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An Exploratory Study on Perceptions of (IPE) Towards Interprofessional Practice in Athletic Training

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AN EXPLORATORY STUDY ON PERCEPTIONS OF (IPE)
TOWARDS INTERPROFESSIONAL PRACTICE IN ATHLETIC TRAINING

By
Carolyn Goeckel

Dissertation Committee

Genevieve Pinto Zipp, PT, Ed.D (Chair)
Vikram Dayalu, Ph.D., CCC-SLP
Anthony Breitbach, PhD, ATC

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Approved by the Dissertation Committee

Genevieve Pinto Zipp Date 3-6-2018

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Submitted in partial fulfillment of the
Requirements for the degree of Doctor of Philosophy in Health Sciences
Seton Hall University
2018

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s...s...s...r...s...d...r...
 ...d...s...s...s...r...s...
 ...r...d...r...d...M...SD...
 and participants' ...d...M...SD...R...s...s...s...r...
 ...r...d...r...d...s...r...s...r...
 ...d...r...r...r...r...s...s...r...r...d...d...r...
 levels (Bachelor's, ELM, PPM, Doctorate), F (3, 184...s...
 ...d...s...s...r...R...s...s...s...d...r...
 ...r...s...d...r...r...r...d...d...r...s...
 R...s...r...d...d...s...r...d...s...
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Conclusion: ...s...d...r...s...d...s...d...
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 impact on PCC. Understanding one's self and one's beliefs, behaviors and
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The Commission on Accreditation of Athletic Training Education (CAATE) was established in 1991 by the National Athletic Trainers' Association (NATA) and the American Athletic Trainers' Association (AATA). The Commission's primary responsibility is to accredit athletic training programs in the United States and to ensure that these programs meet the highest standards of quality.

The Commission's accreditation process is rigorous and comprehensive, involving a thorough review of a program's curriculum, faculty qualifications, student outcomes, and facilities. Programs that are accredited by the Commission are recognized as meeting the national standards for athletic training education.

The Commission's accreditation process is also a continuous one, with programs required to undergo periodic re-accreditation. This ensures that programs remain current and effective in preparing athletic trainers for the profession.

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Another key recommendation of the Commission is to ensure that athletic training programs are integrated into the broader healthcare system. This involves collaborating with medical schools, hospitals, and other healthcare providers to create a cohesive and effective training and practice environment for athletic trainers.

and'...r...ss...rs...s...d...'"...r...R...rds...

athletic...r...s...s...s...

r...ss...d...r...s...r...r...

...r...r...s...r...d...r...

□ □ ...r...s...d...r...ss...r...rs...

...r...d...r...ss...s...r...ss...ds...r...

...r...d...s...s...d...s...r...d...r...

□ ...r...r...ss...d...s...

"learning about, from, and with other health professions". T...s...

...r...s...d...s...r...ss...s...

s...d...s...r...r...ss...r...M...s...d...

M...r...s...d...s...r...

...r...ss...r...d...s...s...r...d...

...r...s...d...r...r...ss...s...

...r...d...r...s...d...r...s...s...r...

□ ...d...rs...ding of one's discipline, and the...r...s...d...r...s...s...

...r...d...s...d...s...r...ss...d...d...s...

r...ss...d...r...s...d...r...r...s...r...

...d...r...d...s...D...ds...d...r...M...r...r...r...

...s...s...r...d...r...s...

...s... □ ...r...d...s...d...s...s...d...s...

and other professional's roles and responsibilities.

Athletic trainers regularly practice collaboratively, working side by side with the team physicians and other medical specialists to ensure that patients' care is safe, effective and efficient. This working relationship between professions is based largely on communication and an overall understanding and appreciation of each other's role in delivering health care (Finkham, 2002). However, another challenge the profession faces is that (IPE) has always been implied and not explicitly addressed. As a result, athletic trainers lack the mastery of the terminology and definitions associated with (IPE).

Moreover, for the past several years there has been a significant effort to address the need for interprofessional education (IPE) and collaborative practice models. The current literature supports the importance of IPE in preparing health professionals to work in a team-based, patient-centered care model. However, many current IPE programs are limited in scope and do not address the specific needs of the athletic training profession. There is a need for research to explore the barriers to IPE in athletic training and to develop strategies to overcome these barriers.

