

An Investigation of Transformational Leadership Traits among Campus Recreation Department
student-employees attending a regional public University

A Thesis

Presented to

The Faculty of Graduate School
of Millersville University of Pennsylvania

In Partial Fulfillment

of the Requirements for the Degree

of Master of Education

By: Palmer Steiner
27 February 2021

This Thesis for the Master of Education Degree by

Palmer Joseph Steiner

has been approved on behalf of the

Graduate School by

Thesis Committee:

Dr. Gordon M. Nesbitt

Research Advisor

Dr. Jeffrey Wimer

Committee Member

Dr. Justin Wartella

Committee Member

(Signatures on file in the College of Graduate Studies and Adult Learning)

April 30, 2021

Date

ABSTRACT OF THE THESIS
AN INVESTIGATION OF TRANSFORMATIONAL LEADERSHIP TRAITS AMONG
CAMPUS RECREATION DEPARTMENT STUDENT-EMPLOYEES ATTENDING A
REGIONAL PUBLIC UNIVERSITY

By

Palmer Steiner

Millersville University, 2021

Millersville, Pennsylvania

Directed by Dr. Nesbitt

Mentoring activities from the Leadership Challenge Workbook were used in a Campus Recreation setting and with Campus Recreation Staff at a regional public university in the Mid-Atlantic Region to show how mentoring could influence transformational leadership traits on student workers. A Multi Factor Leadership Questionnaire (MLQ), developed by Avolio and Bass was used as a pre-test for an officials' group, fitness center attendant group and a remote student worker group as a base score. After the pre-test, virtual mentoring sessions were provided to the officials' group. After the mentoring sessions for officials, the MLQ was used again to assess all groups of student workers. A Mann Whitney U analysis test was used and results found that there was a significant difference $p < 0.05$ in the officials' ($n=18$) post test scores compared to the combined group of fitness center attendants ($n=11$) and remote ($n=10$) post-test scores.

Signature of Investigator Palmer J. Steiner

Date 2/27/2021

Table of Contents

List of Tables	i
Introduction	Error! Bookmark not defined.
Methods	4
Results	8
Discussion.....	15

List of Tables

Table 1: Age Demographics of all students	page 5
Table 2: Race Demographics of all students	page 5
Table 3: Gender Demographics of all students	page 5
Table 4: Educational Level Demographics of all students	page 6
Table 5: Pre-test and post-test scores: Idealized Attributes	page 9
Table 6: Pre-test and post-test scores: Idealized Behaviors	page 9
Table 7: Pre-test and post-test scores: Inspirational Motivation	page 9
Table 8: Pre-test and Post-test scores: Intellectual Stimulation	page 10
Table 9: Pre-test and post-test scores: Individual Consideration	page 10
Table 10: Pre-test and Post-Test scores: Contingent Reward	page 10
Table 11: Pre-test and post-test scores: Management by Exception (Active)	page 11
Table 12: Pre-test and post-test scores: Management by Exception (Passive)	page 11
Table 13: Pre-test and post-test scores Laissez-Faire	page 11
Table 14: Descriptive Statistics of all leadership sections	page 12
Table 15: Number of Participants in Transformational Leadership section	page 12
Table 16: Test Statistics in Transformational Leadership section	page 13
Table 17: Number of participants in Transactional Leadership section	page 13
Table 18: Test Statistics in Transactional Leadership section	page 14
Table 19: Number of participants in Laissez-Faire Leadership section	page 14
Table 20: Test Statistics in Laissez-Faire Leadership section	page 15

An Investigation of Transformational Leadership Traits among Campus Recreation Department student-employees attending a regional public University

Transformational leadership can be described as a leadership theory that is inspiring, developmental, values based, and intellectually stimulating (Avolio & Bass, 1990). One way to measure whether an employee or individual has these traits is by using the Multi-Factor Questionnaire made by Avolio and Bass (1990). Transformational leaders have been shown to be successful because they have the following traits intrinsic motivation, psychological empowerment, need satisfaction, sacrifice, team aggression, and intrateam communication. According to Bosselut, et. al in 2018, these traits make transformational leadership to be considered as the most active and effective leadership style. Furthermore, transformational leadership has been associated with individual indicators of player's moral behavior and motivation (Avolio & Bass, 1990).

