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Assessing the Degree of SPORT Leadership Questionnaire Focusing on the Transactional and Transformational Leadership based on the MLQ-5X

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Abstract

Leadership is very important in sport. Leadership as provided by the coach plays a very significant role in the lives of athletes and in the athlete's sport experience. However, the means by which a coach demonstrates leadership behaviors may vary from coach to coach. Coaches at different levels of competition may be expected to interact with athletes differently due to the different levels of athletic ability and possibly the greater pressure to win for employment security. Coaching attitudes and actions may also differ based on their leadership ability and style. The Multifactor Leadership Questionnaire(MLQ) is a test that looks for the leadership ability and it is one that is accepted by a variety of organization such as sport teams, companies, and even militaries. The MLQ is a test that is widely used today, but just because it is used a great deal of the time, does not mean there are no flaws. The test is not perfect. Therefore, it is necessary to evaluate the Multifactor Leadership Questionnaire and to give some solutions for the test. In this study, the purpose and critiques of MLQ-5X were explored through literature review, and the evaluation and critique of MLQ-5X's practical and technical issues to solve problems that MLQ-5X has.

In the practical point, a cover sheet should be attached to each questionnaire by clarifying the nature of the study and the responsibility of each of the parties. Guarantying anonymity of all participants is important factor that would affect the result of study. Researchers should also provide the contact details to safeguard participants form harm caused by any issues that may have arisen due to the research. The MLQ-5X looks at transformational, transactional and non-leadership behaviors and evaluates each of these with various criteria. In reading the test results, each question is carefully evaluated. Some of the questions are very specific and require the test taker to choose from ambiguous answers such as "sometimes," "fairly often," etc. Many of the questions address various habits and behaviors as well as thinking processes.

For the technical issues, the MLQ-5X test has some strengths and weaknesses in respect to its potential practical application, design and validity. Because of excellent validity and reliability, the MLQ-5X has been used comprehensively worldwide. However, since the MLQ-5X has not been used many times in the sport organization studies, an internal reliability can be issued in the field of sport. The MLQ-5X has some merit because it has been evaluated and used successfully all over the world. Controls have been implemented and to a great extent the numbered questions have validity. Thus, discrepancies will likely be scant, and while the test is a good one in general, it is also likely that some people will fall through the cracks. Therefore, the text should always be used in conjunction with an interview as well as alternative evaluating methods.

While the transactional leadership factors have been discussed in the leadership literature for at least fifty years, little attention in the aggregate had been paid to assessing the transformational components, at least up until the last 20 years. Results of the current report potentially offer a more comprehensive survey tool for measuring leadership styles, now it can be refined and improved upon in subsequent research.

[Keywords] Sport Leadership, Multifactor Leadership Questionnaire, Transformational Leadership, Transactional Leadership, MLQ-5X

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1. Introduction

In sports, an athlete's performance plays a very important role in winning or losing, but the coach's strategy and his/her leadership make it possible for an athlete to achieve the best performance[1][2]. Therefore, athletes should be adequately directed by coaches, giving them a substantial influence on the athletes. However, the level of influence is unknown, along with the expectations of what athletes want from coaches and how do coaches identify themselves[3][4][5][6][7]. Since the coach's role is considered to be a highly complex but systematic process, coaches in most situations must complete a variety of tasks such as planning practices and game strategies, organizational tasks and mentoring athletes which does in fact include more than teaching essential skills and tactics [8][9][10][11].

The leadership behaviors of athletic directors have been determined by coaches' ratings on the Multifactor Leadership Questionnaire(MLQ), which was developed by Bass in 1985[12]. The MLQ measures the degree of transactional and transformational leadership exhibited by the subjects[13]. Since the instrument proposed by Bass(1985) for the purpose of assessing transactional and transformational leadership, it has been modified and revised several times due to the problems reported by a number of authors who conduct a research on transformational leadership behavior with the use of the MLQ[12]. Consequently, there are several revised versions of the MLQ appearing in the former studies[14].

2. Multifactor Leadership Questionnaire

The Multifactor Leadership Questionnaire(MLQ) has been used extensively in the past 20 years. The MLQ is originated from the development of Bass' six-factor leadership model. The development of Bass' six-factor leadership model was originally based on preliminary results obtained by surveying 198 US army field grade officers, who were each

asked to rate their respective superior officers using the MLQ and the six-factor model merges attributed charisma, charismatic behavior and inspirational leadership into a single factor of charisma[14]. Having a clear understanding of the six-factor model might be advantageous for efficiently conducting the research study with the use of the MLQ. Avolio, Bass and Jung(1999) reported the six-factors and their operational definitions in their study that reexamined the components of transformational and transactional leadership using the MLQ[14].

