

An Investigation of Youth Basketball Players' Participation Motivations and Relate Elements

Howard Z. Zeng^{1,*}, Wenyan Meng²

¹Brooklyn College of the City University of New York, USA

²Education Research Institution of Jiangsu Province, Nanjing, China

Abstract Participation motivations are important for youth basketball players (YBPs) keep engaged in their practices and competitions. This study explored what are the crucial factors that actually motivate YBPs engage in practices and competitions continually. Using data from a sample of 101 YBPs, results indicated that the top six motivation factors (MFs) among total of 19 MFs were: 'Content and unique-value', 'Fun and get rid of boredom', 'Contest winners', 'For healthier', 'Enjoyment and happiness', 'Shape body'; while the secondary high impact MFs included: 'Improve health', 'Reduce pressure', 'Make new friends', 'Become a professional-player', 'To my biography', and 'Become a coach'. The MANOVA results revealed: no significant difference in 'Gender' aspect, however, significant differences were found in 'Support-by' and 'Goal-setting' aspects. In conclusion, gender is not the determination aspect; but 'Support-by' and 'Goal-setting' are. Participants who support-by school possess higher motivations than those support-by parent; set 'goal for professional' players possess higher motivation than those set 'goal for non-professional' players. Reasons behind of these findings were exhaustively discussed.

Keywords Youth basketball player, Participation motivation, Practices, Competitions

1. Introduction and Background

Since the second summer Youth Olympic Games (YOG) was held in Nanjing, China in 2014 [1], youth basketball have become one of the hottest sport for the young people who have an sport star dream and that has become an interest research topic in China [2]. However, what reasons/factors that really motivated those youth athletes keep engaged in the sport they love and enable them reaching such high level is rarely covered. For this inquiry, this study want to focus on the youth basketball players' (YBPs) motivations in the city of Nanjing, because since the 2014 Nanjing YOG, youth basketball has obtained much attention from the city and province. The present study aim at: to investigate what are the crucial reasons/factors that actually motivated YBPs engaged in their practices and competitions continually; to use the data collected making exhaustive analyses, so that consequential information and beneficial advices can be provided to their youth sport organization for further improving their youth basketball teaching, coaching and management; to provide suggestions and advices that are suitable for those young athletes; that may facilitate their 'sport star' dream become true.

According to research literature in youth sports studies, generally speaking, the goal and reasons of youth players engaging in the sports they are: 'enjoyment', 'physical health', 'having fun', 'foster self-esteem', 'friendship', 'passion or love the game', and 'peer acceptance', whereas the first three reasons are somewhat similar to those participate motivations in the dominant sports events of Western societies [3-6]. Moreover, Miguel and Machar (2007) and Cohn and Cohn (2016), pointed out that participation motivation supports a successful sport performance; representing one of the most important psychological skills in the game that is playing [7, 8]. Based on the above indicators, we are wondering: whether or not YBPs would be motivated to engage in their practices and competitions as what the literatures have defined? However, one vital problem is: literatures in the youth sports athletes' motivation category shown, research studies involved in participation motivations and relates behaviors for YBPs are extremely limited.

1.1. Purpose and Hypotheses

Grounded on the above introduction and background, although some of the reasons or factors (as listed above) have known in general; but little is known about what kinds of reasons or factors that actually motivated different types of YBPs who have continually engaged in basketball practices and competitions. The purpose of this study, therefore, is to explore what factors or reasons that truly motivated the

* Corresponding author:

HZeng@brooklyn.cuny.edu (Howard Z. Zeng)

Published online at <http://journal.sapub.org/ijap>

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YBPs who have playing basketball for years and have reached top level at a remarkable city's youth basketball league in China.

The following specific hypotheses guided the current study: (1) no significant differences would be found on the motivation factors (MFs) between the athletes' 'Gender' (male or female); (2) no significant differences would be found on the MFs between the athletes' who were 'Support-by' (school or parent); 3) no significant differences would be found on the MFs between the athletes' 'Goal-setting' (for professional or for non-professional). Additionally, the eleven related elements on 'Free Times', 'Activities-Engagement', 'Practicing Frequency', 'Training Condition', 'Competition Frequency' and 'Financing situation' of the YBPs would also be investigated. The findings from this study would reveal and add a new set of data and first-hand information into the youth athletes study literatures, especially concerning to YBPs' motivations and related elements can be as a meaningful frame of reference for their future teaching and coaching.