Overall Transformational Leadership consists of five dimensions which are, idealized influence attributed, idealized influence behavior, inspirational motivation, intellectual stimulation, and individualized consideration (Bosselut et. al. 2018). These leaders gain respect and trust from their employees by acting as role models and are gifted leaders. One concept of transformational leadership is empowering others. Empowering employees on a regular basis will allow them to be more accountable for their actions. In fact, empowerment has been linked to employee job satisfaction and a reduction in employee turnover (Bosselut et. al. 2018; Gozcu & Ciftci, 2019; Tservairidou et. al., 2019).

With this in mind some of these attributes can be tested via Avolio's and Bass's 1990 Multi-Factor Leadership Questionnaire (MLQ). This questionnaire measures the individual leadership styles ranging from passive leaders, to transactional leaders, to transformational leaders. The purpose of the MLQ is to identify factors that differentiate average leaders from

gifted leaders. This also assists in identifying different opportunities for improvement for participants (Avolio & Bass, 1990; Arthur, et. al., 2017).

An example of a transformational leader is “when a new athlete or employee, who has traditionally performed satisfactory results, goes through an internal transformation because of a leader who believes in him/her. These results show exponential growth and strong motivation for continued success” (Gozcu & Ciftci, 2017). This quote points to the importance of transformational leadership in an educational setting. Students are influenced for the better or for the worse. It is the goal of each school to help create students who are successful in the work force. In addition, experiencing a life-changing leader in an education setting can help to lead to more donors who later want to give back to the leader and university who helped them grow. With this in mind, it is necessary to employ leaders in the university with these skill sets and teach transformational leadership skills to those students. Literature suggests that leadership skills can be taught through employment. Student employment includes examples like working to organize intramural sports, club sports, and fitness. These two pieces can help finish a puzzle to help student succeed in their career (Gozcu & Ciftci, 2017; Kovach et al., 2018).

Welty-Peachey, Zhou, Damon, and Burton in their 2015 review on Leadership in the sport industry cited a study by Wallace and Weese in 1995. In the Wallace and Weese (1995) study, they found that those who scored higher on the MLQ, engaged in “more culture building events, handled change better and a greater degree of coordinated teamwork.” The study also presented that those who did not score high on the MLQ did not engage in culture building activities and did not handle change well. With this being said, is important to note that this leadership style can be taught and can cause a ripple effect and transform the student to want to build the same culture in their industry (Welty-Peachey et al., 2015).

Research has been shown from the Multi-Institutional Study of Leadership (MSL) that students' progress in leadership in four different ways. These avenues are, sociocultural conversations with peers, mentoring relationships, community service, memberships in off-campus organizations (Dugan et al., 2013; Nesbitt & Grant, 2015). This research, will look at mentoring relationships in student employment and how this avenue helps develop future leaders.

Mentoring is where a more experienced person serves as a role model. This guidance and support can develop a novice and sponsors that individual's career progress (Weaver & Chelladurai, 1999). The MSL reports that mentoring directly influences leadership capacity (Dugan, et.al 2013). In addition to this, the MSL shows that one of the most important indications of leadership capacity was mentoring for personal development. One option of mentoring is that of peer mentoring. This is the process in which peers build a relationship with each other (Nesbitt & Grant, 2015). While professional mentoring and the original concept of mentoring may last 3-8 years, Pastore (2003) found that peer mentoring relationships last 20-30 years. One way to start peer mentoring is for the mentor to create a list of activities and topics covered between the mentor and the protégé or protégés. From there the mentor would assist the protégé or protégés through these various activities.

With this in mind, student employees of Campus Recreation also hold a strong leadership development tool in Campus Recreation. Supervisors in any staff in the Campus Recreation department hold the high responsibility of helping professional and graduate assistants with organizing and executing intramural events. By mentoring these student leaders, the student will develop more leadership methods and will have the capability to apply those to their daily lives.

This avenue of development is an excellent way to develop future leaders who will later move into the workforce (Nesbitt & Grant, 2015).

Dugan (2015) also explores the role of a student official and how its role helps develop leadership skills. In addition to this, it was also discovered that these skills were shown as highly transformational in that they affected student's overall interactions with others and influenced how to navigate roles as future leaders. Dugan's study also showed that mentoring was one of the prime developmental opportunities for future leaders. In addition, campus recreation exceeds the rate of most other forms of student engagement on campus (Dugan et. al., 2015). This makes the campus recreation setting one of the most influential areas of research and areas to develop superior leaders (Dugan et al., 2015).

