

Motivation to participate in rugby at a South African University

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Abstract

The aim of this study was to investigate what motivates rugby players to participate in rugby, with specific reference to intrinsic and extrinsic motivations. The major grouping variable was between rugby players representing the official teams of a South African university and rugby players playing for their residences. A convenience sample of one hundred rugby players representing official teams (excluding residences) of the University and another hundred rugby players playing for their residences completed a self-administered questionnaire. The major findings are that the two groups do not differ significantly in their intrinsic motivation to play rugby but official team rugby players are much more extrinsically motivated than residence rugby players. The results of the study should assist rugby organisers at universities to understand rugby player motivation.

Keywords: Motivation to participate, Rugby, Intrinsic motivation, Extrinsic motivation, University, Varsity Cup rugby

Introduction

Sport has become a major attraction within the leisure and tourism industries (Isabirye & Surujlal, 2012). Hence, studies of the motivation behind participation in sport and leisure activities should of great interest to members of the tourist and leisure industries who are interested in sport and leisure planning. Varsity Rugby is the collective name for four South African rugby union competitions involving the top rugby playing universities in the country. It was launched in 2008, with eight teams participating in the Varsity Cup competition and each university's internal champions competing in the Koshuis (Residence) Rugby Championships. In 2011, a second tier competition called the Varsity Shield was added, increasing the number of participating universities to thirteen. A Young Guns tournament for the Under-20 side of the Varsity Cup teams was launched in 2012. In 2017 three more universities will be added to the Varsity Shield Competition. All universities participating in the top tier (Varsity Cup) has to field a residence team in the Koshuis Rugby Championship. Smaller universities with an equally smaller player base and equally smaller funding for rugby face a difficult task to motivate students to play rugby at a higher competitive level.

Young men who participate in sport acquire identities that lead them to define their experience in certain ways. The main purpose of this study was to find out if rugby players representing the official teams of a South African university and rugby players playing for their residences differ significantly in terms of their motivation to play rugby. The results might assist universities, who currently compete in the Varsity Shield and who aspire to be promoted to the top tier, namely the Varsity Cup to plan ahead in developing rugby on residence level. Those universities who will be added to the Varsity Shield in 2017 could also find some direction in planning for their development on official rugby level.

People can also have intrinsic or extrinsic motivations when participating in sport and these two sub-dimensions of motivation can be differentiated into competition, exhibitionism, sociability and "playing to the limit" (Recours, Souville & Griffet, 2004:3). Different studies have been conducted

about peoples' motivations for participating in sport, but this research specifically wanted to determine whether intrinsic motivation is more common in residence players and extrinsic motivation more common in University players.

The purpose of this research was to answer the following question:

- Are there differences in terms of intrinsic and extrinsic motives between rugby players playing for their residences and rugby players representing official teams of the University in terms of the following;

The context of this study was participants in rugby at a University and its different residences. The sampling units in this study were the individual players from whom data was collected, but the units of analysis were the different teams playing either for their residences or for official University teams.

Literature review

Intrinsic and extrinsic motivations for playing rugby

Weber (1971) defined a motive as “a combination of meanings which seems to constitute in the eyes of the agent or of the observer the ‘reason’ for behaviour” (Recours *et al.*, 2004:3). There are four dimensions of motivation, namely competition, exhibitionism, sociability and “playing to the limit”. These motives have already been validated in other studies and they reflect the theoretical base of this study. Competition and exhibitionism are extrinsic motivators, with sociability and “playing to the limit” as intrinsic motivators (Recours *et al.*, 2004:3).

Intrinsic motivation

According to Kim (2007:187), intrinsic motivation is a natural inclination that is spontaneously activated by exposure of information. Intrinsic motivation can be defined as a person's drive to act or perform which results from internalized beliefs about the values of the activity and finding the activity rewarding in and of itself (Tosi, Rizzo & Carrol, 1990:737). Deci and Ryan, as cited in Recours *et al.* (2004:3), state that intrinsic motivation is concerned with the pleasure of participating at the present moment in which the deed is performed. As mentioned above, the two intrinsic motivational factors are sociability and playing to the limit. Deci and Ryan in Recours *et al.* (2004:4) noted that the need to be linked to others, i.e. sociability, is a determinant for motivation. Various people enjoy playing rugby and see it as a social gathering where they can spend some time with friends or team mates, and socialization stimulates their need for playing. The concept ‘playing to the limit’ is concerned with the search for danger, risk and adventure (Recours *et al.*, 2004). In rugby, players face a lot of physical risk, which can cause permanent injuries and may even result in a player's premature retirement.

