

Innovations

Exploring the Physical Training Life of Varsity Athletes Amidst the Pandemic

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Abstract

In 2020, a global pandemic interrupted most athletic events, and athletes endured significant reductions in training frequency and time spent completing other training-related activities. The purpose of this study is to determine the physical training strategies encountered by the varsity athletes of the university during the pandemic. The researcher utilized a qualitative method in the study. Questionnaires through google forms were formulated and administered to the coaches and varsity athletes as the respondents. The researcher also conducted a focus group discussion with varsity athletes to be able to explore an in-depth strategies utilized during the pandemic. Findings show that the common physical training of varsity athletes during the pandemic is flexibility and strengthening exercises. Strategies utilized are scheduling, monitoring, and adjustment of the frequency of training. Conclusions are then drawn where varsity athletes are led to modify and made necessary adjustments to the conduct of their physical training because of the challenges they encountered during the pandemic. This recommends enhancing and having proposed or clear guidelines to be followed by the varsity athletes, enhancing time management including setting realistic goals, prioritizing, and establishing routines in conducting their physical training during the pandemic.

Keywords:1. Physical training,2. varsity athlete, 3. strategies, 4. pandemic5.modify

Introduction

As of January 30, 2020, WHO declared the SARS-CoV-2 outbreak a Public Health Emergency of International Concern (PHEIC) (Yamada &Asakura, 2022). The Philippines, in particular, faced a serious situation as the health crisis spread. The top priority for higher education institutions (HEIs) was to avoid and reduce the dangers of infection in the academic community. As a result, the government immediately suspended the classes due to the implementation of community quarantine. The huge task at the time was to figure out how to continue teaching and learning beyond the traditional face-to-face setting.

The memorandum on the teaching and learning process was provided by the Commission on Higher Education (CHED), and the paradigm shift in the teaching and learning process in Philippine higher education necessitates collaboration among stakeholders and stretching the culture of sharing knowledge, resources, and best practices. Everyone is asked to participate in this transition to a new normal. With this, sports activities were also canceled, and most people were upset about the

postponement of several national and international events, like the 2020 Olympics. As a result, those directly and indirectly involved in these events have been affected by the athletes' training schedules around the world, which have also been disrupted. This transformation has a significant impact on training quality and quantity, as well as further separating athletes from the realities of their everyday training at traditional preparation sites and creating uncertainty about the future. Significantly decreasing training and lowering physical performance capacity may result in the athlete losing competitiveness when they return to competition.

The organizational consequences of quarantine or isolation are the absence of organized training and competition, lack of adequate communication between athletes and coaches, inability to move freely, lack of adequate sunlight exposure, and inappropriate training conditions, as identified by Chen and Owens et al. (cited by Jukic et al., 2020). Being in quarantine might have harmful consequences not only for the athletes' physiological systems but also for their personal lives. Isolation at home, for example, can lead to poor and incorrect nutrition, poor sleep quality, addictions, loneliness, and a variety of other bad lifestyle changes, as recognized by Chen and Halabchi et al. (2020) (cited by Jukic et al., 2020). All these factors can have a short- and long-term negative impact on an athlete's physical condition and competitive performance, and it is possible to predict that athletes may face a loss of training-induced adaptation due to the pandemic.

Maintaining a training schedule is currently crucial for physical wellness. Regular exercise helps boost and maintain immunity (Simpson, 2015), as cited by Fagundes (2021), which is necessary for lowering the risk of viral infection. According to Andreato et al. (2020), the athlete must not have a sharp decline in physical fitness. In this regard, athletes from various sports experience reductions in aerobic and anaerobic fitness such as muscle strength, muscle power, agility, flexibility, and physiological changes when they do not train. As a result, athletes must stay active to reduce the volume and speed of detraining, which should occur because of changes in training schedules. Athletes should strive to perform their sport's technical moves, even though it is difficult in many situations (e.g., dependence on the opponent, such as in team sports, need for equipment, or practice location, such as swimming).