Methods

The Multifactor Leadership Questionnaire was used to assess a control group and an experimental group. The control group consisted of a group of 10 Student Memorial Recreation Center student workers and 11 remote student workers. The Student Memorial Center Fitness Center was not originally a part of the Campus Recreation Department at Millersville University. This allows the group to be tested without having been engaged in leadership discussions offered by the Campus Recreation Department. Furthermore, remote workers were used because Campus Recreation supervisors rarely interacted with remote workers. Their work was assigned to their folder and the remote student worker would complete the tasks and let the supervisor know. This allowed little interaction which could affect the results of study. The experimental group would be 20 of the campus recreation department staff who were intramural officials in the spring semester of 2020. Table 1 describes the demographics of all of the groups.

Table 1

Age demographics

Group	Ages							
	18	19	20	21	22	23	24	25
Officials	0	6	7	8	0	0	0	0
Remote	0	2	4	2	1	0	0	1
Fitness Center	0	0	4	3	1	2	0	0

Note: Age demographics of all students who participated in the study

Table 2

Race Demographics

Group	Race					
	Asian/Pacific Islander	Black/African American	Caucasian	Hispanic/ Latino	Native American	Other
Officials	1	1	15	0	0	1
Remote	0	1	8	1	0	0
Fitness Center	1	1	9	0	0	0

Note: Race demographics of all students who participated in the study.

Table 3

Gender Demographics

Group	Gender	
	Male	Females
Officials	11	8
Remote	8	2
Fitness Center	5	7

Note: Gender Demographics of all students who participated in the study.

Table 4

Education Level

Group	Educational Level				
	Freshman	Sophomore	Junior	Senior	Graduate Student
Officials	0	6	7	5	0
Remote	0	2	4	3	1
Fitness Center	0	0	4	7	0

Note: Educational Level Demographics of all students who participated in the study.

All groups completed the preliminary MLQ and submitted their questionnaires to the questionnaire administrator via email from Microsoft Forms. All questions were delivered via Microsoft Forms and emailed to the students, who completed and submitted the form. Once all the questionnaires were completed and returned, the data was be entered into an excel spreadsheet for the data to be analyzed. The MLQ instruction sheet was used for the protocol for the analysis of the results. The instructions for the analysis of the MLQ are as follows, “Calculate an average by scale. (Example: the items which are included in the Idealized Influence (Attributes) are Items 10, 18, 21, 25. Add the scores for all responses to these items and divide by the total number of responses for that item. Blank answers should not be included in the calculation (Avolio & Bass, 1990).” Each transformational score was added together and divided by four. This was also completed for both the transactional and the laissez-faire qualities as well. Transactional and laissez-faire qualities each had two qualities for their section of the questionnaire.

After the preliminary testing was completed, officials participated in five leadership presentations that were led by one of the Campus Recreation Graduate Assistants. The presentations consisted of transformational leadership training. The leadership training sessions were from the Leadership Challenge Student workbook. These activities included the values exercise in Model the Way. Students were shown a list of all values, and students had to list 25

of their closest values. From there the students had to rank their top three values and then were asked how they related to Campus Recreation. The second activity was Inspire a Shared vision where the students brainstormed leaders. Then the students were asked what all leaders had in common. Then students were asked to brainstorm all past coaches, past teachers and parents/guardians who they have had change their life. Then they were asked what all of those leaders had in common as well. The third activity was Challenge the Process and students were told to describe a time when they learned from a mistake. Some questions that were asked were how that it made them feel and what lessons that were learned. Then students were asked statements about a time where they felt they couldn't do something. They learned the importance of taking chances and challenging a process. They were also shown to take initiative on these actions. The fourth activity was from the Enabling others to Act Section. The mentor read a passage from the book "Leadership Challenge" about Coffee Meetings." The mentor then explained that trust is needed in order to build before asking someone to do something. In addition, the mentor challenged the students the next time they had a chance to get to know their co-workers. The last activity was from the section of the Student Leadership Challenge Workbook Encourage the Heart. In this activity, the mentor asked participants to think about a number of different awards like the Heisman Trophy winners from the past 5 years and Nobel prize winners from the past 5 years. Then students were asked to name leaders that have helped them in their lives. The mentor gave the point that it is not about the awards, but how the leaders made you feel. Then had participants think about their co-workers and congratulate them on their accomplishments or their hard-work.