Success is perceived to be attained by athletes if particular goals have been met. There are two orientations, which can be distinguished: to be task-orientated and ego-orientated. These orientations are completely independent from one another. To be task-orientated means that one has a goal of learning or mastering a sport while having an ego orientation means striving to be better than others (Zizzi, Keeler & Watson, 2006:97). This can be linked with intrinsic and extrinsic motivation, with task-orientation similar to intrinsic motivation, and ego-orientation corresponding with extrinsic motivation.

This study attempted to determine if the two relevant groups differ in terms of their intrinsic motivation, with one group being more intrinsically motivated than another. It is therefore hypothesised that:

H_{1(alt)}: There is a difference in intrinsic motivation to participate between rugby players representing the University and players playing for their residences.

Extrinsic motivation

Motivation of individuals can be activated by extraneous factors, termed extrinsic motivation, which is in turn activated by contextual factors (Kim, 2007:187). Extrinsic motivation can be defined as an activity being undertaken for reasons beyond the enjoyment of the activity itself (Recours *et al.*, 2004:3). As mentioned above, the two extrinsic motivational factors are competition and exhibitionism. According to Decci and Ryan (1985), in competition, the reasons for participating are seen as instrumental. A feeling of accomplishment is gained from the fact that one is stronger than the other. The psychologist John Duda (1992:71) said that extrinsic rewards received for doing something well, like medals, trophies or financial rewards, together with the fact that some people compete to prove themselves rather than for the love of the game; may lead to the belief that extrinsic motivation is more on the forefront of sport involvement than intrinsic motivation (Recours *et al.*, 2004:3).

The dimension of exhibitionism is less vague than competition. In competition as a motivational factor, victory is experienced in a personal way, but in the case of exhibitionism the person wants to show his/her superiority, to prove that he/she is better than the rest and to receive recognition for it. Interestingly more males are motivated by exhibitionism than females (Recours *et al.*, 2004:3-4; Zizzi *et al.*, 2006:89-90). The following hypothesis is thus stated:

H_{2(alt)}: There is a difference in extrinsic motivation to participate between rugby players representing the University and players playing for their residences.

Methodology

Sampling

The respondents that were used in this study are rugby players representing the official teams of the University and rugby players playing for their residences. This University wished to remain nameless. Although previous research has been done on the different constructs being tested, no in-depth studies have been done on the differences between residence players and University representatives with regard to these topics. The research findings will be important to rugby organisers at a University Rugby Club, as it will help them to understand what motivates some players to play for their residences even when they have the opportunity to play for the University. The findings also shed some light on what motivates rugby players on University level to participate in the game, and this knowledge will be useful in the marketing and sale of rugby related products. These issues are of practical importance and will fill gaps left by previous researchers in sports literature.

The target population for this study consisted of males playing rugby either for the University or for one of its residences. As the University Rugby Club is open for anybody who has the ability to play there and is registered at the club, the respondents did not necessarily have to study at the University. The units of analysis were the rugby teams at the University and eight different residences.

The sampling method that was used is non-probability purposive quota sampling. Non-probability sampling is subjective, and when choosing subjectively one normally does so with a goal in mind, like only talking to males (Cooper & Schindler, 2006:407). This was one of the main reasons that non-probability sampling was used, as in this case, the subjects were male rugby players and the

sample only focused on them. Purposive sampling is a method that conforms to certain criteria, and quota sampling is a type of purposive sampling (Cooper & Schindler, 2006:424). This study used purposive quota sampling as the sample used, shared the criteria that all the respondents play rugby at the University.

A disadvantage of this type of sampling is that it can not be used for very large sample surveys (Anderson, Sweeney & Williams, 2003: 792). As the sample used in this study was only 200 respondents, non-probability sampling was appropriate. The use of non-probability sampling is a limitation of a quantitative study as the findings of such a study can not be generalized to a larger population. This study had a minimum sample size of 200 respondents. To reach this sample size, 100 questionnaires were distributed to residences players and 100 to players representing official University teams. Of the 200 questionnaires distributed, all were completed and received back, and since none of them had missing responses, all 200 were usable. The respondents provided a reasonably representative profile of rugby players at the University as replies were obtained from eight different residences, as well as from players representing different University Rugby Club teams. Table 1 in the results section provides a demographic and behavioural profile of the 200 respondents who participated in this study.

