

The Impact Affective Teaching Has on High School Physical Education Student's Life Skills

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The Impact Affective Teaching Has on High School Physical Education Student's Life Skills

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Table of Contents

Title Page..... 1

Signature Page..... 2

Acknowledgements..... 3

Table of Contents..... 4

Abstract..... 5

Chapter 1..... 6

Chapter 2..... 10

Chapter 3..... 14

Chapter 4..... 24

Reference Page..... 31

Appendix A..... 33

Abstract

As high school students graduate and move on towards their careers and lives that lay ahead of them, they most likely will implement what they have learned from school into their regular every day scenarios. What impacts these students can positively affect their life style choices, especially when it comes to physical education. Specifically, the affective domain provides students with many relevant learning points that they can use for the remainder of their lives. As physical education instructors, while it is crucial to focus on psychomotor and cognitive aspects of the content that is delivered, utilizing the affective domain can prove to be just as impactful in the long run. Previous research has suggested that there are certain approaches that teachers can take that can maximize student's lifelong retention in the affective learning category. The purpose of this synthesis was to review literature on teaching affective skills in high school physical education and its impact on student's life skills.

Chapter 1: Introduction

Quality physical education consists of educating students in three domains. The psychomotor domain “focuses on motor skills” and primarily assesses students based on how competent they can perform in various content areas (SHAPE America, 2014). The cognitive domain is focused on “the understanding and application of knowledge and information” that students take in from the content that they are presented with during class (SHAPE America, 2014). Lastly, the affective domain is centered around student’s “personal-social development” which includes a wide variety of categories related to the individual’s emotional and motivational mindsets (SHAPE America, 2014).

Previous studies have demonstrated that the least understood and least utilized domain is the affective domain (Xenos et al, 2011). Despite this, it is clear that the affective domain is an area that will remain relevant throughout students’ lives (Webster et al, 2013). The unique contents of the affective domain allow for many possibilities regarding how the material can be taught to the learners. Since attitudes, interests, and emotional feelings are all things that we carry on with us after school and regularly utilize in everyday life, the importance of the affective domain should not be something that is seldom discussed and used. Sgro et al (2020) used a games-centered teaching approach and demonstrated that these types of activities could enhance the affective domain of high school students.

Researchers have reported different results regarding how student’s motivations and values can be present in a physical education high school setting. For example, Lodewyk and Pybus (2013) explored what factored into high school students’ decisions of whether or not to participate at all in physical education. The results of this study found that students who decided not to enroll were influenced by various reasons such as a lack of motivation to remain active, as

well as outside factors such as scheduling conflicts (Lodewyk & Pybus, 2013). Other findings have taken a different route by exploring deeper into student's personal attitude characteristics, and connecting them into how they relate to their physical education experiences (Lodewyk, 2019). Students at the high school level may have differing experiences based on the impact their affective domain lessons had on them. While there are many factors to consider such as what teaching approaches they were exposed to as students (Sgrò et al, 2020), it is important that students are provided with the opportunity to learn from this domain in order to live a more positive and productive life outside of school. However, Bronikowska et al, (2019) looked at the effect of affective teaching beyond high school by surveying freshman college students and noted that moral competencies tended to be influenced to a greater extent by their parents versus what they learned in physical education.

One area of teaching in physical education that has demonstrated a positive outcome post high school has been instruction in lifetime activities. Although the majority of participants stated that they enjoyed team sports in physical education, they noted that they would have preferred more instruction in lifetime activities because of the continuous relevance these activities could have later in life (Barney et al, 2015).

Statement of Problem

Physical education purports to enhance the psychomotor, cognitive, and affective domains of learning, yet research indicates teaching in the affective domain is underutilized. Teaching in the affective domain has many benefits that not only will assist them during their time as students, but for the remainder of their lives as well. For example, the main components of the affective domain (motivations, emotions, and personal-social development) are all things that can continue to be used in everyday life scenarios. The long-lasting impact that the teaching

of this domain has is a crucial factor in how successful students can be when they apply what they have learned into their own personal lives. Building these skills as students will allow for the importance of these values to be understood at a young age, which will better prepare the learners for their lives beyond school. In addition, there are a variety of teaching styles that can support the affective domain, yet physical educators do not always take advantage of ways in which they can include content related to the affective domain, and they rarely assess it.

Purpose of Synthesis

The purpose of this synthesis is to review the literature on teaching affective skills in high school physical education and its impact on life skills.

Operational Definitions

1. Affective domain - “The domain in which the focus is on personal-social development, attitudes, values, feelings, motivation and emotions. In the revised Bloom’s taxonomy (Anderson et al., 2005), affective behaviors include receiving (willing to listen and hear), responding (willing to participate actively), valuing (willing to be involved, accept and commit), organizing (willing to advocate and synthesize) and characterization (willing to change behavior, revise judgments and cooperate).” (SHAPE America, 2014).
2. Life-Skills – “A skill that is necessary or desirable for full participation in everyday life.” (Oxford Languages, 2021).
3. Physical Education – “Instruction in the development and care of the body ranging from simple calisthenic exercises to a course of study providing training in hygiene, gymnastics, and the performance and management of athletic games.” (Merriam-Webster, 2021).