1.2. Theoretical Framework

A comprehensive theoretical framework named 'self-determination theory' (SDT) was employed as the theoretical frame of this study [9]. The SDT is comprised of two major branches: the theory of intrinsic motivation and the theory of extrinsic motivation. Ryan and Deci (2000) indicated that: humans are motivated by three basic psychological needs: competence, relatedness, and autonomy [9]. The competence needs in the SDT model is called effectiveness motivation; the relatedness needs refers to people's need to belong and to feel accepted by others; and the autonomy need, however, refers to people's need to feel self-determined, it is the source of their own action [9]. Similarly, Harter (1981), Pintrich and Schunk (2002) described that organismic needs energize intrinsic and extrinsic motivations, but believe this concept is too general to explain the engagement in specific behaviors, such as engaging in sport competitions [10, 11]. Researchers, therefore, developed a few models that described how motivation triggered by need manifests in intrinsic and extrinsic motivation in specific fields and activities. These models also explained how factors in a specific environment might shape and affect the types of motivation that athletes manifest in different actions or behaviors [10, 11].

Furthermore, Breese (1998) illustrated that athletics initial motivation should be defined as intrinsic motivation (participating in sport for enjoyment) or extrinsic motivation (participating in sport to gain rewards) [12]. Breese (1998) continued, athletics initial motivation usually predicts athletes' attendance and adherence to a particular sport [12]. Such as in our study, a youth basketball player who is intrinsically motivated would be those who go to play or practice his skills every other day for fun; whereas a youth basketball player who is extrinsically motivated would be those who goes to play or practice his basketball skills and

strategies to become a better player at the competition so that he/she could win a medal at a competition. It is interesting to know that intrinsic and extrinsic motivation have different effects on an athlete, including whether or not he/she continue on the sport he/she had choose.

Similarly, Ryan and his colleagues (1997) explained that individuals who were mainly motivated by competence (engaging in exercise to expand skills) and enjoyment (desire to have fun) could be primarily defined as being motivated intrinsically. In contrast, extrinsically motivated individuals are those behaviors performed in intrinsic motivation aim at to obtain rewards or consequences that are separate from the behavior itself [13]. Breese (1998) further illustrated that when athletes begin participation in a particular sport, they are motivated not only by intrinsic factors but also by extrinsic factors [12]. Some particular sports, however, may be more relying on *intrinsic motivation* than *extrinsic motivation* -as described in Ryan and his colleagues (1997) [13]. The reasons are different types of sports need different types of motivation (Breese, 1998). In the current study, we were trying to find out those evidences or the factors that have actually motivated the participants who have engaged in and engaging in the sport of basketball.

2. Methods

2.1. The Sampling

Sampling for the participants in this study were selected from 10 schools of Nanjing city, in which five were regular high schools have basketball as their traditional sport and five sport-schools based on the record of the division of Jiangsu province sports administration (2015) in the youth basketball category [14]. According to Jiangsu.net (2015), Jiangsu province possesses the following unique features: a) Jiangsu is one of the most developed areas in economy, technology and culture in China; its industries total output is one of the largest in the nation. b) Jiangsu is a center of education and science, possessing the highest density of academic institutions and universities, colleges, and research institutes in China. c) Athletes of Jiangsu province have won more gold medals during the past 10 years than did athletes from any other provinces in China [15]. Remarkably, the city of Nanjing is the capital of Jiangsu provinces just held the second youth Olympics Games not long ago. Nowadays, the youth basketball players have the following way out or futures: a) become a professional player; b) become an elite youth player, earn the credits to go to a good college or university; c) even if not able to become an elite youth player, it still able to go to college or get a decent job, etc.