During the quarantine, a complete strategy for injury prevention at home should include mobility and flexibility, bodyweight exercises, core stabilization, balance, and proprioception. Leppanen et al. (2014) and Meurer et al. (2017) are cited by Andreato 2020. As a result, the university transitioned to online distance learning, and the school is not excused because there are varsity athletes who are still under the scholarship. These varsity athletes are still required to do their own physical training at home. Institutions of higher education are continuously trying to meet the growing educational demands of diverse non-traditional learners. Thus, the purpose of this study was to collect data from the coaches and varsity athletes of the university regarding their physical training and strategies they used during the pandemic.

Literature Review

Learners are now turning to online learning, and administrators and other instructors will need to keep track of how online learning is progressing and ensure its effectiveness as colleges and universities continue to adjust to its development. Similarly, determining the needs of student-athletes may help promote high-quality online course development tailored specifically to student-athletes as well as increase the likelihood of positive blended learning experiences. Determining the variables could influence online course instructional design in the future (Kreb, 2008).

A person's self-efficacy is their belief in their ability to achieve in each situation. According to psychologist Albert Bandura, these ideas are predictors of how people think, behave, and feel (Bandura, 1997). Furthermore, self-efficacy affects how people approach goals, projects, and obstacles. A person with a keen sense of self-efficacy develops a deep interest in the activities in which they participate. Aside from

that, they form a stronger sense of commitment to their interests and activities (Bandura 1997). These studies show how self-efficacy determines effort, persistence, and performance in sport. Individuals with higher self-efficacy hold stronger beliefs regarding their capabilities to run certain times, finish in a specific position, and execute a particular skill. With enhanced self-efficacy comes a strong willingness to put in more effort and persist, even when faced with an aversive condition. Effort and persistence work to enhance performance in sport and exercise (Bandura, 1977).

Athletes' self-efficacy with regard to coping is important because every athlete deals with adversity and/or situations. When athletes have confidence that they can appropriately deal with adversity and/or situations, they lessen their negative consequences. For example, an athlete who gets injured may view the injury as traumatic and life-changing. This athlete may fall into depression and start experiencing mental, in addition to physical, setbacks. On the other hand, another injured athlete may view the injury as a temporary setback and make a plan for time off from physical practice. This athlete will likely stay optimistic during the rehabilitation process and may emerge stronger from meeting the challenge (i.e., coming back from injury). Just like what they experience today, some athletes were not motivated to train due to the pandemic, and some athletes took it as a challenge to improve and be ready for face-to-face training.

Coaches have a significant role in shaping athletes' experiences through social cognitive leadership methodologies established in the field of sport psychology. Moreover, Bandura's Social Cognitive Theory (SCT) has the potential to have a profound effect on coaching, athletes, and sports programs. By taking a social-cognitive approach to coaching, coaches can help their athletes through the processes of observation, imitation, and reinforcement of acceptable social behaviors, learning behaviors, motor behaviors, and champion behaviors (Connolly, 2017).

Method

Research Design

A qualitative method was employed in the study. The method was based on phenomenological methodology, as the researcher sought to describe the physical training of the varsity athletes during the pandemic. The qualitative approach is appropriate because the data collected and used in this study focuses on the participants' subjective experiences with the disclosure process and how they understand it. Marshall & Rossman (1995) further outline that the qualitative approach to research is uniquely suited to uncovering the unexpected and exploring new avenues.

Population and Locale of the Study

The respondents of this research consisted of 25 coaches and 93 varsity athletes who have scholarship grants during the Second Trimester (AY 2020–2021) of the online distance learning, with the exclusion of the chess varsity athletes and coach.

Data Collection Instruments

The researcher used interview guide questions, which were converted to a Google form, and a focus group discussion for the varsity athletes. The first part was an interview guide question that was utilized to identify the physical training of the varsity athletes during the pandemic and was answered by the coaches.

To answer problem number one as to the physical training of the varsity athletes, the researcher conducted a mini-survey of the coaches and asked what physical exercises they provided for their athletes to execute during the pandemic. Based on the gathered data, questions were formulated and answered by the respondents through Google Forms. To explore deeper information, the researcher

gathered qualitative data through focus group discussion to address problem number two as to the strategies utilized by the varsity athletes in their physical training during the pandemic.