The revised MLQ-5X measures transformational, transactional, and non-transactional leadership behavior as well as outcomes of leadership, such as Effort, Effectiveness, and Satisfaction.

Transformational leader can produce high levels of subordinate effort and performance that went beyond what would occur with a transactional approach. From a similar perspective, transformational leaders encourage their followers to do more than the minimum requirements, and leads to a higher job performance and job satisfaction among employees in organizations[3]. Transactional leaders clarify for their follower's responsibilities and the leadership theory is based on an exchange process in which the leader provide rewards in return for the subordinate's efforts and performance. Transactional leadership occurs when followers are moved to fulfill their roles as set forth with the leader in exchange for reward or the avoidance of punishment[15].

2.1. Purpose and nature of the test(MLQ-5X)

The MLQ-5X investigates relationships between these leader styles and work unit effectiveness and satisfaction. In its most recent version, the MLQ-5X has been designed to test a full range of leadership styles ranging from charismatic to avoidant and laissez-faire[16]. There are 7 dimensions in the range of leadership styles. The first four factors (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration) are identified as transformational leadership factors, while contingent reward

and management by exception(active and passive) are categorized as transactional leadership factors. Laissez-faire leadership or an absence of leadership is included to embody the entire range of leadership styles.

Bass(1999) argued that transformational leadership generates greater follower effectiveness and satisfaction than transactional leadership[3], and Bass and Avolio(2000), found that the most effective leaders encompass some transactional but more transformational characteristics[16]. In support of this, Lawe, Kroeck, and Sivasubramaniam(1996)'s analysis of 33 independent MLQ-based studies from America, New Zealand, Canada, Japan, Singapore, and India concluded that there are strong positive correlations between all transformational leadership components and objective and subjective performance measures. Transactional, contingent reward leadership was less positively correlated with performance; and passive, management by exception leadership was negatively correlated with performance.

Numerous refinements and rigorous testing have shown the MLQ-5X to be valid and reliable in many studies[16]. A brief description of the full range of leadership dimensions measured by the MLQ-5X is as follows:

- Idealized Influence(charisma):

Leaders with idealized influence become role models as followers identify with and want to emulate them. These leaders are admired, respected and trusted and are perceived as having extraordinary capabilities, persistence and determination[7][15][16].

- Inspirational Motivation:

Leaders who create inspirational motivation paint a clear vision for the followers' future state and create the momentum to reach that vision through the arousal of team spirit. These leaders provide meaning, challenge, clearly communicated expectations, and a commitment to set goals[7][15][16].

- Intellectual Stimulation:

Leaders who exhibit intellectual stimulation encourage followers to be innovative

and creative by getting followers to readdress old problems in new ways, think outside the square and regularly examine old assumptions to see if they are still viable[7][15][16].

- Individualized Consideration:

A leader who shows individual consideration treats each follower as an individual and considers their individual needs, abilities and aspirations. They help individuals to develop their strong points and spend time training and guiding people[7][15][16].

- Contingent Reward:

Contingent reward highlights a relationship between leaders and followers that stresses exchange, with the leader facilitating the achievement of this process. Reinforcement of this process is generally positive[7][15][16].

- Management by Exception:

Active management by exception involves a leader who actively monitors followers to safeguard against mistakes and takes action when mistakes occur. Passive management by exception involves a leader who only intervenes to take corrective action when things go wrong. Reinforcement of this process is generally negative with the use of criticism and negative feedback[7][15][16].

- Laissez-faire:

This is the avoidance or absence of leadership where the leader avoids getting involved altogether. No attempt is made at problem solving or at motivating followers, and decisions are often delayed[7][15][16].

2.2. The intended uses and populations

Since the principles of transformational and transactional leadership have considerable generality, the MLQ-5X can be applied to various ranges of study from military, business organizations, educational institutions, government agencies, hospital, and sport organizations. This fact indicates that the applicability of the MLQ-5X is extensive and the credibility of the MLQ-5X may be high[17].

The populations for the MLQ-5X could be any groups or teams such as military to enhance positive training effects, sport teams to make strong relationship between coaches and players, business firms, or bank managers to predict long-term branch market share and customer satisfaction. Especially, the MLQ-5X for teams is often regarded as a good source since it provides valuable feedback to the whole team about how its members see the group performing leadership functions[16] [17].

3. Practical Issues

3.1. Administration

Self-administration method is used to obtain a response from potential research subjects. In particular, although there is no time limitation in administering the MLQ-5X, a researcher may provide 15 to 20 minutes to answer all forty-five items of the MLQ-5X questions.

When using the MLQ-5X questionnaire, subjects are asked to indicate on a 5-point Likert type scale(0~4) how frequently each of the 45 descriptive statements fits themselves. Subjects can answer with blank if an item is irrelevant, or if they are unsure or do not know the answer.