After Nanjing YOG, sports facilities in this city become abundant, even though previously the city of Nanjing was not lack of sports facilities. While youth basketball become one of the hottest sport in Nanjing. Moreover, Populous (2005) described, "Nanjing Sports Park has also demonstrated the significance that Governments are placing

on the value of sport and its impact on a community. Sport can help generate goodwill among the population when developing a new city" [16]. This is why we purposefully selected Nanjing as our sampling.

2.2. The Instrumentation

The Adopted Questionnaire of Youth Basketball Player's Motivation^{-Chinese Version} (AQBPM^{C.V.} Zeng & Xie, 2015) was employed for data collection [17]. The reasons for using this questionnaire were: a) There is an existing questionnaire with similar purposes, b) to develop a new questionnaire, much more times and funding are needed, c) specialists in basketball motivations and relate behaviors study are available for revising key words from the exist questionnaire to specify uses for youth basketball players and d) research assistants or youth basketball coaches are available for the questionnaire distribution and collection.

2.2.1. Reliability and Validity of the Instrument

According to Child (1990), in order to explore the possible underlying factor of the structure for a set of measured variables without imposing any preconceived structure on the outcome, the exploratory factor analysis (EFA) is the best solution [17]; therefore, the EFA was executed for the AQBPM^{C.V.}. The results revealed: the analysis extracted 6 factors with perfect correspondence to the 19 items with eigenvalues for the reasons or factors ranging from 2.71 to 8.63 and structure coefficients from .78 to .92 and the majority of the fitted residuals reached the pre set-up significant difference ($P < .05$) level.

Furthermore, the validation process was through a pilot study, reviewing to the content or items. These processes confirmed the following concerns: a) the readability and writing skills of the youth participants (15–17 years old); b) whether or not those youth athletes can truly understand and respond to the questions in the questionnaire correctly; c) it may result in re-wording on some questions or statements to improve the understanding for those youth athletes; d) it may result in cutting or adding numbers of the questions or statements in the questionnaire, and e) whether or not the questions or statements have asked all the possible motivation factors/reasons for the athletes participation in basketball practices and competition.

As a result, the AQBPM^{C.V.} contained three parts: Part I asked 'General Information', containing seven questions that covered participant's general information. Part II asked, "What reasons/factors that truly motivated you engaged in basketball practices and competitions continually?" with 19 motivation factors (MFs) provided. In each MF the participant responds in a 5-points *Likert type scale* (5-points represents "Strongly agree", 4-points represents "Agree", 3-points represents "Somewhat-agree", 2-points represents "Little-agree", and 1-point represents "Disagree") [19]. Part III asked 11 relate questions or elements that concern the youth athletes' 'Free Times', 'Activities-Engagement', 'Practicing Frequency', 'Training Condition' 'Competition

Frequency', and 'Financing Situations'. For clearer, since these 11 relate questions or elements belong to qualitative data, therefore, the frequency and percentage were utilized to deal with these data.

In summary, Part II of the questionnaire contains ten intrinsic motivation factors (items 1, 2, 6, 7, 8, 9, 13, 14, 15, & 18); and nine extrinsic motivation factors (items 3, 4, 5, 10, 11, 12, 16, 17, & 19). In the other words, it included the three basic psychological needs (competence, relatedness, and autonomy) described by Ryan and Deci (2000) [9]. Part III contains 11 relate elements about the YBPs' 'Free Times', 'Activities-Engagement', 'Practicing Frequency', 'Training Condition' 'Competition Frequency', and 'Financing Situations' which is qualitative data. All questions and items in AQBPM^{C.V.} can be found in Table 1 and Table 2.

2.2.2. Data Collection

The questionnaires were distributed to the YBPs during a planned practice day of their team by the researchers under the supervision of their coaches or administrators. The YBPs were given their rights to participate or not to participate and the 'confidentiality' of the survey was well informed. Then, the 'directions' about how to respond to the questions and items were illustrated; consequently, 150 YBPs received the AQBPM^{C.V.}, amount of them 101 completed the questionnaire correctly and returned the researchers (Return rate = 67.33%), at this point, the participants also signed the Informed Consent Form. Moreover, an envelope for preventing the participant's coach from viewing the responds in the questionnaire was offered. The coaches were informed that: After the study accomplishing, they would be provided the overall outcomes of the study.

