The Development of Master’s Degree and Certificate programs in Fitness and Sports Division at Texas A&M International University

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Abstract
This study is designed to find out 1) types of preferred certificate program and 2) field of study in Master’s degree in Fitness and Sports. A sample of 132 males and females were recruited for this study. The questionnaires for survey were developed and collected from these groups. The results of survey have shown that 49% of participants prefer to have Athletic Training Program, 21% for Certified Strength and Conditioning Specialist. The survey demonstrated that majority of participants (>90%) want to pursue Master’s degree in Fitness and Sports. The choices of study in Master’s degree are Sports Management, Sports Psychology, Exercise Physiology, and Physical Education. In conclusion, we need to consider to Implement of Certified Strength and Conditioning Specialist and Certified Personal Trainer, program in Fitness and Sports. Also, we need to consider developing additional two courses within Fitness and Sports degree for Athletic Training certificate program. We need to develop Master’s program focusing following field of study, Sports Management, Sports Psychology, Exercise Physiology, Physical Education and Sports Nutrition based on results from this study.

Introduction
The content of collegiate curriculum for students specializing in Kinesiology (or Fitness and Sports), be it at a small liberal arts college or a large research oriented university, is a topic of concern. For students selecting Fitness and Sports (or Kinesiology) as their major, the primary focus has been on a physical education program, rather than on developing programs that support the full aspects of undergraduate majors requiring a strong core curriculum. In the past, the rationale offered for the focus on physical education program was based on the preparation for Teacher’s certificate in Physical Education. Today, the focus has been changed to meet the needs of the undergraduate college students who want to pursue a higher degree (M.A or Ph. d) or become a health professional including athletic trainer, instructor in fitness club, physical therapist, strength and conditioning specialist. Therefore, offering more courses directly related to those certificate programs and housing certificate program within the Fitness and Sports program will give students more opportunity and room to achieve their career goals as a fitness and health specialist. There are several certificate programs available in Fitness and Sports field. Those are Certified Strength and Conditioning Specialist (CSCS) and Certified Personal Trainer (CPT) program governed by National Strength and Conditioning Association (NSCA), Exercise Specialist from the American College of Sports Medicine (ACSM) and Athletic Trainer from National Athletic Trainers’ Association (NATA) and the NATA Board of Certification (NATABOC). The NSCA is an international nonprofit educational association founded in 1978 to produce and deliver information about strength training and conditioning to its member and general public (Baechle & Earle, 2000). The ACSM was founded in 1954 for training and dedication in sports medicine and exercise science to promote...
healthier lifestyles of general public (ACSM, 2006). The National Athletic Trainers’ Association (NATA) is the professional membership association for certified athletic trainers and others who support the athletic training profession founded in 1950. The NATA has grown to almost 30,000 members worldwide today (NATA, 2006). The NATA and NATABOC have achieved for the athletic training profession, promoting and sustaining the public’s reliance on the certified athletic trainer (Grace, 1999).

There are high demands for the Master’s degree in Fitness and Sports program based on our previous survey (unpublished observation). It indicates that there are at least 30 candidates for the Master’s degree in Fitness and Sports program at Texas A&M International University (TAMIU) at Laredo, Texas. Those are coaches, recent graduates, current student (seniors) and instructors in fitness club and local colleges. The Fitness and Sports program at TAMIU appeal to physical educators, health and wellness professionals, coaches, athletic trainers, and other healthcare specialists evidenced by increase number of enrollment for past three years. The enrollment of Fitness and Sports majoring students at TAMIU were only 60 -70 in 2003, however, it is close to 170 in 2006 (R. Pena (personal communication, September, 18, 2006) Texas A&M International University Registration office). The implementing Master’s degree in Fitness and Sports program at TAMIU can strengthen our program and increase overall enrollment for the University. Also, students can pursue their career as an athletic director, manager in fitness club, principal & vice principal of school and faculty member in higher education including college and university when they receive Master’s degree in the field of Fitness and Sports.

In this study, we wanted to answer for following questions. 1) What types of certificate program should be offered for the students in Fitness and Sports? 2) Which field of study should be offered for the Master’s program in Fitness and Sports at Texas A&M International University at Laredo, Texas?

Method

Subjects and experimental design

A sample of 132 males and females were recruited for this study. The test procedure was approved from IRB of Texas A&M International University. A consent form for participation were signed and obtained from each subjects. The subjects were divided into four different groups as follows: Fitness and Sports major (all) from TAMIU, Fitness and Sports major (senior) from TAMIU, Fitness and Sports major (all) from Laredo Community College and Physical Educators and Coaches from local public school.

Survey and Interview

The questionnaires for survey (types of preferred certificate program and choices of study field in Master’s degree in Fitness and Sports) were developed and collected from the four different groups (Appendix). Also, interview with participants was conducted randomly to ask further questions.

Program Review of Other Institutions

The field of specialization in Kinesiology from other institutions were collected via internet and phone interview and used to identify major field of study in Mater’s degree and Certificate programs in Fitness and Sports.
Data Analysis

The survey data were analyzed using the SPSS statistical package. Percentage and frequencies were calculated to identify the characteristics for the information.