Table 1. 5-Point Likert Scale used in MLQ-5X.

Not at all	Once in a while	Some-times	Fairly often	Frequently, if not always
0	1	2	3	4

3.2. Scoring

Usually, the researchers using MLQ questionnaire use relatively simple hand-scoring. The MLQ-5X scale scores are average scores for the items on the scale. The score can be derived by summing the items and dividing by the number of items that make up the scale. All of the leadership style scales have four items, extra effort has three items, effectiveness has four items, and satisfaction has two items.

3.3. Examiner qualifications

The examiner should provide the purpose and nature of test clearly, and also explain the overall test procedures. The most important aspect for examiner qualifications is that the examiner should not be the manager or leader of the test takers. Since one dimension of questionnaire is asked about their leader, the test should guarantee the anonymity of test takers. To provide the anonymity and confidential, the examiner should be a person who is not related to the group or organization.

3.4 Evaluation and critique

A cover sheet should be attached to each questionnaire by clarifying the nature of the study and the responsibility of each of the parties. Guarantying anonymity of all participants is important factor that would affect the result of study. Researchers should also provide the contact details to safeguard participants form harm caused by any issues that may have arisen due to the research.

The MLQ-5X looks at transformational, transactional and non-leadership behaviors and evaluates each of these with various criteria. In reading the test results, each question is carefully evaluated. Some of the questions are very specific and require the test taker to choose from ambiguous answers such as "sometimes," "fairly often," etc. Many of the questions address various habits and behaviors as well as thinking processes. One question is "I articulate an attractive future that gets the attention and stimulates the imagination of my associates(Inspirational motivation)." The MLQ-5X is not a test requiring a creative answer. In other words, what plays into an individual's leadership is not just ideation but also the behavior of the individual. Performance becomes important[2].

Another question is: "I show my associates and followers that I understand their capabilities, needs and desires, and work to develop each of them to their full potential(Individualized consideration)." The answer is whether or not the individual actually does implement such techniques or just feels that he should.

At the same time, there is no box to check which might suggest another alternative[2].

4. Technical Issues

4.1. Norming, scaling, equating

Depending on the design of a research study, a norm group can be established in order to compare one another with regard to those types of leadership behaviors. Norm group may vary on the basis of what a researcher is interested in. In other words, a research may assign a certain group of individuals as a norm group based on their leadership characteristics. If I want to study the leadership characteristics of a certain sport context, all leader(employer) and followers (employees) can be a norm group for my study.

Since the Multifactor Leadership Questionnaire(MLQ-5X) is a multirater assessment, several people rate the target norm group. If I want to create a norm for my organization, I can indicate two norms; for example, the particular group for a workshop as well as my corporate name for comparison across the whole corporation. If I only need each individual compared to others in my organization, I just use one norm.

The Multifactor Leadership Questionnaire uses 5-point likert scale(0: Not at all ~ 4: Frequently).

4.2. Reliability

The MLQ-5X has excellent reliability and has been used extensively worldwide. It has been shown to be strongly predictive of leader performance across a broad range of organizations[17]. Bass & Avolio(2000) reported that the alpha reliability coefficient for the total items and for each leadership factor scale range from .74 to .94[16]. According to Nunnally and Bernstein(1994), an internal consistency(Cronbach's alpha) greater than .70 is reasonably reliable[18]. In addition, there was a statistically significant intercorrelation among the 4 transformational scales(Pearson's correlation coefficient = .95).

4.3. Validity

The initial conceptualization of the transactional and transformational leadership model presented by Bass(1985) included six leadership factors(Charisma, Inspirational, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-Exception, and Laissez-Faire)[12]. Evidence for a five-factor structure combining Charisma and Inspirational leadership was presented by Bycio, Hackett, and Allen(1995) for the earliest version of the Multifactor Leadership Questionnaire(MLQ Form 1) used by Bass(1985)[19]. However, Bycio et al. (1995) noted some reservations regarding their findings indicating that,

“Although the overall confirmatory factor analysis fit indices tended to support the existence of five leadership components, the transformational factors were highly correlated, and more important, they generally did not have strong differential relationship with the outcome variables(p. 474)[19].”

However, a great deal of revision in the MLQ has occurred since 1985. Since the original 6-factor model was proposed by Bass (1985), several additional factors have been uncovered through subsequent research using revised versions of the MLQ[20]. One of these factors provides for attributions regarding the leader's transformational style, and is based on distinguishing between idealized charismatic behaviors and attributions. Management-by-Exception is divided into Management-by-Exception-Active(MBEA) and Management-by-Exception-Passive(MBEP). Thus, nine factor scores were obtained for MLQ-5X. Six had been used previously in MLQ-5R and three were newly created[16].

