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GROUP COHESION AND INTRAMURAL FOOTBALL

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Abstract

Teams with higher levels of team cohesion more often outperform teams with lower levels of cohesion. The purpose of this study was to compare team cohesion levels between inexperienced and experienced subjects participating in intramural flag football. Null Hypothesis: There was no difference in team cohesion between inexperienced and experienced teams. The population consisted of college males participating in intramural flag football (N=20). Ten were inexperienced (G1IN; n=10) and ten were experienced (G1E; n=10). Skill level varied from no experience through varsity high school football. Two years or less of high school football experience were considered inexperienced. Participants with more than two years of high school football playing experience were considered experienced. The modified questionnaire (Weinberg & Gould, 2007) contained twelve questions formatted to fit a Likert scale. Each group of participants were instructed in the same environment using a script to ensure uniform presentation. Packets were distributed to subjects that included an informed consent waiver, logistics sheet, and questionnaire. Means for both groups (inexperienced and experienced players) were computed. A two-tailed independent t-test was used to assess difference. No differences were found. The null hypothesis was not rejected. Since cohesion was multidimensional, no single factor predicted group cohesion. The amount of competitive experience an individual possessed, past experience in the specific sport, and/or if sports were encouraged in the participant's household during childhood were other factors of interest in group cohesion predictions.

INTRODUCTION

As a team works together and players are 'in-sync' with one another, success is more often a possibility. A team with little talent and a high level of group cohesion may beat an opponent with lower group cohesion even if the opponent had more talent. Cohesion and team integration along with leadership and reinforcement can produce effects on small group sport settings (Nixon, 1979; Yukelson, Weinberg, & Jackson, 1984).

The higher level of cohesion a team possessed, the greater the success a team can achieve (see Figure 1). Analysis showed that winning in team sports was more predictable when teams were cohesive compared to teams that were not (Westre & Weiss, 1991; Williams & Widmeyer, 1991; Evan & Dion, 1991). A team

with experience or more talented players does not achieve automatic victory against a team considered to be less experienced or talented. Part of the determiner of success appears to be related to internal attributions perceived by the team.



Figure 1. Team cohesion positively related to greater performance. A team with higher cohesion performed better and with more success than a team with lower team cohesion.

Internal attribution is the ability to perceive and interpret other's behaviors. Teams that achieved internal attribution usually outperformed other teams. Statistically, team success was predicted 52% more accurately when internal attributions were considered (Zaccaro, Peterson & Walker, 1987). Having common goals, values and achievement orientation helped all teams attain cohesion and success, especially smaller teams (Feyerherm & Rice, 2002; Rapisarda, 2002).

Smaller group sizes or sports teams that consisted of fewer players have been found to have more group cohesion than larger groups. In example, a basketball team could produce more cohesion than a football team because a basketball team consisted of fewer players (Mullen & Copper, 1994). The size of a team can impact the achievable level of cohesion a team possesses. Smaller group sizes allowed players more one-on-one time with the leader of the team.

The leadership of a major player or coach affected a team's cohesion and integration. Research indicates that leaders that used encouragement and positive ways of correcting athletes rather than yelling or embarrassing athletes had higher success rates (Turman, 2003). Leadership ability possessed by a player has also been shown to play a role in attraction to a group (see Figure 2). The affinity to join a group and participate with a group has also been shown to increase success through cohesion (Carron & Chelladurai, 1981). Furthermore, reinforcement has further guided players to greater cohesion when provided in a way that was positive (Turman, 2003; Carron & Chelladurai, 1981).



Figure 2. Positive leadership and attraction to a group associated with higher success and team cohesion. Greater cohesion occurred when positive leadership and an individual's attraction both occurred.

Reinforcement is considered a rewarding feeling or emotion that occurs when a player was complemented for skilled performance or after a team won. Reinforcement can cause higher group cohesion and integration (Nixon, 1979) and higher cohesion and integration can influence success. Group cohesion can increase when players are rewarded for success and increased productivity (Shields, Gardner, Bredemeier & Bostro, 1997). In addition, positive feedback has been shown to be one of the most common leadership behaviors that positively affects athletes' satisfaction (Chelladurai, 1984). When setting goals after positive reinforcement, teams with task-orientation have commonly been found to be more successful (Nixon, 1979; Shields, Gardner, Bredemeier & Bostro, 1997; Chelladurai, 1984).

Task-orientation goals are goals set by athletes to perform better than in previous competitions. Successful teams are often led by a coach or leader that is task-orientated (Bird, 1977). Task-orientation teams strived for the same goals, such as winning or improving. Teams with common values demonstrated cohesion and success. As suggested in the literature, cohesion was not one-dimensional but instead multidimensional. Many of the relationships which lead to group cohesion are complex (Yukelson, Weinberg, & Jackson, 1984).