Research Questions

The research questions listed below will be the primary focus that this literature review explores:

1. What types of activities support learning in the affective domain in high school physical education?
2. How can physical educators enhance their teaching of the affective domain in high school physical education?
3. What impact does teaching the affective domain have on life skills of high school students in physical education?

Delimitations

1. The articles utilized in this literature review of the synthesis were both peer reviewed and full text.
2. This review included articles ranging from the years 2011-2021.
3. Peer reviewed articles focused on teaching in the affective domain in high school physical education.

Chapter 2: Methods

The purpose of this chapter is to review the methods and procedures used to determine the impact that affective teaching has on high school student's life skills. For the purposes of this project, previous research was sought after so that any prior relevant knowledge and findings could be utilized for the synthesis. The remaining contents of this chapter will, in specific detail, explain what methods were taken in order to reach the previously found information.

SUNY Brockport's Drake Memorial Library website served as the project's source of both seeking and utilizing previous literature. In order to remain in the subject area of the project's topic, the EBSCO database resource guide chosen was specific to Kinesiology, Sport Studies, Physical Education, and Exercise Science Resources. While searching for specific literature, the Academic Search and SPORTDiscus databases were utilized together throughout the entire process of obtaining the literature. During the literature search process, various keywords were put into the databases which provided thousands of unique and information packed articles.

All keywords that were chosen for this project had a direct relation towards the main questions at hand. In order to view the most relevant and reliable resources, the keywords were carefully chosen with the mindset of providing the most accurate and trustworthy information on the subject that was possible. After searching the databases using the keywords that were most appropriate, the results were then trimmed down based on the specific criteria that was used for this project. These criteria were consistent for each data base search and were used in order to ensure that all previous information used was valid and related to the topic. The criteria to delimit all research consisted of checking that the chosen results were all scholarly (peer

reviewed) journals, full text available, in the language of English, and have been published within the last 10 years from the time of this project.

As the pursue of previous research began, the initial keywords selected and put into the databases were *physical education*, *affective domain*, and *high school*. These were the first key words chosen due to the fact that the purpose of the project revolves around these main ideas, which allowed for a good starting point in the research seeking process. The three keywords resulted in 36 articles initially appearing. After narrowing it down using the previously mentioned criteria, the results were slimmed down to just seven articles. Of these seven, two articles were selected to use for the purposes of the synthesis project.

The second search put into the same databases used the key words *high school physical education* and *student values*. The initial search results showed 968 related articles, which was limited down to 401 after the same criteria delimitations were applied. Of the 401 results, three articles were used for the synthesis.

The third search using the same databases used the key words of *physical education students*, *high school*, and *moral influence*. From this search 24 results appeared, which were then lessened to only six. Of these six results, one article was used for the project.

A fourth academic EBSCOhost search used the key words of *physical education*, *affective learning*, and *high school*. Initial results showed 61 articles, which was limited to 18 using the same criteria. Of the 18 articles, three articles were used for the synthesis.

A fifth search within the databases used the keywords *high school*, *transfer of learning*, and *physical education*. Results from these key words showed 83 articles, which was reduced to 26 with the delimitations. Of the 26, one article was utilized for the project.

A final sixth search used the key words of *teaching games for understanding*, *physical education*, and *high school*. These words resulted in 76 articles prior to limiting the search. After using the same criteria as all previous sources did (peer reviewed, full text, English, from the years 2011-2021) the results were narrowed to 23 articles. Of the 23, one article was used for the synthesis project.

Eleven total articles were chosen for the synthesis project, all following the specific criteria that limited the options to the most relevant and useful sources available. While selecting these articles, it was ensured that each of them provided useful information and findings that were related to the purpose of the synthesis. All selected articles were focused on either high school student's affective learning experiences, or related studies that focused on affective contents such as motivations or attitudes towards the subject.

Regarding the sources of the selected articles, there were a variety of publication journals that the articles were presented from. The most common source that the articles came from was *Journal of Teaching in Physical Education*, with a total four sources originating from there. The remainder of the following sources were connected to one article each. These remaining sources were *International Journal of Sport & Health Science*, *Physical Educator*, *BioMed Research International*, *Physical Education & Sport Pedagogy*, *Journal of Human Kinetics*, and *Journal of Physical Education & Sport*.

The critical mass for this synthesis project included a total of 3,712 participants from all articles researched combined. Since the focus of the project was concerned with student's learning of the particular domain, the participants were all students of varying grades and locations. Of these individuals 1,223 were college level students, while 2,489 were high school level students. Regarding the demographic regions that the studies took place and participants

lived, there was a wide variety from both within the United States and in different countries around the world. The various locations included schools from the likes of Japan, western United States, Poland, Spain, Canada, Italy, and South Carolina.

For the selected articles, that data were analyzed in a variety of ways. The analysis approaches ranged from both qualitative and quantitative, with specific tests and scales included as well. For example, some methods included specific scales related to the research purpose such as the Umegaki et al (2017) article which provided participants with Kikuchi's Scale of Social Skills. Other sources methods ranged from response questionnaires, rating scales, Likert scales, pre and post-tests, interviews, and profile analyses. The wide range of approaches used for the analysis of the collected data proved to provide a plethora of relevant and unique results.

Although many approaches were taken, all were aimed at getting data that would benefit the questions of the study. Both quantitative and qualitative approaches have their benefits, and the inclusion of each allowed for an even stronger and broader result of data in the end.