Data Collection Procedure

The researcher administered the research instrument through an online survey using Google Forms. The researcher prepared a list of questions for the interviews and conducted a focus group discussion through Zoom. Using these as a guide allowed her to maintain the necessary structure and flow in her interviews while also maintaining an element of consistency in all the interviews. Finally, the researcher collected and compiled the answers to the survey questionnaire.

Treatment of Data

The data was treated in an exploratory-sequential approach to satisfy the objectives of the research. Also, the interview responses from the head of the Sports Development Office and varsity athletes were translated to English, transcribed, and summarized based on the questions asked. Furthermore, thematic analysis was used in analyzing the qualitative data. The researcher carefully examines the data to identify common themes—topics, concepts, and patterns of meaning that come up repeatedly—where the process of coding, clustering, and categorizing was made to come up with more meaningful and more organized themes in clarifying the problems of this undertaking. The questionnaire data were analyzed with descriptive statistics, and the interview findings were coded and analyzed to support the questionnaire's conclusions.

Results and Discussion

Table 1 shows the physical training of varsity athletes during the pandemic. Generally, the result shows that flexibility exercises and strengthening exercises are the most common physical training that the varsity athletes execute during the pandemic. Whereas, balancing exercises and aerobic exercises are the least physical training activities that varsity athletes perform during the pandemic.

The finding implies that athletes were led to modify their training programs and train at home. The result shows that athletes perform flexibility exercises, specifically dynamic and static stretching, because this is what the varsity athletes do during their warm-up and their cool-down. In addition, this is already integrated and included in their training exercises.

Flexibility exercises may not improve a person's endurance or strength, but as they stretch their muscles and joints, they can help their body stay flexible. Flexibility allows a person to move more freely for other exercises and everyday activities. Likewise, it will improve an individual's posture and reduce any aches and pains that they may suffer from. This was substantiated by one of the athletes during the focus group discussion that was conducted by the researcher, who said:

"Ma'am I think flexibility exercises can help us to improve our posture and balance, and the effect of these exercises is to lessen or reduce injuries."

Moreover, doing flexibility exercises has a significant impact not only on the physical aspect but also on one's mental health. Regularly stretching and opening the body has been shown to help people relax both physically and mentally, making it simpler to relax and giving a higher sense of well-being. This supports the idea of Johnson (2020) that the disciplines of sports administration, strength and conditioning, and sports psychology can assist coaches while physically and mentally training their athletes. It was also mentioned by the participants that most of the time they do strengthening exercises during their physical training at home. The result indicates that leg raises, which have a percentage of 99, and planking and high knees, which have a percentage of 97, are the most executed strengthening exercises by the varsity athletes during their physical training. This implies that doing these simple exercises can have a lot of

advantages, especially for the core. Also, an individual doesn't need to have equipment to do these exercises. One of the athletes specified:

"Most of us want to achieve the "abs" and these are the exercises that can be simply done but has a lot of advantages."

Table 1 Physical Training of the Varsity Athletes during Pandemic

Physical Training	Yes	%	No	%
Aerobic Exercises				
Jogging/ Running	67	94	4	6
Road run	45	63	26	37
Biking	33	46	38	54
Jump rope	38	54	33	46
Shuttle run	28	39	43	61
Running/ Sprinting in place	54	76	17	24
Plyometric drills	49	69	22	31
Strengthening Exercises				
Push ups	68	96	3	4
Crunches	68	96	3	4
Squats	67	94	4	6
Bicycle Crunch	62	87	9	13
Leg Raise	70	99	1	1
Hip Raise	61	86	10	14
Pull ups	50	70	21	30
Wide Push up	51	72	20	28
Diamond Push up	37	52	34	48
Inchworm to push up	41	58	30	42
Planking	69	97	2	3
High knees	69	97	2	3
Stationary High Knees	64	90	7	10
Burpees	62	87	9	13
Power squat	50	70	21	30
Heels up squatting	53	75	18	25
Power jumps	49	69	22	31
Low lunges	54	76	17	24
Lunge with twist	49	69	22	31
Walking lunges	60	85	11	15
Ladder drills	35	49	36	51
Flexibility Exercises				
Dynamic Stretching	58	82	13	18
Static Stretching	58	82	13	18
Balancing Exercises				
Standing with one leg raised	57	80	14	20
Walking while alternating knee lifts with each step	46	65	25	35