2.2.3. Research Design and Data Analyze

The current research design was to look at the effects of three independent variables on 19 dependent variables in the same time; therefore, a 2 x Gender (male or female) x 2 Support-by (school or parent) x 2 Goal-setting (for professional or for non-professional) multivariate analysis of variance (MANOVA) was implemented. The descriptive statistics reflected the general status of how the youth athletes were motivated engaging in basketball practices and competitions; and the 2 x 2 x 2 MANOVA examined whether or not there are significant differences exist among the three independent variables and the 19 dependent variables. Additionally, a follow up MANOVA test would reflect what differences exactly exist among the dependent variables. The statistical program used for the data analyses was IBM Statistical Package for the Social Sciences (SPSS) Version 22 [20]. And the 11 relate elements about the youth athletes' training and competition status in the Part III of the questionnaire was to reflect the youth athletes' 'Free Times', 'Activities-Engagement', 'Practicing Frequency', 'Training Condition', 'Competition Frequency' and 'Financing Situations'.

3. Results

3.1. Participants' General Information

The following section presents the findings from the current study. It is structured to address the reasons / factors how the participants engaged in the sport of basketball. In total of the 150 questionnaires delivered, 101 were answered correctly and returned (-about 67 percent response/return rate). Data in Table 1 reflected "General Information of the participants". For example, they were 15 to 17 years old, currently study in high school level (grades 9 to 12); 52 were from Sport-School, and 49 were from regular school has basketball as their traditional sport (simply called 'BTS'). Moreover, there were 61 boys and 40 girls, and they have been officially engaged in basketball practicing and competitions for 3 to 5 years; their height range was from 166 CM to 203 CM, and weight range was from 56.30 KG to 81.37 KG.

It is worth to illustrate that: youth athletes from the Sport-School represent the highest skill and competitive capability in non-professional level in Chinese competitive sport system; players in sport school practice at least five half day per week, including a morning exercise and an afternoon practice [19]. While the players from the 'BTS' represents the level of skill and competitive capability slightly below those players in sport school; those players might have the talents to become basketball stars but because their academic purchase (e.g., want to go to top university or college, etc.).

Players in the 'BTS' have 3 - 4 after school practices per week. Another fact need to illustrate is: all YBPs' practices/training and competition costs are pay by the school; but the YBPs who play in the 'BTS' teams might need to pay by themselves (usually by his/her parents).

Table 1. General Information of the Youth Basketball Players ($N = 101$, Males = 61, Females = 40, age = 15-17)

# Questions	Answers / Frequency / Percentage
1) What is your gender?	Male = 61 / 60.40% Female = 40 / 39.60%
2) What are your Height and weight?	Height Range = 166 - 203 CM, Weight Range = 56.30 - 81.37 KG.
3) What is your age rank?	15 - 17 (± 1.61) years.
4) How long have you engage in official Basketball training?	3-5 years = 101 / 100%
5) What type is your basketball school?	Sport-School = 52 / 51.49% BTS = 49 / 48.51%
6) What is your current education level?	High School (Grade 9 -12) = 101 / 100%
7) Where do you live during you have Basketball training/practicing?	School = 69 / 68.32% Home = 57 / 31.68%

Note. BTS = Regular School has Basketball as their Traditional Sport

The means score and the standard deviations can be seen in Table 2:

Table 2. Factors / Reasons that Motivated the Youth Basketball Players: Means Score and Standard Deviations ($N = 101$, Age = 15-17)