These challenges faced by the athletic training profession are a reflection of the silo mentality, where health professions' education is isolated and involved only in developing knowledge, skills, and abilities associated with its' profession.

The current environment of healthcare education is characterized by a "silo like" environment resulting in educational viewpoints that are isolated and fragmented. This fragmented environment leads to a lack of communication and collaboration between different healthcare professionals, which ultimately impacts the quality of patient care.

The goal of interprofessional education (IPE) is collaborative practice, and the key to patient-centered care is to focus on IPE. Therefore, IPE is an opportunity to provide future athletic trainers' with knowledge, skills and abilities that will enable them to work effectively in a team-based environment.

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athletic trainers' role as a contributing member of the interdisciplinary
 centered care within today's healthcare system. Moreover,
 interdisciplinary approaches to care are becoming increasingly
 important in the management of complex conditions. This
 approach involves the collaboration of professionals from
 various disciplines, including physical therapists, occupational
 therapists, speech therapists, and social workers, to provide
 comprehensive care to patients. This approach is essential
 for addressing the complex needs of patients and ensuring
 the best possible outcomes.

Background of the Problem

The problem of... is a complex issue that involves...
 interdisciplinary collaboration is essential for addressing...
 and ensuring the best possible outcomes. This approach...
 involves the collaboration of professionals from various...
 disciplines, including physical therapists, occupational...
 therapists, speech therapists, and social workers, to...
 provide comprehensive care to patients. This approach...
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 occupational therapists, speech therapists, and social...
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Conceptual Framework

This study looked to explore athletic trainers' existing perceptions of whether IPE does or not prepare them for collaborative practice. Ajzen's and Fishbein's (1975, 1985) Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) provide a base framework to explore athletic training students' and athletic trainers' perceptions toward interprofessional practice. □

Social cognitive theories refer to theories where individual beliefs and thoughts are viewed as processes prevailing between perceptions and actions (Godin, Belanger-Gravel, Eccles & Grimshaw, 2008). According to social theorists, "those who are motivated to perform that behavior" (Fishbein & Ajzen (1975) proposed a theoretical model for understanding behavior centered on the attitude construct. Research has shown that attitude (direct and indirect) and the influence of social norms (Figure 1). In this theory, attitudes are a function of the underlying beliefs about the behavior. Seen as the perceived expectation to perform the behavior, subjective norms are the motivation or intention to act on the behavior. Together, attitude and subjective norm influence behavior through intention. □

Ajzen's (1985) theory of Planned Behavior (TPB), links beliefs and behavior. (Figure 1). It is a theory explaining human behavior and is an extension of (TRA). Ajzen intended to improve the predictive power of the

(TRA) by adding to the original theory a perceived behavioral control

(Madden, Ellen, & Ajzen, 1992). “Behavioral beliefs are beliefs about the likelihood of performing a specific behavior.”

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Behavioral beliefs are beliefs about the likelihood of performing a specific behavior.

Behavioral beliefs are beliefs about the likelihood of performing a specific behavior.

Behavioral beliefs are beliefs about the likelihood of performing a specific behavior.

The most important predictor of the actual behavior is the

intention to perform a specific behavior. Behavioral beliefs are beliefs about the likelihood of performing a specific behavior.

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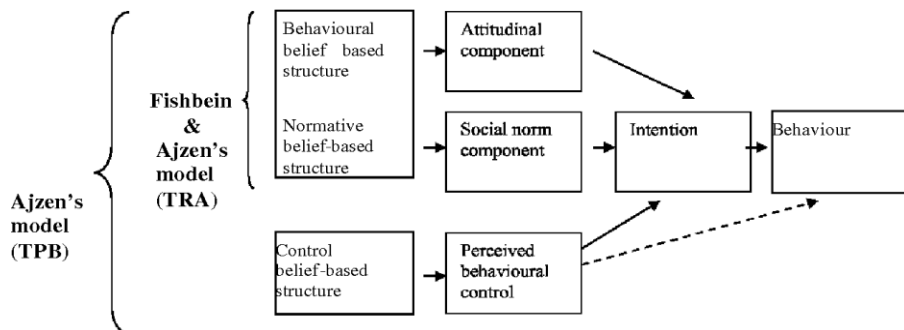


Figure 1

Behavioral beliefs are beliefs about the likelihood of performing a specific behavior.