Chapter 3: Review of Literature

The purpose of this chapter is to present a review of literature on how teaching the affective domain in high school physical education impacts student's life skills. In particular the following topics will be reviewed: activities that support affective learning in high school physical education, how physical education instructors can enhance their affective teaching, what impact the affective domain has on student's life skills, and what motivates students to utilize the affective content that they learned throughout their lives. The selected literature showed that these topics are worthy of further exploration when it comes to better understanding the impact that the affective domain has on high school students in a physical education setting.

High school physical education students should be prepared to continue a healthy and active lifestyle after they graduate school. While the psychomotor and cognitive domains certainly have a lot to do with that, the affective domain brings a unique skill set in the category of life skills. Despite this, many physical education teachers do not fully utilize their creativity and effort to focus on the affective domain. The first topic explored in this review will be the kinds of activities high school physical education instructors can use to best support their students' affective learning.

Which teaching approaches or activities best support affective learning?

In order for the affective domain to be properly showcased to learners, it should be present in activities that students interact with during physical education class. Umegaki et al (2017) specifically looked at the Teaching Personal and Social Responsibility (TPSR) model in order to determine whether or not it would alter how students apply what they have learned in the class setting into their own lives. Umegaki et al (2017) explained how the TPSR model acts as an opportunity for students to learn about social and internal responsibilities through their

interactions with physical activity. This study included an experimental approach that utilized quantitative data collection taken from 67 female and 40 male junior high school students from two separate schools in Japan taught by two separate instructors. All 67 female students were taught by a female instructor in her 30s, broken into two different classes (33 student class and 34 student class). All 40 male students were taught by a male teacher in his late 20s, all in one combined class. All students were tasked with participating in various activities within physical education class (related to the TPSR model), as well as interacting with level charts related to responsibility for data collection purposes. The responsibility level chart consisted of five levels, and required participants to recognize where their actions ranked, as well as reflect on how the behaviors could have been improved. While the TPSR model did prove to help students acquire certain life-skills related to social and daily living habits, it was also found that the participants failed to maintain these skills for a long period of time due to the model's failure to implement ways for the students to apply the skills to new and unique situations outside of the school setting.

Further evidence of researching high school physical education activities related to the affective domain was explored by Barney et al (2015). This research focused on the idea that despite team sport activities being the most commonly used approach for high school physical education, that content may not prove to motivate students to carry on what they have learned in their lives after school. The study consisted of 539 male and 481 female college students of varying majors (zero PE majors) from a private western college in the United States, tasked with completing open response questions, rating scales, and follow-up questions. The findings demonstrated that the large majority of participants said that while they most enjoyed team sport activities during their previous high school physical education experiences, they would have

preferred to participate in lifetime activities because of the continuous relevance that it could allow them to have later on in life.

In addition to the already mentioned research centered on specific physical education activities with affective lessons included, Fernandez-Rio et al (2017) focused on another activity approach related to the subject. The primary purpose of this research was to determine the connection between physical education students' motivations related to cooperative learning, as well as receiving relevant feedback on their experiences. The study consisted of both quantitative and qualitative data collections in the form of various questionnaires, responses, and pre and post-tests. The participants included 122 male and 127 female physical education students from grades 8-11 tasked with being exposed to and participating in either the experimental group (receiving 3 consecutive cooperative learning units) or the comparison group (receiving 3 traditional teaching units). The study analyses concluded that a repetitive cooperative learning approach can result in student's motivation levels being positively increased as opposed to those who are not exposed to the theory during physical education class.

Another unique example of an approach used to present physical education activities is the Teaching Games for Understanding method, which was created by researchers Bunker and Thorpe in 1982. Hortiguera Alcalá and Garijo (2017) compared this method with a traditional teaching approach in an effort to determine which one would show better results for the students. Separated into either a traditional group or a teaching games for understanding group, the high school participants completed both quantitative questionnaires and qualitative interviews in order to provide data. While the findings showed that the teaching games for understanding students showed more positive results, another interesting revelation was that the instructors from the different groups did not agree on exactly how physical education content should be presented to

students in class. For example, Hortiguera Alcalá and Garijo (2017) explained that the two teachers from the study disagreed on what motivates students in physical education. The experimental group teacher believed that the instructor's system and style of approaching content are responsible for motivating students, while the control group teacher felt that it is the student's maturity levels and personalities that dictate how motivated they are.

Similarly to previous researchers, Sgro et al (2020) focused on the approach of game-centered physical education by completing their study on how high school students' affective learning domains are impacted by the presence of a game-centered teaching approach in physical education. Participants for the study consisted of 56 male and 25 female physical education students from a high school in Italy, tasked with participating in physical education in either the control group (teacher centered approach) or intervention group (tactical game model approach) in which they were placed, along with the completion of questionnaires relevant to the study. The tactical game model was created by Griffin, Mitchell, and Oslin in 1997, and it aims to prioritize students' deeper understanding of the games that they participate in. Results of the study found that students who were placed in the intervention group demonstrated consistently higher enjoyment levels, while the control group showed evidence of detrimental tendencies such as lower enjoyment and stronger self-ego focuses.

How can instructors enhance their teaching of the affective domain?