Motivation Factors (MF)	$M \pm SD$	Sum	Place
MF1. Because basketball with high technical content and unique value.	4.34 \pm 1.06	438.00	1
MF2. For the fun and get rid of boredom.	4.23 \pm .98	427.00	2
MF3. For getting healthier	3.87 \pm 1.01	391.00	4
MF4. For the enjoyment and have happiness	3.85 \pm .97	391.00	5
MF5. In order to meet friends.	3.39 \pm 1.03	389.00	17
MF6. In order to make new friends.	3.61 \pm 1.05	342.00	9
MF7. In order to contest winners.	3.93 \pm 1.15	397.00	3
MF8. In order to shape the body.	3.81 \pm 1.09	386.00	6
MF9. In order to improve physical fitness.	3.66 \pm .89	370.00	7
MF10. For the near future may become a professional player.	3.59 \pm 1.11	363.00	10
MF11. In order to foster self-esteem.	3.39 \pm 1.04	343.00	16
MF12. In order to improve my own-biography.	3.58 \pm 1.06	362.00	11
MF13. In order to establish prestige among my classmates / friends.	3.43 \pm 1.08	347.00	15
MF14. In order to get the recognition from my teacher / coach.	3.22 \pm 1.18	325.00	18
MF15. In order to reduce pressure from academic learning.	3.62 \pm .96	366.00	8
MF16. In order to reduce working pressure.	3.51 \pm .92	354.00	13
MF17. In order to develop an extraordinary skills.	3.45 \pm .97	349.00	14
MF18. Hope to become volleyball coach in the future.	3.50 \pm .97	354.00	12
MF19. In order to satisfy the will of family.	3.14 \pm 1.22	317.00	19

Note. 1) The motivation factor (MF) 1, 2, 6, 7, 8, 9, 13, 14, 15, and 18 are 'Intrinsic motivation factors'; and the MF 3, 4, 5, 10, 11, 12, 16, 17, and 19 are 'Extrinsic motivation factors'. 2) MF1, MF2, MF7, MF4, MF5, MF17 & MF8 scored on the top; 3) the MF9, MF15, MF6, MF10, MF12, & MF18 scored on the middle; 4) the MF16, MF17, MF13, MF11, MF5, MF14, & MF19 scored on the bottom. 5) Grand sum = 7011.00, $M_{Grand} = 368.99$.

Table 3. The 2 x 2 x 2 MANOVA Tests for the Participants' Motivation Factors [$N = 101$, 61 Males, 40 Females; or Support-by (School = 50, Parent = 51) or Goal-setting (For professional = 52, for non-professional = 49)]

Source	Wilks' Lambda	F	Hypo df	Error df	P
1. Gender	.71	1.57 ^b	19.000	73.00	.09
2. Support-by	.55	3.19 ^b	19.000	73.00	.00
3. Goal-setting	.34	2.74 ^b	19.000	73.00	.00

Note. ^aDesign: Intercept + Gender + Support-by + Goal-setting; ^bExact statistic.

Table 4. Descriptive Statistics in the Post Hoc Test: Determine for the Participants' Motivations Scores Exist Significant Differences or Not

Motivations Factors (MF)	Support-by		Goal-Setting	
	School (50)	Parent (51)	Profession (52)	Non-profession (49)
MF 1	4.80 (.45)*	3.88 (1.27)	4.72 (.56)*	3.92 (1.28)
MF 2	4.52 (.73)*	3.94 (1.12)	4.51 (.70)*	3.92 (1.15)
MF 3	4.28 (.72)*	3.47 (1.10)	4.29 (.70)*	3.42 (1.12)
MF 4	3.92 (.77)	3.78 (1.13)	3.98 (.98)	3.70 (.93)
MF 5	3.72 (1.13)*	3.05 (1.13)	3.61 (.85)*	3.14 (1.15)
MF 6	3.58 (1.10)	3.64 (1.01)	3.55(1.21)	3.67 (1.21)
MF 7	4.15 (.89)	3.76 (1.19)	4.25 (.84)	3.57 (1.33)
MF 8	4.04 (.88)	3.61 (1.25)	4.13(1.05)	3.49 (1.06)
MF 9	3.78 (.89)	3.55 (.09)	3.72 (.85)	3.59 (.95)
MF 10	3.92 (.96)*	3.27 (1.16)	4.29 (.54)*	2.83 (1.06)
MF 11	3.18 (1.04)	3.60 (1.02)	3.71(1.15)*	3.06 (.82)
MF 12	3.48 (.95)	3.68 (1.15)	3.92 (.95)*	3.22 (1.06)
MF 13	3.72 (.90)*	3.15 (1.17)	3.76 (.90)*	3.06 (1.12)
MF 14	3.42 (1.31)	3.02 (1.31)	3.53 (.94)*	2.85 (1.30)
MF 15	3.42 (.90)	3.76 (.95)	3.41 (.94)	3.83 (.96)
MF 16	3.62 (1.00)	3.39 (.82)	3.62 (.89)	3.37 (.95)
MF 17	3.70 (.99)*	3.21 (.90)	3.80 (.77)*	3.10 (1.04)
MF 18	3.42 (1.10)	3.58 (.82)	3.56 (1.06)	3.43 (.89)
MF 19	3.72 (1.03)*	2.56 (1.13)	3.21 (1.15)	3.10 (1.21)