A systematic review conducted in Canada by Godin, Belanger-Gravel, Eccles, & Grimshaw, (2008), aimed to predict healthcare professionals' intentions and behaviors. The key question the authors wanted to answer was which theoretical construct is most relevant for the study of health care professionals' behavior. The review specification included study's using a social cognitive theory approach □ Seventy-eight studies met the inclusion criteria. Among these, seventy-two provided information on the determinants of intention and sixteen prospective studies provided information on the determinants of behavior. Seventy of the seventy-two studies included looked at the purpose of behavior. □

The authors reported that concerning the factors explaining intention, “the most consistently significant cognitive factors (*i.e.*, at least 50% of the time) were beliefs about capabilities, beliefs about consequences and the social/professional role and identity” (Godin et al., 2008). The theory most often identified was the TRA or its extension the TPB. When researchers are looking to predict behavior in the health professions Godin et al., (2008) concluded that the TPB is an appropriate construct for studies that explore health-care professionals' behavior and intention. □

Understanding one's self and one's beliefs, behaviors and attitudes enable a professional to identify possible areas of collaboration with other disciplines. It creates openness and understanding of working together and developing skills for teamwork. Therefore, while perceptions do not infer

actions or produce identified behavior, it does provide the foundational base to support the body of knowledge regarding IPE effectiveness. □

Research Questions and Hypothesis

□ This study explored athletic trainers' perceptions and attitudes towards interprofessional education (IPE) and its effectiveness in preparing athletic trainers for the workforce. The study also examined the relationship between athletic trainers' perceptions and attitudes and their demographic characteristics. The study was conducted using a survey of athletic trainers from various settings. The study found that athletic trainers generally have positive perceptions and attitudes towards IPE. The study also found that athletic trainers' perceptions and attitudes are related to their demographic characteristics. The study has several limitations, including a cross-sectional design and a self-reported measure of perceptions and attitudes. The study has several strengths, including a large sample size and a focus on athletic trainers. The study has several implications for practice, including the need for more IPE opportunities for athletic trainers. The study has several implications for research, including the need for more research on athletic trainers' perceptions and attitudes towards IPE. The study has several implications for policy, including the need for more policies that support IPE for athletic trainers. The study has several implications for education, including the need for more IPE opportunities for athletic trainees. The study has several implications for accreditation, including the need for more IPE opportunities for athletic trainees. The study has several implications for professional development, including the need for more IPE opportunities for athletic trainers. The study has several implications for research, including the need for more research on athletic trainers' perceptions and attitudes towards IPE. The study has several implications for policy, including the need for more policies that support IPE for athletic trainers. The study has several implications for education, including the need for more IPE opportunities for athletic trainees. The study has several implications for accreditation, including the need for more IPE opportunities for athletic trainees. The study has several implications for professional development, including the need for more IPE opportunities for athletic trainers.

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□

RQ1: Is there a significant difference in AT students' and AT professionals' (IEPS) composite scores regarding their perceptions and attitudes towards IPE? The study found that there is a significant difference in AT students' and AT professionals' (IEPS) composite scores regarding their perceptions and attitudes towards IPE. The study has several limitations, including a cross-sectional design and a self-reported measure of perceptions and attitudes. The study has several strengths, including a large sample size and a focus on athletic trainers. The study has several implications for practice, including the need for more IPE opportunities for athletic trainers. The study has several implications for research, including the need for more research on athletic trainers' perceptions and attitudes towards IPE. The study has several implications for policy, including the need for more policies that support IPE for athletic trainers. The study has several implications for education, including the need for more IPE opportunities for athletic trainees. The study has several implications for accreditation, including the need for more IPE opportunities for athletic trainees. The study has several implications for professional development, including the need for more IPE opportunities for athletic trainers.