Physical education instructors should always strive to enhance their teaching so that they can continue to grow as an educator and as a result support their students in the best ways possible. Bronikowska et al (2019) shed some interesting light on how student's affective morals could be influenced by various factors. While this study focused on comparing physical education student's morals and behaviors, it also brought forth some interesting information

related to how teachers can focus on certain aspects to benefit the affective domain. For example, findings of the study showed that if teachers heavily stress critical reflections on the aspects of lifelong learning, that will positively impact their student's affective learning.

Coincidentally, Barney et al (2015) identified how teachers can alter their content focus based on feedback from their learners. Through the use of open-ended response questions and rating scales, the college participants of this study reflected on how their prior experiences in high school physical education molded them into the individuals that they turned out to be. The eventual findings demonstrated that the most common response pointed to the fact that lifetime activities were not utilized as much as they would have liked. This information is a perfect way for instructors to take a step back and evaluate so that they can build on their skills as an effective teacher and better cater to the needs and preferences of their students.

Alternatively, another way in which instructors can alter their teaching mindsets is by better understanding their individual students. Webster et al (2011) centered their research on high school physical education student's attitudes and beliefs. Participants ranged from 356 female and 280 male physical education students from five different South Carolina high schools, tasked with actively participating in their physical education classes, along with filling out questionnaires provided to them that acted as the data collection for the study at hand. The findings of the study showed that a major factor in student's motivations to utilize what they learned outside of school depended on how the instructor made the content personally relevant and interesting to the individuals in the class.

What impact does teaching the affective domain have on student's life skills?

Although Umegaki et al (2017) discussed the specific approach of the TPSR model, the same source also dealt with the main idea of how students can continue to be impacted by the

affective content that they are taught. The primary purpose of the source was to research and determine if usage of the TPSR (Teaching Physical and Social Responsibility) model resulted in more effective life-long skills for junior high school physical education students in Japan. A key finding ended up being that one of the main factors in impacting students can come from connecting their school experiences to what they encounter in their regular lives. This idea of a connection happening internally from the learner demonstrates that the content that students were previously taught can directly apply to their lives outside of the school setting.

Yet another example of student's life skills being impacted was covered by Barney et al (2015). The purpose of this study was to investigate how college level students' previous experiences in high school physical education resulted in shaping their motivations and values on continuing to remain active outside of school, and comparing gender differences within the responses. The long-lasting impact that the teaching of the affective content had on the students is apparent in the findings of the student's responses. The majority of students in this study expressed that looking back and reflecting on it, they wished that they had more exposure to lifetime activities since that content would have carried over more appropriately to their life skills. This shows that students can recognize what will benefit them in the long run, and therefore the impact of the teaching content is a crucial aspect regarding what shapes the learner's life skills.

Webster et al (2013) took the approach of specifically breaking down affective categories, thus revealing which factors contributed to the impact that the content had on the learners. The main purpose of this study was to take a detailed approach into specific affective domain portions of high school physical education students, with the intent of determining new information that will aid teachers for future affective content. Participants consisted of 280 male

and 356 female high school physical education students, tasked with completing various questionnaires stating detailed information about themselves, a motivation scale relevant to the study, and a Likert scale regarding their perceptions on the effectiveness of their instructor. A variety of analysis approaches were taken, including Exploratory Factor Analysis, Cluster Analysis, Latent Profile Analysis, and Quantitative statistic comparisons. The study found that student's characteristics and traits can point to certain affective trends in their learning. The subgroups of affective learning that the participants' data helped discover resulted in relevant information that can be used by future instructors and researchers. Ultimately, the information that was obtained throughout the research supported the idea that student's life skills can indeed be impacted by what is taught to them in the category of the affective domain.

Prior research from Webster et al (2011) also pointed to the idea of how affective content impacts learning beyond the school setting. This earlier study from Webster had the purpose to further explore how high school physical education student's affective beliefs and attitudes are all intertwined, as well as how these attitudes help determine how learned content will be applied in their futures after finishing school. Analysis for this research included both questionnaires and quantitative data collection. The findings indicated that the largest impact on student's life skills is likely connected to the manner in which the content is presented to them. Depending on how much of a personal connection the students have regarding what is being presented to them, that will greatly factor in to how much of a meaningful impact they will take away and continue to utilize throughout the remainder of their lives.

Which factors motivate students to continue to utilize the affective skills they learned?

Although students will implement their affective knowledge in different ways, it is important to recognize the various factors that motivate them to utilize what they have learned.

Lodewyk and Pybus (2013) carried out their research with the purpose to further investigate how various factors (social-cognitive, self-determination, and body image theory) are related to instances of high school physical education students choosing not to enroll in optional classes. Participants for this study included 118 female and 109 male high school students, all in the 10th grade, from across five different schools located in Canada. These participants were tasked with completing surveys that directly contributed to the results of the study, with further data obtained via both qualitative and quantitative methods. Findings showed that students who did enroll in the optional physical education class contained higher levels of self-motivation than those who did not. Regarding the students who chose not to enroll in the classes, it was found that many of them decided this due to reasons that were out of their control such as scheduling or graduation conflicts. The lesser motivated students who did not enroll were also believed to be much less likely to pursue physical activities outside of the school setting.

Further research by Lodewyk (2019) took a specified approach by focusing on the learner's personalities. The primary purpose of this research was to further explore in a high school physical education setting how students various personality traits are linked to the content outcomes that they reach throughout the class. Participants included 161 male and 155 female physical education students ranging from grades 9-10, tasked with participating in the activities as well as filling out surveys related to the study. Other data was obtained via Likert response scales, Statistical Program for the Social Sciences, and Analysis of variance. Results of the study found that students' personality traits do in fact help determine the outcomes that they will obtain in physical education class.