Data collection

Data collection method

The questionnaire was pre-tested with a sample of 20 rugby players using the collaborative participant pre-testing method described by Cooper and Schindler (2006:396). Of these respondents, 10 were rugby players playing for their residences and 10 were rugby players representing official teams of the University. The data was collected over a three week period using a self-administered survey with a field worker present.

The self-administered survey is pervasive in modern living and normally consists of a short questionnaire left to be completed by the participant (Cooper & Schindler, 2006:254). This was seen as the only viable option for this study, as it had the lowest cost while still providing accurate results, and the researchers, who acted as field workers, were present to answer questions and provide assistance (Cooper & Schindler, 2006:253).

The residence rugby players were approached by visiting each residence and asking players to complete questionnaires. As the club rugby season was over by the time the data collection process began, these players had to be located through word of mouth and referrals by team mates and residence players. No incentives were provided to respondents to complete the questionnaire.

Measures

Motivation

Pelletier, Fortier, Vallerand, Brière, Tuson and Blais' (1995) Sport Motivation Scale and Pelletier, Rocchi, Vallerand, Deci, and Ryan's (2013) revised Sport Motivation Scale were used to determine what motivates the respondents to play rugby. The 24-item multiple-item rating scale measured two dimensions of motivation, namely intrinsic motivation (items 2.1 – 2.12) (see Table 2) and extrinsic motivation (items 3.1 – 3.12) (see Table 3). No items were reverse scored.

The original Sport Motivation Scale consists of 28 items, 4 of these measuring amotivation. These 4 items were left out for this study, as only intrinsic and extrinsic motivational factors were measured. The original scale also has scale points labelled in the top row from 1 to 7, which were

lowered to 1 (“Does not correspond at all”) to 5 (“Corresponds exactly”) to reduce the scale’s complexity. The Cronbach alpha coefficient for the remaining 24 items is 0.86, which indicates acceptable internal consistency reliability. Cronbach alpha values were also tested for the sub-dimensions in the scale, with a result of 0.87 for intrinsic motivation, and 0.78 for extrinsic motivation. Both of these values also indicate acceptable internal consistency reliability. A study by Pope and Wilson (2012) lend partial support for Vallerand’s (1997) contentions regarding the importance of motivation processes in sport and the use of this Scale is still relevant..

In Chantal, Robin, Vernat and Bernache-Assollant (2003:4), Cronbach alpha values of 0.74 to 0.82 were obtained for the sub-dimensions of this scale, which means the values of between 0.78 and 0.87 for this study is slightly higher. All responses were averaged to determine an overall intrinsic motivation and an overall extrinsic motivation score. A higher score on the intrinsic motivation items coupled with a lower score on extrinsic motivation items indicates a high level of intrinsic motivation, and vice versa.

Results

Descriptive statistics

Of the 200 respondents (100 represented official university teams and 100 played for their residence teams), 86.5% were Afrikaans speaking, 12.5% English speaking, and only 1% of respondents indicated another home language.

Univariate descriptive statistics for rating scales

Table 1 below presents the mean (*M*) ratings of intrinsic motivation for taking part in certain activities. The highest intrinsic motivation is associated with “for the intense emotions I feel when doing a sport that I like” (*M*=4.03, *SD*=1.15) and the lowest intrinsic motivation is associated with “for the pleasure of discovering new training techniques” (*M*=3.09, *SD*=1.07). The average mean and standard deviation for intrinsic motivation is 3.58 and 1.11 respectively.