After the completion of the leadership trainings, all groups submitted a post- MLQ to complete the study. The information was then be entered into an excel spreadsheet and the same

process as the preliminary data was used to analyze the results of the MLQ. After the completion of the analysis, a Mann Whitney U test was used to analyze the significant difference of the data collected. The scores that were analyzed are the official's post-test group scores against the fitness student employees and the remote student employees. The data that was analyzed were officials' transformational leadership scores against fitness and remote student workers, officials' transactional leadership scores against fitness and remote student workers and officials' laissez-faire leadership scores against fitness and remote student workers. These scores are found by adding up all the scores and dividing the number by the number of questions of the leadership attribute from the MLQ. For instance, idealized attributes had four different questions so the final score was the sum of the individual's four answered numbers and then divided by four. Transactional and Laissez-Faire had only two qualities each for their section of the questionnaire. These scores were then analyzed with the Mann-Whitney U test at $p < 0.05$. This analysis was completed with SPSS software from the Millersville Computer Laboratory computers via VMware Horizon

Results

Included in the results section are the tables that show the numbers and results of the Mann-Whitney U test. After each individual score was added and divided by the number of questions, the entire average of each group was calculated. The significance difference was found at $p < 0.05$. Below are the results from each section and each group:

Table 5

Idealized Attributes

Group	Pre- Test Score	Post- Test Score
Officials	3.27	3.11
Remote Student Workers	2.77	2.77
Fitness Student Workers	2.95	2.90

Notes: Pre-test and post-test scores for each group of the Idealized Attributes section.

Table 6

Idealized Behaviors

Group	Pre-Test Score	Post Test Scores
Officials	2.77	3.02
Remote Student Workers	2.82	2.90
Fitness Student Workers	2.97	3.04

Notes: Pre-test and post-test scores for each group of the Idealized Behaviors section.

Table 7

Inspirational Motivation

Group	Pre-Test Score	Post-Test Score
Officials	3.27	3.26
Remote Student Workers	2.87	2.90
Fitness Student Workers	3.17	3.11

Notes: Pre-test and post-test scores for each group of the Inspirational Motivation section.

Table 8

Intellectual Stimulation

Group	Pre-Test Scores	Post-test Scores
Officials	2.97	3.05
Remote Student Workers	3.16	3.05
Fitness Student Workers	3.04	3.12

Notes: Pre-test and Post-test scores for each group of the Intellectual Stimulation section.

Table 9

Individual Consideration

Group	Pre-Test Scores	Post-Test Scores
Officials	3.03	3.01
Remote Student Workers	3.15	3.23
Fitness Student Workers	2.83	3.15

Notes: Pre-test and post-test scores for each group of the Individual Consideration section.

Table 10

Contingent Reward

Group	Pre-Test Scores	Post- Test Scores
Officials	2.90	3.08
Remote Student Workers	2.55	3.00
Fitness Student Workers	2.95	2.93

Notes: Pre-test and Post-Test scores for each group of the Contingent Reward section.

Table 11

Management by Exception (Active)

Group	Pre-test Scores	Post-test Scores
Officials	2.03	2.00
Remote Student Workers	2.28	2.50
Fitness Student Workers	1.98	2.15

Notes: Pre-test and post-test scores for each group of the Management by Exception (Active) section.

Table 12

Management by Exception (Passive)

Group	Pre-test Scores	Post-test Scores
Officials	1.33	1.04
Remote Student Workers	1.20	1.15
Fitness Student Workers	0.93	0.96

Notes: Pre-test and post-test scores for each group of the Management by Exception (Passive) section.

Table 13

Laissez-Faire

Group	Pre-test Scores	Post-test Scores
Officials	0.65	0.67
Remote Student Workers	0.90	0.77
Fitness Student Workers	0.90	0.72

Notes: Pre-test and post-test scores for each group of the Laissez-Faire section.

After the averages were calculated, a Mann-Whitney U test was performed on each individual's score against the two groups. Below are the calculations from the tests.