Ha1: *There is a significant difference in AT students' and AT professionals' (IEPS) composite scores* □

□

RQ2: □ Do athletic training programs, located within the same academic unit as other health profession programs (HPP), lead to significant differences in AT students' and AT professionals' perceptions of IPP as identified on the IEPS composite score? □

Ha2: *AT students' and AT professionals whose athletic training program is located within the same academic unit, as other (HPP) will present with significantly higher IEPS composite scores than those who are not.*

RQ3: □ Does structured instruction during their education affect AT students' and AT professionals' perceptions of IPP in athletic training as identified on the IEPS composite score? □

Ha3: *AT students' and AT professionals' who received structured IPE instruction during their education will present with significantly higher IEPS composite scores than those who do not receive structured IPE instruction.*

RQ4: □ Does the presence of an athletic training program within the same academic unit affect AT students' and AT professionals' perceptions of IPP as identified on the IEPS composite score? □

professions, and a positive influence on students' willingness to continue

with the profession. The study found that students who were exposed to a professional role model in their classroom were more likely to choose a profession in that field and were more likely to be willing to continue with the profession.

A study conducted by Klocko et al., (2012) aimed to improve students'

interest in the health professions. The study was conducted in a high school classroom and involved a role model who was a health professional. The role model visited the classroom and interacted with the students. The study found that students who were exposed to the role model were more likely to choose a health profession and were more likely to be willing to continue with the profession. The study also found that the role model's influence was positive on the students' attitudes towards the health professions. The study was limited by the fact that it was conducted in a high school classroom and did not include a control group. The study was also limited by the fact that it did not measure the long-term impact of the role model's influence on the students' career choices.

Most students (80%) chose a health profession and (20%) chose "other."

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classroom and (5%) chose "other."

worked together to solve a patient's problems and learning with other

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Impact of IPE on Faculty

[unclear] [unclear] [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]

[unclear] [unclear] [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]

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Chapter III

METHODS

Study Design

Researcher's design and implementation of research and data collection and analysis

and data sources and methods used to collect and analyze data and interpret the results.

To answer the questions purposed, the researcher implements Creswell & Plano Clark (2011), concurrent mixed method embedded design. Creswell & Plano-Clark (2011, p. 92), describe this design as a collection and analysis of both qualitative and quantitative data in combination, on the same topic, and at the same time. In an embedded design, a primary or larger design and a secondary or lesser "embedded" design are used to collect and analyze data and interpret the results.

For this study, embedded into the more substantial or primary quantitative design was the smaller qualitative design (Figure 2).

Researcher's design and implementation of research and data collection and analysis

to expand on these findings, to collect and analyze data and interpret the results

of the participants' experiences and perceptions of the research process.

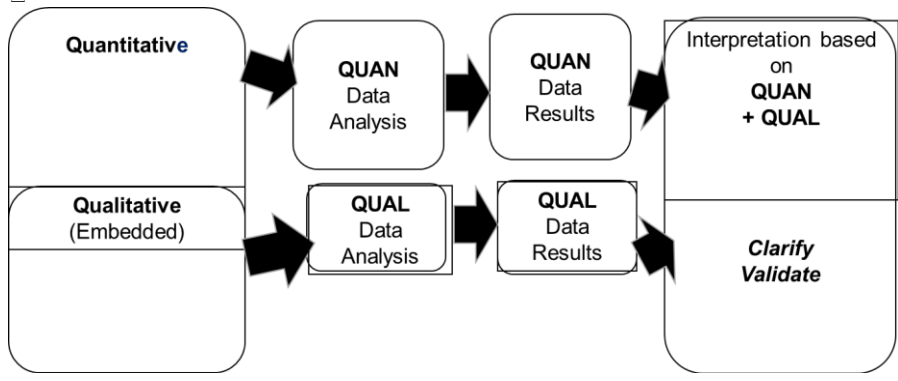


Figure 2.