Table 1: Intrinsic motivation for participating in sport (N=200)

	<i>M</i>	<i>SD</i>
Intrinsic motivation	3.58	1.11
1.1 For the pleasure I feel in living exciting experiences	3.71	1.21
1.2 For the pleasure it gives me to know more about the sport I practice	3.50	0.99
1.3 For the pleasure of discovering new training techniques	3.09	1.07
1.4 I feel a lot of personal satisfaction while mastering certain difficult training techniques	3.87	1.01
1.5 For the pleasure I feel while improving some of my weak points	3.47	1.09
1.6 For the excitement I feel when I am really involved in the activity	4.02	1.12
1.7 For the satisfaction I experience while I am perfecting my abilities	3.74	1.36
1.8 For the intense emotions I feel when doing a sport that I like	4.03	1.15
1.9 For the pleasure that I feel while executing certain difficult movements	3.66	0.94
1.10 For the pleasure that I feel while learning training techniques that I never have tried before	3.30	1.30

	<i>M</i>	<i>SD</i>
1.11 I must do sports regularly	3.34	0.87
1.12 For the pleasure of discovering new performance strategies	3.28	1.19

The mean (*M*) ratings of extrinsic motivation for taking part in certain activities are offered in Table 2 below. The highest extrinsic motivation is associated with “it is absolutely necessary to do sports if one wants to be in shape” (*M*=3.80, *SD*=1.07) and the lowest extrinsic motivation is associated with “I would feel bad if I was not taking time to do it” (*M*=2.60, *SD*=1.19). On average, the mean and standard deviation for extrinsic motivation is 3.31 and 1.11 respectively.

Table 2: Extrinsic motivation for participating in sport (N=200)

	<i>M</i>	<i>SD</i>
Extrinsic Motivation	3.31	1.11
2.1 It allows me to be well regarded by people that I know	3.45	1.21
2.2 It is one of the best ways to meet people in my opinion	3.31	1.20
2.3 It is absolutely necessary to do sports if one wants to be in shape	3.80	1.07
2.4 For the prestige of being a rugby player	3.54	0.99
2.5 It is one of the best ways I have chosen to develop other aspects of myself	3.41	1.24
2.6 I must do sports to feel good about myself	3.10	0.84
2.7 People around me think it is important to be in shape	2.89	0.97
2.8 It is a good way to learn lots of things which could be useful to me in other areas of my life	3.29	1.34
2.9 I would feel bad if I was not taking time to do it	2.60	1.19
2.10 To show others how good I am at my sport	3.26	1.13
2.11 It is one of the best ways to maintain good relationships with my friends	3.49	1.11
2.12 I like the feeling of being totally immersed in the activity	3.61	1.02

Hypothesis Tests

Hypotheses

Hypothesis H_1 and H_2 focused on the differences in intrinsic and extrinsic motivation between rugby players playing for their residences and rugby players representing official teams of the University.

$H_{1(alt)}$: *There is a difference in intrinsic motivation to participate in rugby between players representing the University and players playing for their residences.*

$H_{2(alt)}$: *There is a difference in extrinsic motivation to participate in rugby between players representing the University and players playing for their residences.*

These two-tailed (non-directional) hypotheses were tested at a 5% level of significance (i.e., $\alpha = 0.05$).

Since intrinsic and extrinsic motivation was measured at an interval level of measurement, the appropriate parametric significance test is the independent sample t-test. The assumptions for the independent sample t-test were not satisfied in the case of this hypothesis, and therefore the Mann-Whitney *U* test was used as a non-parametric alternative (Pallant, 2010:260).

Two significance tests were considered, namely the independent sample t-test as a parametric test and the Mann-Whitney *U* test as its non-parametric alternative. The most important assumptions for the independent sample t-test are that the variables on which the two groups are compared have a normal distribution in both populations. It also assumes that the variable on which the two groups are being compared has an equal variance in both groups. The assumption for normality was assessed through the Kolmogorov-Smirnov test for normality as well as through a visual inspection of the relevant histograms (Pallant, 2010:260-261). Slight departures from normality were detected in both sub-samples.

In these hypotheses, the data violated the normality assumption of the independent sample t-test, and therefore the non-parametric Mann-Whitney *U* test was used. The most important underlying assumptions of the Mann-Whitney *U* test are that random samples are used, and that observations are independent of one another, and that the data from one subject cannot influence the data from another. Each case can also only appear in one category or group (Pallant, 2010:287). Since the samples used in this study were completely random and each person was only counted once and appeared in only one category, the Mann-Whitney *U* test was seen as appropriate for both of these hypotheses. Table 3 below provides relevant descriptive statistics and also summarizes the results of the Mann-Whitney *U* test conducted to test hypotheses H_1 and H_2 .