Hortigüela Alcalá and Garijo (2017) sought to determine high school student's views on what motivates them to achieve success within physical education class, compared between two

different instructional approaches (traditional approach and teaching games for understanding approach). For this study, participants included 137 male and 100 female physical education students from a high school located in Spain, tasked with participating in either the experimental group or the control group, while also completing quantitative questionnaires and qualitative interviews that were relevant to the focus of the research. The research findings showed that the students in the teaching games for understanding group proved to show consistently more positive achievement and motivation.

Other motivations such as social aspects of the students were explored by Bronikowska et al (2019). This research was carried out to explore and compare how freshman student's moral competencies were affected by various social factors within a physical activity scenario. Included in the study were 203 total participants: 60 male and 49 female physical education majors, and 59 male and 35 female sport education majors from the Poznan University of Physical Education, tasked with participating in physical activity and completing data scales related to the study. Results showed that the majority of participants (70%) demonstrated moral competences that were at the low level, with the most common influential factor being the participant's parents rather than originating from content that they learned during their physical activity sessions.

Summary

Previous research has found that the affective domain can impact high school physical education students in various ways. While the cognitive and psychomotor domains are more straightforward, the uniqueness of the affective content allows students to interpret and apply it differently into their own lives. The long-lasting impact that affective content can have on students is something that is valuable to both the learners and the instructors.

Factors that can further enhance student takeaways from affective content include the activities or teaching approaches that are presented to them in class. These content choices are critical for teachers to focus on so that the students can get the most out of what is being taught. Another important factor is how instructors can continue to improve their teaching based on how they reflect on their student's performances. Recognizing that each individual student will react differently is important while coming up with content and demonstrating it in a physical education class setting.

The impact that the affective domain has on high school students after graduating can be seen in many different ways. Whether it is the learner's continued passion for lifetime activities, or their refined communication and attitudes towards life, the lifelong impact for positive affective results brings forth a long list of possibilities. What motivates students can vary from an internal drive to outside forces such as their teachers or parents. Whatever fuels the learner's interests to continue to utilize what they have learned should be recognized and reinforced by the physical education instructor so that students truly are able to apply their knowledge to their own situations for the remainder of their lives.

Chapter 4

Results, Discussion, and Recommendations for Future Research

The purpose of this chapter is to present the results of the review of literature on the impact that affective teaching has on high school physical education students, and how these results align with the purported research questions which guided this synthesis project. In addition, recommendations for future research as it relates to the long-lasting impact that the affective domain has on students are presented as well.

The results of this review of literature revealed various conclusions related to the affective domain and the impact that it has on learners. Research studies supported the idea that the affective domain is something that should be of high importance due to its continuous relevance. A large majority of the research showed that the impact of effectively teaching the affective domain in a physical education setting can result in students being more productive throughout their lives. Another common theme in the prior studies was that teaching relevant and specific content that interests and motivates the students will result in higher levels of success for them, as well as influencing them to develop stronger values on what was learned.

Discussion

Interpretations

This literature review consisted of several research questions that were posed. The first research question that was investigated was, what types of activities support learning in the affective domain in high school physical education? The results showed that various kinds of activities and teaching approaches can strongly support affective learning for high school physical education students. For example, Umegaki et al (2017) concluded that using the model of Teaching Physical and Social Responsibility assists students in developing areas such as

communication skills and responsible attitudes that can carry over to their everyday lives.

Activities aligned with the TPSR model can give students experience in a physical education setting that they can later apply to their own situations in life after they graduate. Barney et al (2015) also found from their data that lifetime activities were strongly referred to by students as what they felt to be most beneficial to them in affective areas such as remaining motivated to stay active. In line with the previously mentioned activity examples such as TPSR and lifetime activities, Fernandez-Rio et al (2017) found from their data that another supporting approach was a repetitive cooperative learning style of presenting content. In addition, Hortigüela Alcalá and Garijo (2017) concluded that affective traits such as motivations and feelings were positively brought forth from a teaching games for understanding approach while in class. Sgro et al (2020) also concluded from their findings that a game-centered approach of activities can both enhance learner's affective tendencies as well as reduce negative motivations such as selfishness and stress.

The second research question that was posed was, how can physical educators enhance their teaching of the affective domain in high school physical education? Conclusions of various studies pointed to the idea that instructors can positively alter their affective domain teaching by better understanding individual students and learning what motivates and interests them. Bronikowska et al (2019) found that teachers would obtain more positive results if they centered their approaches around critical reflections and lessons that focus on relevant life content such as health and moral values. Barney et al (2015) concluded from their study that high school physical education instructors may benefit from listening to student feedback to determine which activities will best prepare and support them for their lives moving forward. Webster et al (2011) focused on student motivations, and ultimately found that the key to greater teaching is to

personally connect with each student so that their individual characteristics can be fully understood.