Note. 1) This is a follow up test to determine what and where significant differences exist. 2) Among the 38 items comparisons, 18 showed significant differences, * represents at $p < .05$ Level; 3) MF1 to MF19 represent the 19 different motivation factors – as shown in Table 2.

The results of the 2 x Gender: (male or female) x 2 Support-by (School or Parent) x 2 Goal-setting (For Professional or Non-professional) MANOVA in Table 3 showed that: all three independent variables reached the significant different levels. Where in 'Gender' $A = .71$, $F = 1.57$, $p = .09$; in 'Support-by' $A = .55$, $F = 3.19$, $p = .00$; and in 'Goal-setting' $A = .34$, $F = 2.74$, $p = .00$. According to the research design, after significant differences effect was found, a following up MANOVA test would be conducted. This post hoc test determined where and what factors or reasons that truly motivated these participants engaged in basketball practices and competitions, Detail findings are presented in Table 4.

As shown in Table 4, among the 38 comparisons, 18 reached significant differences at $p = .05$ level. Specifically,

eight FMs showed significant differences at $p = .05$ level in 'Support-by' aspect with support by school scored higher than those of by parent; and ten FMs showed significant differences at $p = .05$ level in the 'Goal-setting' aspect with for professional scored higher than those of for non-professional.

The findings from part III of the questionnaire, which was 11 elements related to the 'Free Times', 'Activities-Engagement', 'Practicing Frequency', 'Training Condition' and 'Competition Frequency' and 'Financing Situations' of the participants; these elements are crucial because its possess great influence on the YBPs' participation motivations. All findings are presented in Table 5:

Table 5. Relate Elements on 'Free Times', 'Activities-Engagement', 'Practicing Frequency', 'Training Condition', 'Competition Frequency' and 'Financing- support' of the Youth Basketball Athletes ($N = 101$, Age = 15-17, Gender (61 Boys, 40 Girls))

