Abstract

The purpose of this study was to determine the preferred learning style of undergraduate and graduate entry level athletic training students. This study also investigated the preference of males and females in both groups. Marshall and Merritt’s Student Learning Style Questionnaire (1985) based on Kolb’s theory was used to survey 429 undergraduate and 69 graduate students. The preferred learning style of undergraduate entry level athletic training students was Diverger, which was the same as the graduate students, and make and females of each group. There was no significant difference of preferred learning style between undergraduate and graduate students between the males and females. Using the Chi-Square goodness of fit test, it was concluded that the Diverger learning style was preferred by 68.12% (n=47) of undergraduate and graduate entry level athletic training students and was statistically significant.

Significance of Study

Since more entry level graduate athletic training programs are developing throughout the country, it is important for educators to know how to best accommodate the students. Do their background education and social and interpersonal issues factors play a role in their learning styles? Do their learning styles change over time in school or do they tend to remain constant? Students have been conducted on undergraduate student learning styles, so it would be interesting to see graduate students’ results and if their learning style change as they go through graduate school. By researching any differences in preferred learning styles between the undergraduate and graduate programs, athletic training educators will be able to change their teaching methods accordinglingly.

Methods

Participants: The sample consisted of 69 students from 21 entry level graduate programs and 429 students from 84 undergraduate programs.

Procedure: An email was sent to the colleges or university’s Athletic Training Education Program Director asking them if they were willing to forward the survey to their students. If the Program Director was willing, another email was sent to the students in the survey inviting the students to participate in this study. This email served as an informed consent for the students. After the informed consent page, the survey started off with the demographic questions page and then the survey questions followed. The survey was made electronic through the North Dakota State University Group Decision Center and emailed to the students by their Program Director. The survey remained open for three weeks for the students to respond.

Analysis: Data was analyzed using the Student Learning Style Questionnaire (1993) based on Kolb’s theory of Learning Styles: Experiential Learning Theory. A chi-square test of independence was used to determine the differences between the undergraduate and graduate students. The results of the Chi-square test indicated a p-value of < .0001 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

References


Conclusions

It was concluded from this study that undergraduate and graduate entry level athletic training students have a variety of learning styles, but prefer the Diverger style. The same is true with the males and females in each group. The Diverger style was the preferred learning style within both undergraduate and graduate entry level athletic training students and both males and females with no statistical differences between the groups.

Results

Research question one asked what was the preferred learning style of undergraduate entry level athletic training students. The results showed 74.80% (n=162) of undergraduate students preferred the Diverger style of learning, Accommodator 15.94% (n=36), and Converger 7.26% (n=16) were the other styles. This study asked if there was a significant difference of preferred learning styles between male and female undergraduate students. A chi-square test of independence was used, and the p-value was .1794 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

Research question two asked what was the preferred learning style of graduate entry level athletic training students. The Diverger style was preferred by 68.12% (n=47) of the students, the Accommodator style was preferred by 15.94% (n=11), the Assimilator style was preferred by 15.94% (n=11), and the Converger style was preferred by 2.10% (n=9). This study asked if there was a significant difference of preferred learning styles between male and female graduate students. The p-value of the Chi-square test was .1794 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

Research question three asked if there was a significant difference of preferred learning styles between undergraduate and graduate students. There was no significant difference found between the preferred learning styles of undergraduate and graduate students. The chi-square test indicated a p-value of < .0001 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

Research question four asked if there was a significant difference between preferred learning styles of male and female undergraduate students. It was concluded that the Diverger style was preferred by 59.63% (n=207) of undergraduate female students and 77.55% (n=220) of undergraduate male students. The chi-square of independence test had a p-value of <.0001 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

Research question five asked if there was a significant difference of preferred learning styles between male and female graduate students. The male graduate students prefer the Diverger style (72%) and females prefer the Accommodator style (74.36%). The p-value of the Chi-square test of independence was .1794 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

Research question six asked if there was a significant difference of preferred learning styles between male and female students. The male students prefer the Diverger style more than the female students. The p-value of the Chi-square test of independence was <.0001 which is greater than the alpha value of 0.05 indicating no significant difference existed in the scores of these two groups.

Learning Styles: Differences in Undergraduate Versus Graduate Entry Level Athletic Training Students

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