athletes are perceived as slightly motivated when it comes to amotivation. This dimension refers to the absence of a relationship between an individual's actions and outcomes. Individuals who do not appear to have specific purposes and objectives or approach their ends systematically. Also, these individuals merely lack the intent to participate in an activity. Apathy has been linked to learned helplessness, in which people withdraw effort due to perceptions of incompetence and loss of control (Barkoukis, 2008). On the contrary, it may sound negative, but the result tries to present that athletes are high in motivating themselves. Athletes believe they still know their future plans, their reasons, and the path they want to take.

The highest source of motivation for athletes is intrinsic motivation; this is because athletes never cease learning. These athletes continue to strive for improvement. According to Oudeyer and Kaplan (2007), intrinsic motivation is fundamental to spontaneous exploration, and in developmental psychology, curiosity is a crucial concept. It has been suggested that it is a crucial mechanism for humans' open-ended cognitive development. In contrast, extrinsic motivation-external regulation is the lowest source of motivation, despite its high perceived level. This is because athletes continue to recognize the significance of medals, awards, and podium finishes.

On the other hand, Athletics are considered the most motivated team. According to Trook (2017), he stated that athletics has always been an extremely straightforward sport. The competitors with the fastest times triumph and advance. This has been a significant advantage for track coaches over team sports. When parents query your decisions, you can just look at times. When athletes query their position on the team, a simple glance at the clock will suffice. Therefore, athletics are the most motivated team because they want to prove themselves since everything will be based on time. Lastly, the dance troupe is the lowest rank of a team regarding motivation. According to Shope (2019), in dance classes, feelings of isolation and competition can lead to a dearth of motivation. This reflects that some dancers are less motivated because of their emotions and fear.

4. Conclusion

Motivation fuels athletes to drive forward to achieve their maximum potential. The level of motivational factors of athletes in sports participation is high. The contributing factors to this result are intrinsic motivation -to know, intrinsic motivation – to accomplish, intrinsic motivation- to stimulation, and extrinsic motivation- introjected. It is important for all athletes to attend different symposiums, understand and learn different playing styles, and try something new to increase their knowledge. Also, coaches provide more meaningful experiences for athletes to maintain and to increase their level of motivation. Athletes must not forget their personal goals while joining a specific sport. Their goal, satisfaction, and exposure will serve as their compass to be the best athlete they can be.

The highest source of motivational factors is intrinsic motivation—to know since the university provides athletes with different trainings and seminars related to new trends in their respective sports, especially during their off-season. In contrast, the lowest source of motivational factors is extrinsic motivation-external regulation. Although it is perceived as the lowest source of motivational factors, it is still considered high because there are some athletes who still want to perform due to money, medal, trophies, and recognition. Most athletes from different institutions come from provinces, so they need to elevate the athlete package, such as their allowances and scholarship; with this, athletes will double their effort to get a podium finish. Let us not disregard amotivation since when athletes get tired, they really lose the enthusiasm to play.

The result of the study may differ from other universities here in the Philippines, but one thing is for sure these athletes are motivated to give it all for their respective

sports. Others might see a podium finish, but only athletes can testify to the road toward victory.

Conflict of Interest Statement

The author declares no conflicts of interest.

About the Author(s)

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