No. Questions	Answers / Frequency / Percentage	
1) How many free times do you have from Monday to Friday? (Please select the one that most fit your situation)		
a) No free time at all – 0 / 0%	b) 2-3 hours 0 / 0%	
c) 4-5 hours 41 / 40.59%	d) more than 5 hours 60 / 59.41%	
2) How many free times do you have during weekend? (Select the one that most fit your situation)		
a) 1-2 hour – 0 / 0%	b) 3-4 hours – 0 / 0%	
c) 5-6 hours 45 / 44.55%	d) 7 hours and more 56 / 55.45%	
3) What kind of activities do you do in your free time, besides basketball training / practices? (There are choices a to f; choose as many as it fit your situation)		
a) Reading books/magazines 27 / 27.73%	b) Watching TV 68 / 67.33%	
c) Play computer 48 / 47.52%	d) Listening to music 15 / 14.85%	
e) Social meetings 15 / 14.85%	f) Other physical activity 23 / 22.77%	
4) Do you undertake physical activity willingly in your free time? (Included play basketball and other kinds of activity)		
a) Yes, 83 / 82.18%	b) No, 18 / 17.82%	
5) Besides basketball, what physical activity do you involve often? (There are choices A to I; choose as many as it fit your situation)		
a) Swimming 9 / 8.91%	b) Jogging 18 / 17.82%	c) Body building 23 / 22.77%
d) Other fitness 15 / 14.85%	e) Gymnastics 0 / 0%	f) Other team sports 26 / 25.74%
g) Ride bike 17 / 16.83%	h) Walking 10 / 9.90%	i) Martial arts 28 / 27.72%
6) What is your frequency to engage in sports/physical activities? (Including play basketball)		
a) Every day 61 / 60.40%	b) Four times per week 21 / 20.79%	
c) Three times per week 19 / 18.81%	d) Two times per week 0 / – 0 / 0%	
7) Can you access to basketball or Sports-facilities easily or difficultly?		
a) Very easily – 67/ 66.34%	b) Easily -- 18 / 17.82%	
c) It's depend -- 8 / 7.92%	d) Difficultly -- 9 / 8.91%	
8) Does your financial situation allow you to participate in Volleyball practices and competitions?		
a) Yes -- 39 / 38.61%	b) No – 62 / 61.39% (-various reasons)	
9) How often do you attend basketball competition during a semester?		
a) Never -- 0 (0%)	b) Once per semester – 31 / 30.69%	
c) 2 or more times per semester -- 70 / 69.31%	d) Others -- 0 / 0%	
10) Do you attend basketball competition in winter / summer vacations?		
a) Yes, always -- 67 / 66.34%	b) Usually -- 30 / 29.70%	
c) Once in winter or summer -- 4 / 3.96%	d) No -- 0 / 0%	
11) Who pay for the travel and registration fee for your basketball competitions? (You can choose multiples answers according to your situation)		
a) My parents -- 51 / 50.50%	b) My school -- 50 / 49.50%	
c) My team / club 0 / 0%	d) Myself -- 0 / 0%	

Although the elements in Table 5 are not in the motivation factors list but they have essential relationship with the participants' motivation; because those elements are really matter to whether or not the YBPs able to engage in basketball practicing and competitions continually. Amazingly, the participants self-reported that: 1) from Monday to Friday, 59.41percent reported they have more than 5 hours free time, and 30.43 percent said they have four to three hours free time. 2) During weekend, 44.55 percent declared they have 5 to 6 hours free time, 55.45 percent reported them have 7 hours or more free time. 3) In their 'free time', except play basketball, the two activities played by the YBPs were watching TV (67.33%) and played computer (47.52%). 4) 82.18 percent of them reported they

were willingly attended play basketball and physical activities, but 17.82 percent of them said "No". 5) Besides basketball, among the nine physical activity listed, the top three selected by the YBPs were: Martial arts (27.72%), Other team sports (25.74%), and Body building (22.77%) 6) For the question of what is your frequency to engage in sports/physical activities (including play basketball)? The YBPs report were: Every day (60.40%), four times per week (20.79%), and three times per week (18.81%). 7) For accessing to basketball or Sports-facilities easily or difficultly?" 66.34 percent reported them "Very easily", 17.82 percent reported "Easily", 7.92 percent said "It's depend" and only 8.91 percent claimed "Difficultly". 8) When asking "Does your financial situation allow you to

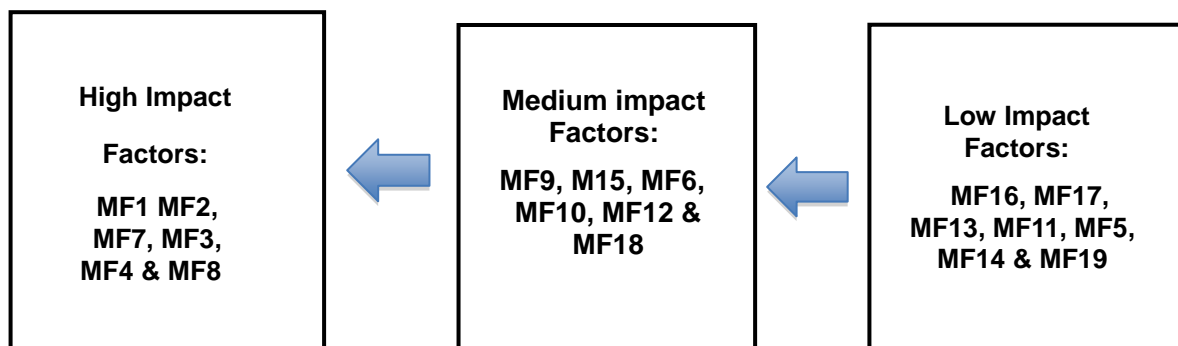
engaged in basketball practices and competitions? There were 38.61 percent declared “Yes!” but 61.39 percent reported a “No” with various reasons. 9) To the question of “How often do you attend basketball competition during a semester?” 69.31 percent declared they attend two or more times basketball competitions per a semester, and 30.69 percent reported they attended one basketball competition per a semester. 10) When asking, “Who pay for the travel and registration fee for your basketball competitions?” 50.50 percent reported, “was paid by my parent”, and 49.50 percent reported, “was paid by my school”.