The earlier version of the Multifactor Leadership Questionnaire(MLQ-5R) was used to measure transformational, transactional, and non-transactional/laissez-faire leadership. It has been criticized by several authors for an inadequate discriminant validity among the factors comprising the survey, for including behavioral and impact items in the same survey scales, and because the factor structure initially proposed by Bass(1985) sometimes

has failed to be replicated in subsequent empirical research[21][22]. Bass and Avolio (1993), following their review of prior empirical studies completed on the MLQ[23], concluded that:

“The original factor structure presented by Bass(1985) does still represent conceptually and in many instances empirically, the factors of transformational, transactional and laissez-faire leadership. But already we see that the structure is more complex than originally proposed. Further refinements are in the offing(p. 61)[23].”

In last MLQ technical manual[24], it can be summarized preliminary results of a comprehensive validation study that was undertaken to develop some refinements of the MLQ. That manual addressed some of the original concerns raised by Yukl(1999) and Smith and Peterson(1988) regarding the psychometric problems with earlier version of the MLQ[21][22]. Results presented in that earlier technical manual were based on a portion of the sample reported in the present technical report.

The MLQ-5X was developed in response to substantive criticism of its predecessor the MLQ-5R survey[16]. The criticism concerned the high correlations among the transformational scales, as well as between the transformational leadership scales and contingent reward; the mixing of behaviors, impact and outcomes within a single leadership scale, and distinguishing between behaviorally-based charismatic leadership[referred to as idealized influence(behaviors)], versus an attribution or impact on followers referred to as idealized influence, or elsewhere as “attributed charisma”[25].

In a cross-validation examination with nine samples[American undergraduate students(N=162), U.S. government research agency(N=66), U.S. Army(N=2020), Scottish gas firm(N=99), U.S. business firm(N=1,326), Taiwanese & American undergraduate students(N=254), U.S. nursing school(N=45)] by using construct factor analysis, it has proved to have good construct validity[16].

4.4. Evaluation and critique

The MLQ test has some strengths and weaknesses in respect to its potential practical application, design and validity[2]. Because of excellent validity and reliability, the MLQ-5X has been used comprehensively worldwide. However, since the MLQ-5X has not been used many times in the sport organization studies, an internal reliability can be issued in the field of sport.

It may be used to test potential leaders or manager applicants in a variety of situations. In this way, because of the validity of the test, one can say that truly unsuitable individuals will not be placed in management positions. Positive attributes of the test include widely accepted notions. When finding leaders who demonstrate transformational qualities, one should be reminded that transformational leadership is positively correlated with role clarity[26]. Hence, when associates are chosen with the help of the test, it adds to the smooth running of a corporation.

The MLQ-5X relies heavily on honesty and self-evaluation. By the time someone is in a management position, he or she usually has a college degree, and has some life experience. Some of the questions suggest that one answer is better than another. Even if an individual test taker is honest, their self-evaluation may slant to the preferred choice. The preferred choice can sometimes be rather obvious.

Since the MLQ-5X has been evaluated and used successfully all over the world, one has to assume that it has some merit. Controls have been implemented and to a great extent the numbered questions have validity. Thus, discrepancies will likely be scant, and while the test is a good one in general, it is also likely that some people will fall through the cracks. Therefore, the text should always be used in conjunction with an interview as well as alternative evaluating methods.

Brown and Trevino(2002) explain: "Although much has been said about the importance of the ethical dimension of leadership, the construct had never been precisely defined or adequately measured"(p.D1)[27].

It is hard to really measure ethical qualities in terms of leadership.

5. Conclusion

Although the MLQ-5X has been used for long time and in various areas of study, and updated several times, it still has some questionable aspects and issues. Since the concept of transformational and transactional leadership is relatively not clear or there is no straight line to divide between them, for example, some people have trouble with conceptual questions as opposed to having to deal with the concrete. When statements or questions may be interpreted in a variety of ways, some will not do well on the test. Thus, the result may not clearly indicate the type of leader the individual might be but rather, how well the person is at test taking[28].

While the transactional leadership factors have been discussed in the leadership literature for at least fifty years[29], little attention in the aggregate had been paid to assessing the transformational components, at least up until the last 20 years. Results of the current report potentially offer a more comprehensive survey tool for measuring leadership styles, now it can be refined and improved upon in subsequent research.

Despite of its popularity and fame, the MLQ-5X has not been used many times in the field of sports compared to other research area. The sport organizations need a strong leadership more than any other fields because strong leadership can make players to chain with coaches that results in team winnings.

Cross-cultural research should consider the possibility of differently interpreting the concept of leadership or test because of different culture. It needs to be developed in terms of the test as well as concept based on the various cultures.

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