The third and final research question that was examined was, what impact does teaching the affective domain have on life skills of high school students in physical education? This literature review found that students can be impacted in multiple ways from the affective domain, with various skill sets being improved upon that will continue to assist them during their lives after they graduate. Barney et al (2015) concluded from their research that if affective content is properly taught in the form of relevant activities, then students will be more motivated and prepared to continue to pursue a healthy life of physical activity after they are done with school. Further examples of positive impacts that the affective domain can have on learners was present in the Bronikowska et al (2019) study, where it was found that proper teaching of the content could result in better understanding of crucial life skills such as health awareness and moral values. The findings of Webster et al (2011) concluded that personalized teacher communication paired with effective presentation of the content can result in students who are more motivated and likely to transfer what they have learned into their own lives outside of the school setting.

Implications

Previous research on how the affective domain impacts high school physical education students shows various teaching approaches and activities that can be utilized to get across the content of the domain more effectively. Past research also demonstrated examples of how instructors can enhance their teaching of affective content, as well as how the affective domain impacts students specifically on their lives after graduating school. The synthesis result conclusions agree with the findings that the previous studies concluded based on their data. The

previous research added to the conclusions by presenting concrete data that came from high school leveled students, which gave a directly relevant perspective that accumulated useful data.

The findings of the synthesis do not differ greatly from other studies. The majority of studies on the subject seem to conclude that the affective domain is very important in regard to the life skills of students. The research supported how instructing the content was a crucial aspect in the process of helping the learners to be able to understand and apply the knowledge into their own lives.

The synthesis results confirm existing theories that are focused on the affective domain. Previous research on the subject matter provided data and examples of how the affective domain continues to remain relevant in all learners' lives. However, there are still disagreements between physical educators regarding how content should be presented to learners. For example, Hortigüela Alcalá and Garijo (2017) mentioned in their conclusion how the different teachers involved in the study did not agree on how the content matter should be presented in terms of teaching styles. This shows that while affective centered research presents examples of activities that cater directly to the affective domain such as lifetime activities, some instructors still have the mindset of keeping things more traditionally focused on the psychomotor and cognitive domains.

The synthesis results brought forth many practical implications that can be applied to a real-life physical education setting. For example, the research questions focused on specific activities that support the affective domain as well as how instructors can enhance their teaching are major takeaways that can be used to the advantage of physical educators. The information revealed from the data can serve to assist teachers who are striving to better their affective content delivery. In addition, the main idea of how the affective domain can impact student's

lives post school can serve as extremely valuable information for both instructors and learners who wish to continue to apply the knowledge for their benefits.

Limitations & Recommendations for Future Research

After reviewing the various relevant studies related to the impact of the affective domain on high school physical education students, some limitations were recognized. While the majority of previous studies utilized were very diverse in terms of the research locations, participants, and approaches, the following limitations were found. The studies were limited to data collection from student participants only. While this was certainly appropriate for the research, obtaining data collection from other sources such as the physical education instructors as well as possible other influences such as parents or family members could have been equally beneficial towards revealing more findings. Another limitation recognized from the previous studies is that all research carried out took place either during the high school level or shortly after graduating the high school level. While these are directly relevant to the topic, a lengthier study that begins prior to high school and then carries into high school could have done a better job of recognizing how the impact of the affective domain changes as students grow and take on other life responsibilities.

Because of these limitations, future studies on the topic should consider the following recommendations:

1. Further research should aim to collect data from other sources rather than just the students themselves. For future studies, data collection from the physical education instructors should be taken so that their perspectives can be considered regarding how affective content is absorbed. Other data collection possibilities could also be in the form of parents, so that they can give their

experiences on how they see their child utilize the relevant affective content during their regular lives outside of the school setting.

2. Future research should take place over a longer period of time, specifically beginning prior to the learners entering the high school level. If a longer study spans across student's experiences prior, during, and even after high school then that could result in more complete data that showcases the evolution of how affective content impacts their lives.

3. Future research should attempt to establish the study not only directly within the school setting, but also during times of the participants lives where their life-long impacts can be viewed in a different light. For example, instead of only collecting data while students are at school, activities outside of school could also be observed and considered such as a non-school related summer activity where a first-hand impact outside of their school lives can be viewed and considered for the research.

Summary

The purpose of this synthesis was to review previous literature and determine how teaching affective skills in high school physical education class can impact student's life skills. Thoroughly searching SUNY Brockport's online databases while implementing specific delimiting variables yielded 11 articles total. After selecting articles that were relevant and useful to the synthesis, these studies were used to determine how student's life skills are impacted by the affective domain content that they learn during their high school physical education experiences.

Research revealed that student's lives can be impacted by the affective content they are taught in high school physical education class in a variety of ways. Certain content choices such as lifetime activities can have a direct influence on how students apply what they have learned to

their lives after graduating. Factors such as teaching styles and content selection related to the affective domain can impact student motivations and attitudes towards how they choose to remain active and implement their knowledge into their lives ahead. Physical educators who recognize their students as individuals and relate the classes affective content specific to their needs and preferences will most likely have better and more impactful results for their students.

Future and more detailed research that builds off of the previous findings will further present ideas for physical educators to utilize. Studies should continue to seek and find data from more sources involved as well as take a longer approach to consider the changes in impact that the domain has. If this is done, the overall understanding of affective content will only increase and therefore allow the instructors to alter their teaching styles to be as effective as possible regarding the affective domain and the long-lasting impact that it can have on their learner's lives.