Mixed Methods research is defined as research that uses both quantitative and qualitative methods as a type of investigation that “validates the findings generated by each method through evidence produced by the other” (Crabtree & Miller, 2009, p. 10). Research results are often more robust and credible when they are based on both quantitative and qualitative data. This approach allows researchers to explore the complexity of human behavior and social phenomena in a more comprehensive way. The integration of quantitative and qualitative methods can provide a more complete understanding of the research topic and can help to identify patterns and relationships that might not be apparent if only one method were used. This approach is particularly useful in fields such as psychology, sociology, and education, where the complexity of human behavior and social phenomena is often the focus of research. The use of mixed methods can also help to address the limitations of each individual method. For example, quantitative methods can provide a high level of statistical power and generalizability, but they often lack the depth and richness of qualitative methods. Conversely, qualitative methods can provide a rich, detailed understanding of the research topic, but they often lack the statistical power and generalizability of quantitative methods. By combining the strengths of both methods, mixed methods research can provide a more comprehensive and robust understanding of the research topic.

amongst athletic trainers' perceived confidence and competency toward IPE and (IPP). The

and to identify possible outliers within the population who participated

Demographic Profile

The researcher developed the demographic profile. The profile included thirteen questions to identify characteristics of the study's population and factors that may influence the participant's perceptions of IPE. General characteristics of the population included; age, gender, years of experience and work setting. The demographic variables (IV) explored in this study included professional status (student, clinician), alignment of AT program with other health profession programs, formal, structured instruction in IPE and academic degree.

□□□□□□□□

Demographic Characteristics of Sample Population (N=188)□

Characteristics	n	Percent
Participants		
□□s□d□□s□	54□	□□□ □
□□r□□ss□□□□s□	138□	□□□ □
Gender		
M□□□	68□	□□□ □
□□□ □□□	120□	□□□ □
Age		
□□□□□	38□	□□□ □
□□□□□	90□	□□□ □
□□□□□	37□	□□□ □
□□□□□	15□	□□□ □
□□□□□	08□	□□□ □
Occupational setting		
□ □□S□□□□□	66□	□□□ □
□ □□□□□□□	92□	□□□ □
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AT in physician's office□	08□	□□□ □

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Descriptive Statistical Analysis

An overall score of 72 represents the highest level of agreement of items scored on the (IEPS). Higher scores indicate positive perceptions of IPE and IP collaboration (teamwork). Analysis conducted on the composite (IEPS) score was used to answer the questions posed in this study; however, it was interesting to look at the three subscales that identified specific constructs related to interprofessional education and teamwork (Table 4). □

Using a six-point Likert scale (from 1=strongly agree to 6=strongly disagree), participants indicated their level of agreement with each of the 12 statements. Constructs in subset one (SS1) refer to competency and autonomy (answers reflect perceptions towards roles and responsibility) of individuals (athletic trainers) in their profession (Goeln et al., 2006). Statement seven in (SS1) "*Individuals in my profession trust each other's professional judgment,*" revealed a significant difference ($p=.04$) in agreement level. Responses reflect that AT students ($n=52$, $M=5.2$, $SD \pm 1.3$) had a higher level of agreement in constructs related to competency and autonomy concepts of interprofessional education and teamwork when compared with AT professionals ($n=134$, $M=4.9$ $SD \pm .94$) (Table 4). □

Subset 3 □□□s r□□□s r□□□□□□□□□□r□□□□□□s □□□ actual cooperation for interdisciplinary teamwork between one's profession and other professions (Luecht, 1990). Answers reflect perceptions towards actual collaboration in healthcare. Statement ten in (SS3) "*Individuals in my profession have good relations with people in other professions*" reported a significant difference ($p=.04$) agreement level. Results reflect AT students ($n=54$ $M=5.2$, $SD \pm .96$) again had a higher level of agreement with concepts related to actual cooperation for interdisciplinary teamwork between one's profession and other professions compared with AT professionals ($M=5.0$ $SD \pm .90$ $n=134$) (Table 4).

□

□

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participants', did receive a slightly lower agreement score (IEPS (Table 5)).

An independent-samples t-test was used to test if there was a significant difference in the overall IEPS scores between participants who received structured IPE instruction (M=62, SD ±8.7) and participants' who did not receive IPE instruction (M=59, SD±10.6) an independent-samples t-test was used. This test revealed a very small, but significant difference on IEPS composite scores between participants who received structured IPE instruction and participants who did not $t(161) = 1.64, p = .051$ (one-tailed), $d = .3$ (Table 8); therefore the alternate hypothesis was accepted (Table 8). Results showed

that participants who received structured IPE instruction had significantly higher scores on the IEPS composite score than participants who did not receive structured IPE instruction.