Whereas, it was found that strengthening exercises provide appropriate resistance to the muscles to increase endurance and strength. It has also been shown that strength training reduces symptoms of anxiety in individuals with and without an anxiety disorder. Besides, it was discovered that by doing strength training at home, one does not need to invest in much equipment instead of using dumbbells or a kettle bell; simply improvise by using water bottles, sandbags, or any alternative for weights. This kind of training can benefit athletes' health and fitness in many ways. Strength training makes them stronger and fitter. Just like one of the athletes explained:

"You do not need equipment for doing those kinds of exercises. You can just simply do different variations".

Since the guidelines for outdoor exercises and recreational activities were prohibited and were not supervised by their coaches during the pandemic, the result agrees with the idea of Andreato et al. (2020) that athletes must remain active to decrease the magnitude and speed of detraining, which should occur due to changes in training routines. This corroborates the answer of the athlete, saying:

"I still perform physical training in this time of pandemic because it is a requirement for our scholarship. But aside from that, what really drives me is to maintain my body shape, the endurance, and being just physically fit; it is to sustain the lifestyle that I had before the pandemic."

The finding agrees with Shariat (2020) that physical exercise is an effective way to reduce the risk of the development of cardiovascular diseases and death. It was found out that doing physical exercises and relaxation performances at home can be valuable tools to help you remain calm and continue to protect your health during this time of the pandemic. With this, they can do flexibility and strengthening exercises at home, especially in this time of pandemic when people need to stay at home. These two exercises can be a super easy and convenient way of engaging in training without going outside the house. The result of the study also concurs with Shariat's (2020) finding that home-based fitness regimens should be easy to do without the need for special equipment and come with clear instructions. On the other hand, due to the implementation of community quarantine, the training routines of the varsity athletes have been interrupted, which leads to the result of the study that balance exercises and aerobic exercises are the least physical training they perform during the pandemic. This implies that athletes are not focusing on the balancing exercises, where one of the athletes stated that:

"We do not need that. We need more or we focus more on strengthening and flexibility exercises especially in this time of pandemic though sometimes we do balance exercises."

It was found that most individuals have the habit of focusing on one activity or type of exercise and thinking they're doing enough for their health. This agrees with the concept of Elmagd (2016), who stated that each type of exercise is different; however, doing them all will give you extra benefits. Moreover, it also minimizes boredom and reduces the risk of injury when mixing things up. The product of the study likewise indicates that aerobic exercise is the least physical training that the varsity athletes perform during the pandemic. Specifically, shuttle runs, biking, and jump rope exercises are the least aerobic exercises that the varsity athletes perform during the pandemic, with a percentage of 39, 46, and 54, respectively. This implies that varsity athletes are not really into aerobic exercises, particularly in this time of pandemic due to the implementation of community quarantine imposed by the Inter-Agency Task Force (IATF), where recommended interventions include canceling events that generate agglomerations or mass gatherings, jogging or running, and other recreational activities. That leads the athletes to stay at home and do their physical training there. By doing aerobic exercises, you increase your breathing and heart rate.

Table 2 shows the strategies utilized in the physical training of varsity athletes during the pandemic. It was found out that the strategies, which are based on themes created, include scheduling, monitoring, and frequency of training.

Table 2 The Strategies Utilized in the Conduct of the Physical Training of Varsity Athletes

Themes	Frequenc y	Informants
1. Scheduling	15	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14,
2. Monitoring	11	A2, A3, A5, A6, A8, A9, A10, A11, A13, A14, A15
3. Frequency of	8	A2, A6, A7, A8, A9, A12, A13, A15

2.1 Scheduling

One of the themes found in terms of the strategies utilized in the physical training of varsity athletes is scheduling. The result reveals that the training schedule of the varsity athletes at the university is not the same and not consistent. Throughout the interview, all the informants told the researcher that they do their physical training during their free time or after class.