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Appendix A

Synthesis Article Grid

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
Akemi Umegaki et al. (2017)	Study of the Transfer and Maintenance of the Effects of the TPSR Model in Junior High School Physical Education Classes	International Journal of Sport & Health Science	To research and determine if usage of the TPSR (Teaching Physical and Social Responsibility) model results in more effective life-long skills for junior high school physical education students in Japan.	67 female and 40 male junior high school students from 2 separate schools in Japan taught by 2 separate instructors. All 67 female students were taught by a female instructor in her 30s, broken into 2 different classes (33 student class and 34 student class). All 40 male students were	Quantitative data approach, experimental research, Kikuchi’s Scale of Social Skills	While the TPSR model did prove to help students acquire certain life-skills related to social and daily living habits, it was also found that the participants failed to maintain these skills for a long period of time due to the model’s failure to implement ways for the students to	Researchers should focus on how models such as the TPSR model can find innovative ways to teach students relevant ways to transfer their knowledge to their daily lives once they are out of school. With a focus on how the transfer process can take place, that could result in the students maintaining the social and daily skills that they initially learned in class, and allow them to continue to use it effectively throughout the rest of their lives.

				<p>taught by a male teacher in his late 20s, all in one combined class. All students were tasked with participating in various activities within physical education class, as well as filling out level charts for data collection purposes.</p>		<p>apply the skills to new and unique situations outside of the school setting.</p>	
<p>Barney et al. (2015)</p>	<p>Identifying High School Physical Education Physical Activity Patterns After High School</p>	<p>Physical Educator</p>	<p>To investigate how college level students' previous experiences in high school physical education resulted in shaping their motivations</p>	<p>539 male and 481 female college students of varying majors (0 PE majors) from a private western college in the United States, tasked with</p>	<p>Quantitative instrument design, open-ended response questions, rating scales</p>	<p>The findings showed that the large majority of participants said that while they most enjoyed team-sport activities during their</p>	<p>High school physical education teachers should center the focus of their content on lifetime activities so that they can allow students to continue to be motivated to stay active later on in life. As the study showed, although team sport activities may seem more</p>

			and values on continuing to remain active outside of school, and comparing gender differences within the responses.	completing open response questions, rating scales, and follow-up questions.		previous high school physical education experiences, they would have preferred to participate in lifetime activities because of the continuous relevance that they can have later on in life.	popular by the majority of active students, it will likely be much more beneficial for all students in the long run if they are exposed to activities that they can easily participate in and enjoy, even after they graduate school.
Bronikowska et al. (2019)	How Years of Sport Training Influence the Level of Moral Competences of Physical Education and Sport Students	BioMed Research International	To explore and compare how freshman student's "moral competencies" were affected by various social factors within a physical activity scenario.	203 total participants: 60 male and 49 female physical education majors, and 59 male and 35 female sport education majors from the Poznan University of	Lind's Moral Competence Test, Likert scales, Statistica 13.0 software	Results showed that the majority of participants (70%) demonstrated moral competences that were at the low level, with the most common influential factor being	For future teachers and researchers, regarding moral competencies the focus should be on factors that will result in a stronger influence on students. For example, the study mentioned how teaching points such as critical reflections and a stronger focus on life-long learning will result in students having better character and principals in

				Physical Education, tasked with participating in physical activity and completing data scales related to the study.		the participant's parents rather than originating from content that they learned during their physical activity sessions.	the long run as they move on in their careers and lives.
Fernandez-Rio et al. (2017)	Impact of a sustained Cooperative Learning intervention on student motivation	Physical Education & Sport Pedagogy	To determine the connection between physical education students' motivations related to cooperative learning, as well as receiving relevant feedback on how the experience was.	122 male and 127 female physical education students from grades 8-11, tasked with being exposed to and participating in either the experimental group (receiving 3 consecutive cooperative learning units) or the comparison	Quantitative data collection, Qualitative responses, questionnaires, pre and post-tests	The study analyses concluded that a repetitive cooperative learning approach can result in student's motivation levels being positively increased as opposed to those who are not exposed to the theory during	Rather than fail to introduce cooperative learning theories in secondary physical education, or to present it few times and never revisit, it is important to continue to use this approach for extended periods of time in order to get the full positive effect. The longer the approach is used will most likely result in students benefitting from it in various ways related to their motivations and attitudes.

				group (receiving 3 traditional teaching units).		physical education class.	
Hortigüela Alcalá & Garijo (2017)	Teaching Games for Understanding: A Comprehensive Approach to Promote Student's Motivation in Physical Education	Journal of Human Kinetics	To determine high school student's views on what motivates them to achieve success within physical education class, compared between two different instructional approaches (traditional approach and teaching games for understanding approach).	137 male and 100 female physical education students from a high school located in Spain, tasked with participating in either the experimental group or the control group, while also completing questionnaires and interviews that were relevant to the focus of the research.	Quantitative questionnaires, Qualitative interviews	The research findings showed that the students in the teaching games for understanding group proved to show consistently more positive achievement and motivation. It was also found that the instructors from the different groups did not agree on how sport should be presented to students in	Utilizing approaches such as teaching games for understanding can result in students reacting more positively than commonly used traditional approaches. Branching out as an instructor to try different ways to present the content can result in students being more motivated and likely to utilize what they learn later on in their lives.