Results and Discussions

Sample Characteristics

The sample of this study was characterized by 59% of women and 41% of men. They were composed of 33 of Fitness and Sports major (all) in Texas A&M International University (TAMIU), 29 of Fitness and Sports major (senior) from TAMIU, 30 Fitness and Sports major (all) from Laredo Community College and 40 Physical Educators and Coaches from local public school (Table 1).

Table 1
Distributions of survey group

<table>
<thead>
<tr>
<th>TAMIU</th>
<th>TAMIU</th>
<th>Laredo Community College (LCC)</th>
<th>United Independent School District (UISD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitness and Sports major (all)</td>
<td>Fitness and Sports major (Senior)</td>
<td>Fitness and Sports major (all)</td>
<td>Physical Educators and Coaches</td>
</tr>
<tr>
<td>33</td>
<td>29</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

Certificate Program

The results of survey have shown that 49% of participants prefer to have Athletic Training (AT) Program, 21% for Certified Strength and Conditioning Specialist (CSCS) (Fig 1). The problem associated to have Athletic Training Program will be the number of classes required to be qualified to become an Athletic Trainer. The Fitness and Sports program at TAMIU is currently offering only one Athletic Training course. However, Athletic Training certificate program requires total number of three Athletic related courses to become Athletic trainer. However, it is hard to implement two additional athletic courses in Fitness and Sports program due to the number of faculty. In contrast, the Fitness and Sports program at TAMIU already fulfills all class requirements by Certified Strength and Conditioning Specialist and Certified Personal Trainer (CPT) program governed by National Strength and Conditioning Association. The National Strength and Conditioning Association (NSCA) is an international nonprofit educational association established in 1978 to produce and deliver information about strength training and conditioning to its member and general public. Evolving from a membership of 76, the association now serves nearly 18,000 members in 80 countries (Baechle & Earle, 2000). Currently, there is only one certified trainer (CSCS) and no Certified Personal Trainer available at Laredo, Texas based on search on official web site of NSCA (NSCA, 2006). Also, there is a significant increase number of local fitness club at Laredo and adjacent area. Therefore, implementing of those certificate programs will strengthen job opportunity for Fitness and Sports major students at Texas A&M International University.
The survey demonstrated that 89.7 % (26 out of 29) of seniors (Fitness and Sports), 90.9 % (30 out of 33) of Fitness and Sports major (other than Senior) and 33.3 % (12 out of 40) of coaches want to pursue Master’s degree. Therefore, total number of candidate for the master’s degree program of Fitness and Sports is 68 based on the results of survey in this study.

The only question was which field of study of Master’s Program should the institution offer? Some suggestions were Sports Management, Sports Psychology, Exercise Physiology, Physical Education and Sports Nutrition (Fig 2).

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**Figure 1**
Preference of certificate program

**Master’s Degree**

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**Figure 2**
Preference of field of study in Master’s program
Master’s degree in Fitness and Sports will also help establish research project in an area of interest addressing sport performance, health, athletic injury prevention and management, and other applications of sports management, sport psychology, exercise physiology and physical education.

Offering a Master’s in Fitness & Sports at TAMIU will give students from Laredo the opportunity to stay in their hometown and fulfill their goal. This would also attract students from surrounding areas like Brownsville, Alice, Kingsville, Zapata, Corpus Christi, McAllen, San Antonio, Austin, Dallas and Huston.

Conclusion

In conclusion, we recommend that following changes should be made based on the results from survey and consultant with experts in this study.

Certificate program in Fitness and Sports

Implementation of Certified Strength and Conditioning Specialist, Certified Personal Trainer, program in Fitness and Sports. Considering development of additional two courses for Athletic Training certificate program.

Master’s degree

Development of Master’s program focusing following fields of study, Sports Management, Sports Psychology, Exercise Physiology, Physical Education and Sports Nutrition in Fitness and Sports program at TAMIU.
References

Author Note
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Appendix

Questionnaires

The outcome of this study will be used as a key-determining factor to develop Master’s degree and certificate program of Fitness & Sports at Texas A&M International University.

1. What is your classification?

Students: Freshman ____ Sophomore ____ Junior ____ Senior ____
Physical Educator: Elementary______ Jr. High _____High School______

2. What is your sex?

Male _____ Female _____

3. If TAMIU offers classes for certificate programs (Athletic Training, Certified Personal Trainer, Certified Strength and Conditioning Specialist, Exercise Specialist from ACSM), would you be interested in enrolling in these programs?

_____yes _____no

4. If “yes”, which program would you be interested in? (Please pick only two Certificate programs)

_____Athletic Training from NATA
_____Certified Personal Trainer from NSCA
_____Certified Strength & Conditioning Specialist from NSCA
_____Exercise Specialist & other forms from ACSM

5. Would you be interested in pursuing a Master’s degree at TAMIU?

_____yes _____no

6. If “yes”, which program would you be interested in? (Please pick only two study fields)

_____Sports Psychology _____Sports Management
_____Biomechanics _____Sports Pedagogy
_____Sports Nutrition _____Physical Education
_____Exercise Physiology _____Clinical Exercise Physiology