Table 3: Descriptive statistics on the results of the Mann-Whitney *U* tests conducted to test H_1 and H_2

Hyp.	Motive	Group	<i>n</i>	<i>M</i>	<i>SD</i>	Results: Mann-Whitney <i>U</i> Test
H_1	Intrinsic Motivation	Official University team	100	3.61	0.71	Test statistic: 4861 2-tailed <i>p</i> -value: 0.73
		Residence team	100	3.56	0.65	Conclusion: Not significant difference, $H_{1(alt)}$ rejected
H_2	Extrinsic Motivation	Official University team	100	3.61	0.49	Test statistic: 2217 2-tailed <i>p</i> -value: 0.00000000000947
		Residence team	100	3.02	0.59	Conclusion: significant difference, $H_{2(alt)}$ accepted

The table indicates that there is not a statistically significant difference in the intrinsic motivation to participate in rugby between players representing the University and players playing for their residences. There is however a statistically significant difference in the extrinsic motivation to play rugby between these two groups as the *p*-value in H_2 is close to 0.000, which is significantly smaller than 0.05. The null hypothesis can thus be rejected and the alternative hypothesis be accepted.

Discussion

This study investigated the differences between rugby players representing official teams of the University and rugby players playing for their residences, in terms of their motives to participate. This research contributes to sport literature and particularly rugby literature, as no other studies have been done on the differences in these two levels of rugby players in a University setting before. It must be noted that Mumm and O'Connor (2014) investigated the motivational profile of professional male Fijian rugby players.

The results indicated that there was no difference in the two groups in terms of their intrinsic motivation, but players representing official teams of the University had relatively higher levels of extrinsic motivation than rugby players playing for their residences.

Sociability is one determinant of intrinsic motivation which is linked with the need to be with someone. It is in line with the results from Recours *et al* (2004:16) which showed that there was a significant and positive relationship between regularity of sporting activity and motivations pertaining to sociability and playing it to the limit. Results from Recours *et al* (2004:16) showed that there was a significant relationship between competition motive and the institutional context within which individuals prefer to participate which can be linked with players playing for official teams and their extrinsic motivations towards it. An unexpected finding in this study is the fact that there is no statistically significant difference in intrinsic motivation between the two groups of rugby players. This can possibly be explained by 'love of the game'. Any person who chooses to play rugby at University level will still love and enjoy the game, no matter what team he plays for.

This study also indicated that rugby players representing official teams of the University are more extrinsically motivated than rugby players representing their residences. From this it can be concluded that the more prestigious the team the players play for, the more the players are concerned with status and exhibitionism. According to Recours *et al* (2004:3), extrinsic motivation is more on the forefront in sport involvement than intrinsic motivation. This is because of the fact that many people participate in sport to prove themselves rather than playing sport for the "love of the game".

The dimension of exhibitionism means that a person wants to show his/her superiority, to prove that he/she is better than the rest and to receive recognition for it. Interestingly more males are motivated by exhibitionism than females (Recourse *et al.*, 2004:3-4; Zizzi *et al.*, 2006:89-90). Since this study is focused solely on males, exhibitionism and extrinsic motivation can have several implications. When a rugby player is extrinsically motivated, it signifies that he wants people to look at and admire him for excelling at his sport. From this it can be concluded that these players will want the best rugby boots, clothes, scrumcaps etc. This research can thus be important to marketers of these types of products, and help them to focus on the right market segment when offering their products.

Limitations

One of the limitations in this study is related to the sampling method used. The use of non-probability sampling is a limitation of a quantitative study, as the findings of such a study cannot be generalized to a much larger population. This study was also limited by the fact that it focused on a student sample as all respondents were linked to official University and residence rugby teams. This study was conducted in a single industry, namely rugby players at a University, and this means that the results cannot be generalized to other industries, such as provincial or national rugby teams.

Other contextual factors that could have limited the findings in this study are specific events and circumstances that could have had an influence on the nature and quality of the data collected. An

example of such a factor is negative feelings that a respondent could have towards rugby after the elimination of his team from the league.

Recommendations for future research

This study was limited to rugby players' motivation for playing rugby. Future work should examine other factors such as the commitment a player has to his team, and if this commitment differs according to the team he represents. Commitment can be measured through players' dedication to practises and their willingness to stay with the same team indefinitely.

It is also recommended that the importance that success and winning has for different groups of rugby players be investigated in future research. The focus of the study should be on the different levels of joy felt by University players after winning an intervarsity and residence players after winning the residence rugby league.

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