Because of the sudden outbreak of the COVID-19 pandemic, both the quantity and quality of the athletes' training were affected. Due to home isolation, athletes significantly changed their training routines, lamenting the impossibility of accessing facilities and equipment as well as training with their teammates. In addition, some athletes find it challenging to train at home due to a lack of motivation. Agreeing with the self-determination theory (SDT) work of Ryan and Deci (cited in Deci et al., 2000), an individual is motivated to participate or not participate in an activity, in this case PA for intrinsic motivation, extrinsic motivation, or amotivation. Just like one of the informants said:

“As a student-athlete myself, I still perform physical training in this time of pandemic because it is a requirement for our scholarship. But aside from that, what really drives me is to maintain my body shape, endurance, and being just physically fit; it is to sustain the lifestyle that I had before the pandemic. However, we cannot deny that there are lazy days. I had skipped most of my training because I know that I won't go back to playing my sport since there are still a lot of uncertainties plus, I only had months in college. What make me perform physical activities are either the short or long-term benefits of physical activities and exercises. One good example is the benefits of physical activities and exercises against covid-19 this pandemic.”

This indicates that one of the main reasons athletes still do their physical training is for their scholarship and to sustain the routine they had before the pandemic. Moreover, the university transitioned to online distance learning, and the varsity athletes are not excused because they are still on scholarships. These varsity athletes are still required to do their own physical training at home. This coincides with Chen (2020), who said that at this time, maintenance of a training routine is important for physical health. As a result, the head of the Center for Sports Development made some adjustments regarding the physical training of the varsity athletes and said,

“The purpose of their workout is to maintain their body conditioning. As of now, they are focusing on conditioning workouts at their own pace. That is their major goal as of the moment.”

The above statement corroborates the study by Andreato et al. (2020) that the athlete must not have a sharp decline in physical fitness. Therefore, they performed conditioning training like strength training. The inability to perform sport-specific elements is likely to have contributed to a decrease in training volume, intensity, and quality. As a result, athletes must stay active to reduce the amount and speed of detraining, which is expected to occur because of changes in training regimens.

2.2 Monitoring

Through an interview, it was found that informants A3, A5, A6, A8, A9, A10, A11, A13, A14, and A15 expressed that they video recorded themselves or took pictures while having their training and submitted it to the Sports Development Office. Moreover, the Enhanced Community Quarantine, where individuals are not allowed to go outside, implies that varsity athletes used social media platforms such as Zoom and Google Meet to conduct their physical training. To validate this, one of the informants conveys:

“At least once a month, we gather through Zoom, and we all train together and greet each other.”

Additionally, one of the participants indicated:

“Through recorded videos and pictures of our separate training. We update each other in our group chat.”

Because of COVID-19 restrictions, such as the closure of schools, parks, gyms, and stadiums, and the cancellation of sports and other activities, physical training and participation among varsity athletes have been impacted. With this, athletes were encouraged to do their physical training at home. Correspondingly, the Sports Development Office required the varsity athletes to video record themselves or take pictures and submit them to them for monitoring and documentation purposes. Besides, according to El Mansour and Mapinga (2007), as the popularity of online delivery continues to rise, institutions and administrators are challenged with the importance of establishing the positive components of the student’s experiences in online learning as well as adjusting the undesirable aspects of this form of learning. In addition, Schinkle et al. (2020) apprehended that, like several other groups, they also became dominated by online interactions. This has been a major challenge because these athletes were affected by how to identify themselves when they were not able to compete and earn a living from their sport and how to remain active, fit, and holistically well when their training venues were closed and they were forced to spend prolonged periods in isolation, like so many other populations. Furthermore, the community has already adapted rapidly by creating online content for different people, from free tutorials on social media to yoga and dance classes where the whole family can participate. Additionally, educational institutions are offering students online resources to use at home. Just like one of the informants uttered,

“In our team, our coach lets us follow online exercises from beginner, intermediate, and advance work out and serves as our progress report.”