Table 14

Descriptive Statistics

Variable	N	Mean	Std. Deviation	Minimum	Maximum
Transformational Pre-Test	39	2.920085470102565	.501928728657976	1.85	3.7
Transformational Post-Test	39	2.921153846153846	.466713054374641	2.025	3.85
Group	39	.92	1.010	0	2

Notes: Descriptive statistics from the transformational section of the Multi-Leadership Questionnaire. The information shows the number of participants, the mean of the test, standard deviations and minimum and maximum scores from the test.

Table 15

Number of Participants of Transformational section

Group	N	Mean Rank	Sum of Ranks
Transformational Pre-Test			
Remote/Fitness Workers	21	21.86	459
Officials	18	17.83	321
Total	39		
Transformational Post-Test			
Remote/Fitness Workers	21	16.29	342
Officials	18	24.33	438
Total	39		

Notes: Number of participants of the Transformational section of the Multi-Leadership Questionnaire, mean rank and sum of ranks.

Table 16

Test Results for Mann-Whitney U Analysis Test

Test	Transformational Pre-Test	Transformational Post-Test
Mann-Whitney U	150	111
Wilcoxon W	321	342
Z	-1.1	-2.198
Asymp. Sig (2-tailed)	.271	.028
Exact Sig. [2*(1-tailed Sig.)]	.282	.028

Notes: Test results and the Mann-Whitney U Analysis test comparisons of the transformational section of the Multi-Leadership Questionnaire. The Exact Sig. shows a number of .028, showing the significant difference in official's post-test scores to remote/fitness center student workers.

Table 17

Number of Participants of Transactional Section

Group	N	Mean Rank	Sum of Ranks
Transactional Pre-Test			
Remote/Fitness Workers	21	21.79	457.50
Officials	18	17.92	322.50
Total	39		
Transactional Post-Test			
Remote/Fitness Workers	21	21.19	445
Officials	18	18.61	335
Total	39		

Notes: Number of participants of the Transactional section of the Multi-Leadership Questionnaire, mean rank and sum of ranks.

Table 18

Test Results of the Transactional Section

Test	Transactional Pre-Test	Transactional Post-Test
Mann-Whitney U	151.50	164
Wilcoxon W	322.50	335
Z	-1.061	-.706
Asymp. Sig (2-tailed)	.289	.480
Exact Sig. [2*(1-tailed Sig.)]	.294	.494

Notes: Test results and comparison of the Transactional section of Multi-Leadership

Questionnaire. No significant difference was found in this section of the questionnaire.

Table 19

Number of Participants of Laissez-Faire Section

Group	N	Mean Rank	Sum of Ranks
Laissez-Faire Pre-Test			
Remote/Fitness Workers	21	19.90	418
Officials	18	20.11	362
Total	39		
Laissez-Faire Post-Test			
Remote/Fitness Workers	21	19.90	418
Officials	18	20.11	362
Total	39		

Notes: Number of participants of the Laissez-Faire section of the Multi-Leadership

Questionnaire, mean rank and sum of ranks

Table 20

Test Results of the Laissez Faire Section

Test	Laissez-Faire Pre-Test	Laissez-Faire Post-Test
Mann-Whitney U	187	187
Wilcoxon W	418	418
Z	-.057	-.057
Asymp. Sig (2-tailed)	.955	.955
Exact Sig. [2*(1-tailed Sig.)]	.967	.967

Notes: Test results and comparison of the Laissez Faire section of Multi-Leadership

Questionnaire. No significant difference was found in this section of the questionnaire.

Discussion

With educators increasing their interest in campus recreation to recruit and retain more students, more positions for student employee will need to be available to keep up with expansion. With more students working in campus recreation, it is extremely important to understand the by-products of participating in the campus recreation department. One of these byproducts, leadership, is found from students who participate in being mentored the campus recreation department (Bower, et. al. 2005). These skills can continue to help advance a student on a skill that cannot be attained in a classroom. Furthermore, mentoring students in leadership can help advance the leadership self-efficacy of not only the mentor, but the mentee as well (Nesbitt & Grant, 2015). The virtual discussions allowed the students to discuss issues or experiences they have encountered in the campus recreation setting and used them as leadership lessons.