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Results of independent t- test, between groups (received structured IPE, did not receive structured IPE)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
S	received structured IPE	1.92	0.168	1.64	161	0.103	2.553	1.556	-0.519	5.625
	did not receive structured IPE									
S	received structured IPE			1.54	89.2	0.128	2.553	1.663	-0.752	5.858
	did not receive structured IPE									

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A post hoc analysis using G*Power for independent sample *t-test*, identified a resulting small power level (β .2). The effect size for this analysis ($d = .2$) was found to not exceed Cohen's, (1988) convention for a large effect ($d = .80$). However, as reported by Cohen (1988), the importance of the value for Cohen's effect size is debatable in how much of a measure of practical significance these results provide. As an exploratory study, the purpose was not to confirm an effect but instead explore participants' perceptions. □

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language pathology had a similar percentage recorded at (5%) for both professionals and students (Table 10). □

A high percentage of AT professionals identified physician (79%), the predominant healthcare professional that students need exposure and to interact with more. This is consistent with the practice of athletic training and the requirement to practice under the supervision of a physician. However, a smaller percentage of AT students identified the physician (49%); suggesting more exposure and interaction is needed between the physician and AT student during their educational preparation. Nursing was another category with a varied range of responses between students and professionals. Only (5%) of AT students identified nursing compared to (33%) for AT professionals who identified nursing as a predominant profession students need exposure and more interaction (Table 10). AT professionals who work in a school-based setting, regularly interact with the school nurse, and the results again suggest students need more exposure and communication with the nursing staff during their clinical rotation. □

Mental health professionals was not a predetermined category but one that emerged from the data. Both AT students (12 %) and AT professionals (7 %) identified the mental health professional as a health profession that students need more exposure and communication. This response reflects the recent initiative by the AT profession to raise awareness among AT professionals, stressing the need to develop a collaborative approach when

addressing psychological concerns related to identifying mental health illness and referring athletes at risk for the appropriate care (Neil, 2015). □

Sample responses listed in (Table 11) described the words and phrases used to explain ‘why’ working with other professions is important. Building on “what” professional AT students need which was identified as exposure and interaction, the second part of question five provided further insight into the participants thought processes and looked to strengthen the IPE framework. The core competencies of the interprofessional collaborative practice (IPEC, 2010) provided the predetermined categories for reflection (roles & responsibilities, teamwork, communication, and values). Inter-rater agreement level was established at >.90. □

Fifty-seven percent of participant phrases were coded into the category roles and responsibilities. Samples phrases include “**gain perspective**”; “**get to know other professions**”; “**learn about other professions**”; and “**other professions learn about us**”. Of significance here, is the participants’ positive attitudes towards learning together. In addition, their awareness of the knowledge and abilities needed to articulate one’s profession to others as well as learning the importance of other health professional roles as a member of the healthcare team providing patient-centered care. □

Twenty-six percent of the phrases such as “**health professions we work most with**”; “**working together to provided patient care**” and “**to establish relationships**” were coded in the category teamwork. Participants’

responses reflect a knowledge of the value of teamwork and collaboration. Coded within the communication and the values category, phrases such as **“talk together about things”, best for patient care, and “build relationships” reflect a perception of self-confidence in communication with other professionals”**. These comments or phrases reflected that both AT students and professionals support the concepts and importance of IPE towards preparing for interprofessional practice. Responses verified the □ quantitative findings of high agreement identified on the IEPS composite scores and validated the participants’ positive perceptions of knowledge of and abilities toward teamwork and collaboration. □

The findings in this study parallel the findings in a study by van Schaik, Plant, Diane, Tsang, & O’Sullivan, (2011). In the van Schaik et al., study the authors used a survey that focused on a simulation-based interprofessional team-training program with health professionals using open-ended questions. Themes that emerged from the study revealed an increase in understanding professional roles, hands-on experience, and the value of debriefing. The authors reported an increase in self-confidence, attitude and a positive impact on self-efficacy (van Schaik et al., 2011)□