Complexity in cohesion has been related to a combination of both individual and group factors. Factors include interpersonal attraction, task attraction, attraction to group, and normative considerations, (Yukelson, Weinberg, & Jackson, 1984). Cohesion is seen as a complex element that is affected by each individual and interaction with others in the group or team (Yukelson, Weinberg, & Jackson, 1984).

The literature reports group cohesion was measured in college and professional football, but has not been measured at other sport participation levels. This pilot study investigated the relationship of experience to group/team cohesion in intramural football.

PROBLEM STATEMENT

The purpose of the study was to determine if group cohesion in a team differed between experienced players and inexperienced players. The focus was to determine the effect of experience on group/team cohesion.

Null Hypothesis: There was no difference in team cohesion between inexperienced and experienced individuals/teams.

METHODS

Subjects chosen for small group sport settings varied in skill and experience. The instrument used was modified in order to measure association between cohesion and experience level. A specific procedure and statistical analysis followed data collection. The study focused on the outcome of group cohesion in male teams.

Subjects

An intramural football team consisted of seven players. Teams were composed of male participants at a Division I University who were playing intramural football. Participants ranged from ages 18 to 23 years. Twenty players, 10 inexperienced ($n_i = 10$), 10 experienced ($n_e = 10$) were used in the study.

Skill level varied from players with varsity high school football experience to players with no experience. Participants were divided into experienced and inexperienced players using a logistics sheet to record player history and family experience. Athletes who played football for more than two years in high school were considered experienced. Athletes who had two years or less of high school football experience were classified as inexperienced.

Instrumentation

A sport group cohesion questionnaire was the assessment instrument used in the study. The instrument was revised from a questionnaire found in Weinberg and Gould (2007). The revised questionnaire focused on flag football participants.

The modified questionnaire determined group/team cohesion levels. A four point Likert scale was used to obtain answers concerning group cohesion. The specific instrument consisted of 12 questions which evaluated a team's cohesion (see Figure 3). Questions consisted of scenarios along with possible incidents that occurred on a team.

Football Group Environment: Question One			
The following statements are for you to read and rate on a scale from 1-4: 1 is never, and 4 is always. If the statement falls in between this range, you are asked to rate it accordingly. There is no right or wrong answer, so answer honestly and thoughtfully, realizing that is ok to use a number numerous times, if that's truly how you feel.			
1. Our team is competitive	1	2	3

Figure 3. All twelve questions in the modified questionnaire were revised from the original instrument. Each question followed similar format.

With approval of use of human subjects at the university from the Institutional Review Board, the questionnaire and a logistics sheet (to gain information about history and family experiences) was distributed to all subjects on the same day in the same setting. A script was used to ensure uniform presentation of the assessment procedures. Data was compiled using responses from the questionnaire. Scores were averaged and compared between experienced and inexperienced athletes.

Procedure

Participants were reminded to answer honestly and accurately. The details of the study were explained prior to participation. Each group of participants were instructed in the same environment.

Precautions, such as a script, were made to ensure all participants received the same instruction in a succinct and ordered fashion.

The survey was included in a packet given to each subject who agreed to take part in the study. Packets included a questionnaire, informed consent waiver, and logistics sheet. The questionnaire and logistics sheet were used in statistical analysis and later in discussion of results.

Statistics

A data compilation sheet was developed for the study. The data compilation sheet was designed for comparison between the experienced and inexperienced groups. The completed packets filled out by subjects and the answers recorded on the survey were transferred to the data compilation sheet. The questionnaires (spread sheet) and logistics sheets organized analysis. The completed data compilation sheet demonstrated information used for comparison (see Table 1). The means and totals for the inexperienced and experienced players were recorded and compared. The two groups were compared by using a two-tailed independent t-test to examine if difference existed. An alpha level of 0.05 was used to measure the difference.

Table 1. Questionnaire Averages

Score	Sample of Data Compilation							
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
G1 S1	4	2	4	2	4	1	4	1
G1 S2	4	1	3	1	4	2	3	1
G1 S3	4	1	4	1	3	2	4	1
G1 S4	4	1	4	1	4	3	4	1
G1 S5	4	1	4	1	3	2	4	4
G1 S6	4	2	3	4	4	3	4	3
G1 S7	3	4	4	2	3	4	4	1

ANALYSIS

Answers provided by subjects were recorded in the data compilation sheet to calculate statistics and determine results. Results suggested discussion of issues related to the study. Both groups scored similarly. Group one consisted of inexperienced players who had played two years or less in high school football; the subjects scored a mean of 33.8. Group two, consisted of experienced players who had played more than two years in high school football scored a mean of 32.8. Relationships between groups were then tested for statistical significance.

The alpha level used for this study was 0.05. The p-value was 0.87507. There was no difference between the two groups. Therefore the study failed to reject the null hypothesis (see Table 2).