The averages of the results show that there was a significant difference in scores in the official's post-test group. In addition, some officials scores showed a decrease or increase in scores when compared from the pre-test to the post-test. This could be shown for a number of different reasons. One explanation for the changes in scores could be due to leadership self-efficacy. After the leadership lessons, a student may be able to better assess themselves and their leadership abilities (Nesbitt & Grant, 2015). This could result in an increase or a decrease in their scores based on their answers of the questionnaire. If after the leadership sessions the student realizes that they do not perform transformational leadership actions, then they may not answer the same way the student previously answered on the pre-test questionnaire. The results did show however, that the training did have a significant impact on the scores.

There were also a few limitations in the study as well. One of the limitations was the questionnaire was sent out during the public university's midterm week, so the official's group may not have been as focused on the leadership lessons as their midterms. Another limitation of the study was technological issues on Microsoft Forms. There were times were students were completing the form, however, it was not showing up on the results section for two students. This could have prevented receiving accurate tests, because by having the student complete the questionnaire a second time, they could have made a mistake on one of the questions.

The results of the Mann-Whitney U test showed a significant difference of .028 in the post transformational section of the MLQ between the officials and the fitness center/remote student employees. In addition, the pre-test of the transformational section of the MLQ did not show a significant difference in the Mann-Whitney U analysis. This points to the direction that the leadership sessions held made a significant difference in the officials' transformational leadership scores. These results suggest that peer mentoring through even virtual sessions

impacts participants in a positive way, which helps contribute to the learning process of the students and increase their leadership capacity. According to Dugan (2013) peer mentoring contributes directly to leadership capacity, which supports the link in these results.

Further research is needed in this field in order to understand the importance of Campus Recreation in student leadership development. By mentoring and finding many common methods where students can learn leadership techniques, one can help improve the department and create future leaders (Nesbitt & Grant, 2015). Campus Recreation is an excellent environment for developing leaders and therefore needs to be researched more in order to find enhanced and more efficient avenues in developing leadership skills in students (Dugan et al., 2015).

References

- Arthur, C., Bastardo, N., & Eklund, R. (2017). Transformational leadership in sport: current status and future directions. *Science Direct*. 16. 78-83.
- Avolio, B. J., & Bass, B. M. (1990). *Multifactor Leadership Questionnaire [Third Edition Manual]*.
- Bosselut, G., Julie B., Bastien S., Evelyne F., & Guilbert, L. (2018). Transformational leadership and group cohesion in sport: examining the mediating role of interactional justice using a within- and between- team approach. *International Journal of Sports Science and Coaching*. 13(6). 912-928.
- Bower, G., Hums, M., & Keedy, J. (2005). Factors influencing the willingness to mentor students within campus recreation. *Recreation Sports Journal*. 29: 59-77.
- Dugan, J. P., Kodama, C., & Correia, B., (2013). Multi-institutional study of leadership insight report: Leadership program delivery. *College Park, MD: National Clearinghouse for Leadership Programs*.
- Dugan, J.P., Turman, N., & Torrez, A. (2015). When recreation is more than just sport: Advancing the leadership development of students in intramurals and club sports. *Recreational Sports Journal*. 39: 37-48.
- Gozcu, H., & Ciftci, S. (2019). Investigate of the sport center managers' leadership styles and the employees' performance. *Journal of Physical Education and Sport*. 19(6): 2152-2158.
- Kovach, M. (2018). An examination of leadership theories in business and sport achievement contexts. *The Journal of Values-Based Leadership*. 11(2): 1-16
- Nesbitt, G. & Grant, A. (2015). Applying the multi-institutional study of leadership findings to collegiate recreation and athletics. *Wiley Periodicals*. 147: 19-31.
- Pastore, D. (2003). A different lens to view mentoring in sport management. *Journal in Sport Management*. 17: 1-12.
- Tservairidou, L., Matsouka, O., Tsitskari, E., Gourgoulis V., & Kosta, G. (2019). Transformational leadership style, psychological empowerment and job satisfaction in greek municipal sport organizations. *Sport Mont*. 17(2): 29-34.
- Weaver, M.A., & Chelladurai, P. (1999). Mentoring in intercollegiate athletics administration. *Quest*. 51. 24-38.

Welty-Peachey, J., Damon, Z.J., Zhou, Y., & Burton, L.J. (2015). Forty years of leadership research in sport management: A review, synthesis, and conceptual framework. *Journal of Sport Management*, 29(5), 570-587