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Healthcare Professionals that AT Students Need Exposure

Code /Category	AT Student (n=41, 76%)		AT Professional (n=108, 81%)	
	Count	Percent	Count	Percent
AT	2	5%	5	5%
Emergency Responders (M, EMT, paramedic)	11	27%	31	29%
Physician (sports MD, podiatrist, MD, orthopedic, MD, orthopedic, MD, orthopedic)	20	49%	85	79%
PT	28	68.3%	76	70%
PA	8	20%	26	24%
OT	4	10%	19	18%
SLP	2	05%	3	05%
NU, NP	2	05%	36	33%
Mental health (counselor, SW, sport psychology)	5	12%	7	6.5%

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Response rates from AT students and AT professionals

	Groups			
	AT Student (n=41)		AT Professional (n=107)	
	Response Rate			
	Count	Percent	Count	Percent
Classroom	15	37%	39	36%
Lab	20	49%	49	46%
Clinical	32	78%	79	74%
Work	5	2%	2	1%
Throughout curriculum	0	0%	5	1%

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□□□□□□□□ themes suggest that (92%) of students and professionals believe experiential learning such as clinical rotations and observation, hands on opportunities, real-time and simulation learning experience are most meaningful when learning IPE. Participants' used phrases "***It helps broaden knowledge scope and gain practical knowledge and experience***" and "***More meaningful to do with other professions***" to support and help clarify why clinical or experiential learning is most beneficial. Additionally, (87%) of the participants identified the value of the classroom experience. Together this question helps to inform the quantitative question regarding receiving IPE

Sample responses from AT students and AT professionals

Would you recommend IPE?

Briefly explain why

97% Recommend
1% Require
1% Not sure
1% No

Increase understanding of AT profession, educate others about AT

Want to know who best professional to refer patient

Prepares you for providing best care for your patient

Expanding my knowledge and skills to be a better AT

Most other health disciplines do not know/understand what ATs are capable of doing and IPE will help other health professions learn about our professions

Provide best possible patient care

AT is growing and working in more settings

Chapter V

DISCUSSION

Overall, this study identified positive attitudes for IPE among AT students and AT professionals. Mostly, IEPS scores were high which is consistent with previous studies (Ahmad, Chan, Wong, Tan, & Liaw, 2013; Coster et al., 2008; McFadyen et al., 2010). Mean score findings on the IEPS found a high level of agreement with the 12 statements; suggesting positive perceptions toward concepts related to IPE and collaborative practice. □

Though results implied no significant difference between groups, it was apparent that both athletic trainers and athletic training students equally value and perceive the importance of IPE. Participant responses indicated a broader awareness of the impact of IPE needed to foster interprofessional collaborative practice and leading to improved patient care and outcomes. In a mixed methods study by Pinto, Lombardi, Ellis, and Davies (2010), in which the IEPS was administered followed by participation in focus groups for physical therapy students in Toronto, with the purpose of examining how a structured IP clinical experience influences perceptions of IPC, the authors reported no statistically significant differences in mean scores between

groups on the IEPS. Participants did however; show a more significant positive trend in total IEPS statement scores (Pinto et al., 2010). □

There also was no significant difference on the IEPS overall score between AT programs aligned compared to those not aligned with other health profession programs. However, because the majority of AT programs are housed in the same unit as peer professions, this alignment appears to facilitate more opportunity for AT programs to participate and foster IPE inclusion with other health care professions. These findings are supported in the literature, which indicates that AT programs aligned with other health care professional programs offer an IPE environment and potentially greater access to (IPE) opportunities (Breitbach & Cuppett, 2012). The authors presented the results of two studies that examined the presence of IPE in athletic training programs. AT Program directors were surveyed in 2012 and again in 2015. In both studies, the analysis revealed a significant relationship between a level of accreditation and the academic unit housing the program. Significant changes were also shown in programs that offered IPE from 2012 to 2015. The proportion of AT programs who participated or had access to IPE programs increased significantly from (23%) in 2012 to (37%) in 2015. The authors reported an odds ratio, which illustrated those programs surveyed in 2015 were almost twice as likely to have an IPE program compared to programs surveyed in 2012. The authors concluded that IPE has a more significant presence for AT programs that reside in health professions

academic units. However, of concern is that less than 50% of these AT programs participate in IPE (Breitbach et al., 2017). □