DISCUSSION

The null hypothesis stated no significant difference in group cohesion between inexperienced and experienced players. There was no significant difference between the two groups of participants. The difference in mean between inexperienced and experienced players was 1.00. This further described the similarity that inexperienced and experienced players possessed in relation to group cohesion.

Group cohesion was multidimensional as described by Yukelson *et al.* (1984). Multiple factors played a role in an individual's cohesion with the team. These included, but were not limited to, the amount of competitive experience an individual possessed and/or the sports encouraged in a participant's household during childhood. Factors were investigated by using logistics sheets filled out by each subject.

The amount of competitive experience did not correlate with the experience in football. Total competitive experience was based on how long participants had played in competitive sport. The inexperienced players averaged 4.6 years of pre-collegiate competitive experience. Experienced players averaged 10.8 years. The number of years a subject possessed in competitive experience did not have an impact on team cohesion. A second factor investigated was the encouragement for competitive sports within subjects' households.

Ninety percent of the participants had family who had a positive influence on their participation in sports. Since nearly all the subjects had a familial influence, sufficient data was not available to conclude whether family influence increased or decreased group cohesion. No factors provided additional light on whether inexperienced or experienced athletes had higher levels of group cohesion.

CONCLUSION

The study did not illustrate that inexperienced or experienced individuals/teams held a higher level of group cohesion. Modifications to this pilot study had the potential to make results more accurate and should be emphasized in future studies.

In this pilot study, data did not indicate a difference in group cohesion between inexperienced and experienced players. With a p-value of 0.87507 and an alpha level of 0.05, the probability of finding differences is low. Modifications to the study may result in more reliable and/or accurate findings.

Modifications to the study consist of including a larger number of subjects, testing skills of each subject, and recording data before and after the season. Having a larger subject population would create more reliable results. The best results would have come from taking data before and after the football season. Results from before and after the season may find differences between how group cohesion differs between inexperienced and experienced teams of the same win/loss record. Subjects' skills also need to be measured. There is a possibility that a participant with less experience could play at a higher level of performance than a participant with more experience.

In future studies, the logistics sheet should have more questions that assess the participants' background and experience in the specific sport of football. These modifications made present in future studies would increase reliability of results since relationships between levels of experience and group cohesion were difficult to discover.

REFERENCES

- Bird, A.M. (1977). Team structure and success as related to cohesiveness and leadership. *The Journal of Social Psychology*, 103(1), 217-223.
- Carron, A.V. & Chelladurai, P. (1981). Cohesiveness as a factor in sport performance. *International Review of Sport Sociology*, 16(2), 21-41.
- Chelladurai, P. (1984). Discrepancy between preferences and perceptions of leadership behavior and satisfaction of athletes in varying sports. *Journal of Sport Psychology*, 6(1), 27-41.
- Evans, R.E. & Dion, D.L. (1991). Group cohesion and performance a meta-analysis. *Small Group Research*, 22(2), 175-186.
- Feyerherm, A.E. & Rice, C.L. (2002). Emotional intelligence and team performance: The good, the bad, and the ugly. *The International Journal of Organizational Analysis*, 10(4), 343-362.
- Mullen B. & Copper, C. (1994). The relationship between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115(2), 210-227.
- Nixon, H.L. (1979). Reinforcement effects of sport team success cohesiveness-related factors. *International Review of Sport Sociology*, 12(4), 17-36.
- Rapisarda, B.A. (2002). The impact of emotional intelligence on work team cohesiveness and performance. *The International Journal of Organizational Analysis*, 10(4), 363-379.
- Shields, D.L., Gardner, D.E., Bredemeier, B.J., & Bostro, A. (1997). The relationship between leadership behaviors and group cohesion in team sports. *The Journal of Psychology*, 131(2), 196-210.
- Turman, P.D. (2003). Coaches and cohesion: The impact of coaching techniques on team cohesion in the small group sport setting. *Journal of Sport Behavior*, 26(2), 86-104.
- Weinberg, R.S. & Gould, D. (2007). Group cohesion. In M. Schrag, M. Schwarzentraub & M. Eckstein (Eds.), *Foundations of sport and exercise psychology* (pp. 181-203). Champaign, IL: Human Kinetics
- Westre, K.R. & Weiss, M.R. (1991). The relationship between perceived coaching behaviors and group cohesion in high school football teams. *The Sport Psychologist*, 5(1), 41-54.
- Williams, J.M. & Widmeyer, W.N. (1991). The cohesion-performance outcome relationship in a coaching sport. *Journal of Sport & Exercise Psychology*, 13(1), 364-371.
- Yukelson, D., Weinberg, R., & Jackson, A. (1984). A multidimensional group cohesion instrument for intercollegiate basketball teams. *Journal of Sport Psychology*, 6(1), 103-117.
- Zaccaro, S.J., Peterson, C., & Walker, S. (1987). Self-serving attributions for individual and group performance. *Social Psychology Quarterly*, 50(3), 257-263.