This authenticates Bandura's social cognitive theory, which has the potential to have a profound effect on coaching and athletes. By taking a social-cognitive approach to coaching, coaches can help their athletes through the processes of observation, imitation, and reinforcement of acceptable behaviors, learning behaviors, motor behaviors, and champion behaviors. This likewise validates the study of Groom (2012) (cited by Hurley, 2021) that such mobile technology is very convenient for athletes and their support teams because it can be employed anywhere. Its application is not limited to formal training venues, as it may have been in the past. Some research papers have explored the advantages and disadvantages of using technology in modern sports. For athletes and their coaches, the use of video technology during the pandemic may have provided a variety of physical and psychological benefits, such as (i) the objectivity of the data collected—it is real and evident for all to see; (ii) the ability to assist and keep the athletes responsible and motivated to train (for instance, if such video evidence of completing training sessions as requested by coaches and the athletes' various support staff), (iii) its potential ability to improve athletes' self-efficacy (self-belief) and mental imagery skills, as well as (iv) its use in positively aiding their decision-making skills and pre-performance routines.

To strengthen the result above, according to the theory of Albert Bandura (1997), self-efficacy is "the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations." These concepts are determinants of how people think, behave, and feel, according to Bandura. Furthermore, he also added that self-efficacy plays a significant role in how goals, tasks, and challenges are approached. A person with a keen sense of self-efficacy develops a deep interest in the activities in which they participate. Aside from that, they form a stronger sense of commitment to their interests and activities.

2.3 Frequency of Training

The strategies utilized in the conduct of the physical training activities of the varsity athletes (A2, A6, A7, A8, A9, A12, A13, and A15) scheduled their physical training (3) three times a week during the pandemic.

The result implies that the varsity athletes reduced the number of days of their training because of the challenges they encountered during the pandemic. To verify this, one of the informants said:

"We schedule our training every morning three times a week MWF because sometimes we need to do our scheduled requirements in our online class."

Toresdahl and Asif (2020) advised athletes to follow a conservative approach, limiting training sessions to <60 min and to <80% of their maximum ability during this time to prevent COVID-19. This led to the product of the interview, where athletes A5, A10, and A11 still do their physical training at least one to two times a week. And according to the head of the Sports Development Office, who stated:

"It is forbidden to undergo physical training as per IAATF and of course, our top priority is the safety of the athletes. But they are still encouraged to do their work out."

This supports the idea of Andreato et al., (2020) that the athlete must not have a sharp decline in physical fitness. In this regard, athletes from various sports experience reductions in aerobic and anaerobic fitness such as muscle strength, muscle power, agility, flexibility, and physiological changes when they do not train. As a result, athletes must stay active to reduce the volume and speed of detraining, which should occur because of changes in training schedules.

He also added,

"The purpose of their workout is to maintain their body conditioning. As of now, they are focusing on conditioning workouts at their own pace. That is their major goal as of the moment."

His statement has a connection with Jukic et al., (2020), who cited the principle of training reversibility, which states that stopping or markedly reducing training induces a partial or complete reversal of the previously developed adaptations, thus compromising athletic performance. This principle is also known as detraining. Athletes' self-efficacy concerning coping is important because every athlete deals with adversity and/or situations. When athletes have confidence that they can appropriately deal with adversity and/or situations, they lessen their negative consequences.

Conclusion

This portion of the study presents the conclusions drawn and recommendations proposed by the researchers. Based on the findings, the following are the conclusions drawn: Varsity athletes modified their physical training, where resistance exercises and physical mobility exercises were the most common physical training they executed during the pandemic. In addition, the varsity athletes create an arranged workout routine with proper time allotment, conduct online supervision, and observe systematic training execution based on the athletes' capabilities.

After a careful review of the findings and conclusions, the following recommendations are drawn: To enhance and have a proposed plan or a clear guideline to be followed by the varsity athletes and not only focus on two major aspects in conducting their physical training during the pandemic.

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