Breitbach & Brown (2011) reported that students surrounded by other health professional students create a means for professional socialization, which in turn creates practitioners who appreciate the role of their profession and the role of other professionals in the health care team. □

Unexpectedly, both AT students and professionals perceived that they received structured IPE during their education. These results implied a small but significant difference between the groups, suggesting that participants who received structured IPE appreciated the knowledge, confidence, and skills gained through structured IPE experiences. Results reflect a positive impact on athletic trainers' attitudes toward, and perceptions of the importance of collaboration within the healthcare team and that these perceptions may lead to actions that positively affect IPP and that this can lead to improved patient outcomes. The study results are consistent and supported by the research of Rose et al., (2009), who reported that (70%) of health professional students reported a favorable view of attitudes after an IPE program. Van Schaik et al., (2011) found a positive impact on medical residents and nurses' self-abilities after participation in a real code situation and reported an overall positive effect on team collaboration. Themes evolving from the qualitative data implied that ATs valued structured IPE instruction regardless if they received or just perceived they received and

engaged in structured IPE during their educational program (Table 15). □

Not surprisingly, doctorate scores were lower with a less positive agreement with the items on the IEPS and compared to the other degree levels. In a survey study, Curran et al., (2005), examined attitudes towards IPE and IPC among academic administrators in Canada representing several health professions programs. Results indicated no significant difference between the academic faculty responses to the total score and between items related to IPE and IPC. In general, administrators had positive attitudes towards IPE; however, barriers identified included conflicts with scheduling, “rigid curriculum, turf battles and lack of perceived value by the higher administration” (Curran, Deacon, & Fleet, 2005, p. 76). Another study by Eliot, Breitbach, Wilson, & Chushak, (2017), examined institutional factors that affect the level of IPE participation within AT and nutrition and dietetic programs across the United States. The authors reported AT faculty involvement scored low on the Interprofessional Education Assessment and Planning Instrument for Academic Institutions (IPE-APT) which measures whether program faculty participates in IPE initiatives/program. One possible reason the authors gave for the low score is the perceived work setting and clinical role of the AT by other health professionals. The authors commented that this is a possible reason why AT faculty are not recruited to participate as faculty members on IPE teaching teams (Eliot et al., 2017). □

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Athletic Training, 43 □

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APPENDIX A

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SHU IRB


 OFFICE OF INSTITUTIONAL
 REVIEW BOARD
SETON HALL UNIVERSITY

April 7, 2016

Carolyn Goeckel
 P. O. Box 252
 Barnegat Light, NJ 08006

Dear Ms. Goeckel,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "Exploring Perceptions of Interprofessional Collaborative Practice in Athletic Training." Your research protocol is hereby accepted as revised and is categorized as exempt.

Please note that, where applicable, subjects must sign and must be given a copy of the Seton Hall University current stamped Letter of Solicitation or Consent Form before the subjects' participation. All data, as well as the investigator's copies of the signed Consent Forms, must be retained by the principal investigator for a period of at least three years following the termination of the project.

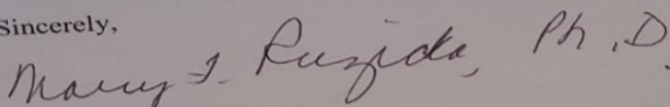
Should you wish to make changes to the IRB approved procedures, the following materials must be submitted for IRB review and be approved by the IRB prior to being instituted:

- Description of proposed revisions;
- *If applicable*, any new or revised materials, such as recruitment fliers, letters to subjects, or consent documents; and
- *If applicable*, updated letters of approval from cooperating institutions and IRBs.

At the present time, there is no need for further action on your part with the IRB.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,


 Mary F. Ruzicka, Ph.D.
 Professor
 Director, Institutional Review Board

cc: Dr. Genevieve Pinto Zipp

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