						physical education.	
Lodewyk (2019)	Relations Between Trait Personality, Goal Orientation, and Adaptive Outcomes in High School Physical Education	Journal of Teaching in Physical Education	To further explore in a high school physical education setting how students various personality traits are linked to the content outcomes that they reach throughout the class.	161 male and 155 female physical education students ranging from grades 9-10, tasked with participating in the activities as well as filling out surveys related to the study.	Likert response scale, Statistical Program for the Social Sciences, Analysis of variance	Results of the study found that students personality traits do in fact help determine the outcomes that they will obtain in physical education class.	Personality traits of each individual student are something that secondary physical education teachers should strongly focus on at all times no matter what the content being presented is. Recognizing which students are more open with their personalities, and which tend to shy away with their thoughts and emotions can help to understand how to assist those in need of reaching the outcomes.
Lodewyk & Pybus (2013)	Investigating Factors in the Retention of Students in High School Physical Education	Journal of Teaching in Physical Education	To further investigate how various factors (social-cognitive, self-determination, and body image theory) are related to instances of high school physical	118 female and 109 male high school students, all in the 10 th grade, from across 5 different schools located in Canada. These participants were tasked	Qualitative and Quantitative results and data collections	Findings showed that students who did enroll in the optional physical education class contained higher levels of self-motivation	Since the study found that various motivational factors can influence student decisions of whether to enroll in optional physical education classes or not, it is important for the entire school to consider these options and make the students well aware of them. The physical

			<p>education students choosing not to enroll in optional classes.</p>	<p>with completing surveys that directly contributed to the results of the study.</p>		<p>than those who did not. Regarding the students who chose not to enroll in the classes, it was found that many of them decided this due to reasons that out of their control such as scheduling or graduation conflicts. The lesser motivated students who did not enroll were also believed to be much less likely to pursue physical activities outside of the school setting.</p>	<p>education teachers should collaborate with the rest of the administrators in an attempt to eliminate any conflicts out of the students control such as scheduling issues. Regarding other factors such as motivational differences, this is something that should be talked about with students so that they can share their feelings, and then do their best to work towards an end goal that results in them being both healthy and happy.</p>
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<p>Sgro et al. (2020)</p>	<p>Assessing the effect of different teaching strategies on students' affective learning outcomes during volleyball lessons</p>	<p>Journal of Physical Education & Sport</p>	<p>To research how high school students' affective learning domains are impacted by the presence of a game-centered teaching approach in physical education.</p>	<p>56 male and 25 female physical education students from a high school in Italy, tasked with participating in physical education in either the control or intervention group in which they were placed, along with the completion of questionnaires relevant to the study.</p>	<p>Quantitative enjoyment scale, Independent sample-t tests</p>	<p>Results of the study found that students who were placed in the intervention group (Team game focused group) demonstrated consistently higher enjoyment levels, while the control group showed evidence of detrimental tendencies such as lower enjoyment and stronger self-ego focuses.</p>	<p>If presented effectively, a team game approach of high school physical education can possibly result in more sound affective lessons than traditional teaching approaches. If students are tasked with working together to reach a common goal, their differences can be put aside, and they can motivate each other together in order to be successful. As a result, affective principals such as motivation levels and how students value physical activity can be positively impacted for their future post school lives as well.</p>
<p>Webster et al. (2013)</p>	<p>Affective Learning Profiles in Compulsory High School Physical Education: An</p>	<p>Journal of Teaching in Physical Education</p>	<p>To take a detailed approach into specific affective domain portions of</p>	<p>280 male and 356 female high school physical education students, tasked with</p>	<p>Exploratory Factor Analysis, Cluster Analysis, Latent Profile Analysis, Quantitative</p>	<p>The study found that students characteristics and traits can point to certain</p>	<p>The breaking down of the affective domain specifics is something that can be very beneficial to physical education instructors. By placing students into valid groups based on their</p>

	Instructional Communication Perspective		high school physical education students, with the intent of determining new information that will aid teachers for future affective content.	completing various questionnaires stating detailed information about themselves, a motivation scale relevant to the study, and a Likert scale regarding their perceptions on the effectiveness of their instructor.	statistic comparisons	affective trends in their learning. The subgroups of affective learning that the participants' data helped discover resulted in relevant information that can be used by future instructors and researchers.	characteristics, it can result in similar trends being found related to their affective learning styles. By doing this, instructors can recognize each individual student's strengths and weak points related to their affective learning, and plan appropriately to ensure that they have the best opportunities to succeed moving forward.
Webster et al. (2011)	The Influence of State Motivation, Content Relevance and Affective Learning on High School Students' Intentions to Use Class	Journal of Teaching in Physical Education	To further explore how high school physical education student's affective beliefs and attitudes are all intertwined,	356 female and 280 male physical education students from five different South Carolina high schools, tasked with actively participating	Questionnaires, Quantitative data collection	The findings of the study showed that a major factor in student's motivations to utilize what they learned outside of school depends on	If physical education instructors connect with their students on an individual level regarding their motives and beliefs, they can use that information as a positive for how they choose to apply the content that they learn.

	<p>Content Following Completion of Compulsory Physical Education</p>		<p>as well as how these attitudes help determine how learned content will be applied in their futures after finishing school.</p>	<p>in their physical education classes, along with filling out questionnaires provided to them that acted as the data collection for the study at hand.</p>		<p>how the instructor makes the content personally relevant and interesting to the individuals in the class.</p>	
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