4. Discussion

The current study was designed for: 1) exploring the current status of YBPs' participation motivations and relate elements in Nanjing, China, and 2) examining if differences exist on the motivation factors among the ‘Gender’, ‘Support-by’, ‘Goal-setting’ aspects of the participants. According to the MFs mean scores presented in Table 2, the placements of the 19 MFs should be divided into three impact groups: a) High impact group, it comprises of MF1 MF2, MF7, MF3, MF4 & MF8; these six MFs possess the

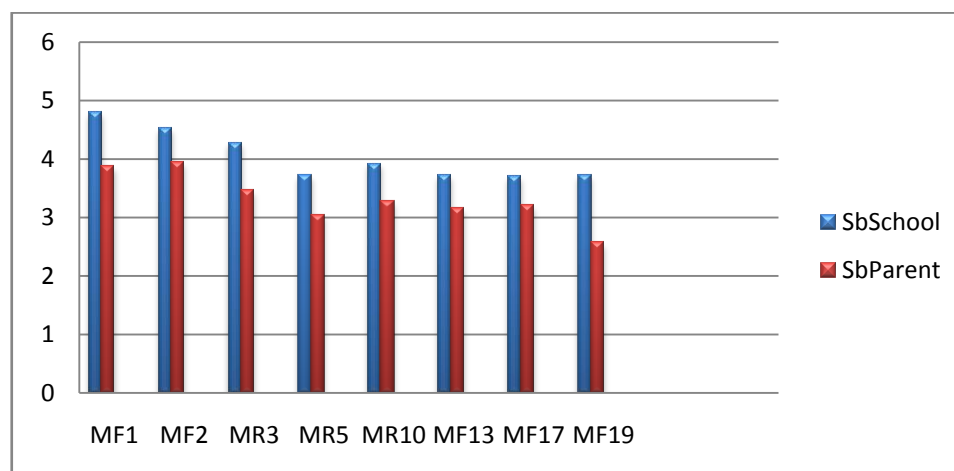
highest impact power on this sample YBPs' motivations. Interestingly, among this group's MFs, MF1, MF2, MF7 and MF8 are within the ‘Intrinsic motivation factors’ category; other two MF3 and MF4 are in the ‘Extrinsic motivation factors’ category. b) Medium impact group, it comprises of MF9, MF15, MF6, MF10, MF12 and MF18. These MFs possess medium impact power with intermediary scores on this samples YBPs' motivations. Amazingly, among this group's MFs, MF9, MF15, MF16 and MF12 are within the ‘Intrinsic motivation factors’ category again; the other two MFs (10 & 12) are in the ‘Extrinsic motivation factors’ category. c) Lower impact group, it includes the rest seven MFs with lower scores. These MFs possess less impact power on this samples' motivation. Incredibly, among this group's MFs, MF16, MF17, MF5, MF 11 and MF19 are in the ‘Extrinsic motivation factors’ category; the other two MFs (13 & 14) belong to ‘Intrinsic motivation factors’ category. The motivation features of this sample can be summarized as Fig. 1. (The actual value of each MF can be found in Table 2).

The comparing for the motivation scores reached significant differences in ‘Supporting-by’ (school or Parent) valuable was present in Chart 2.



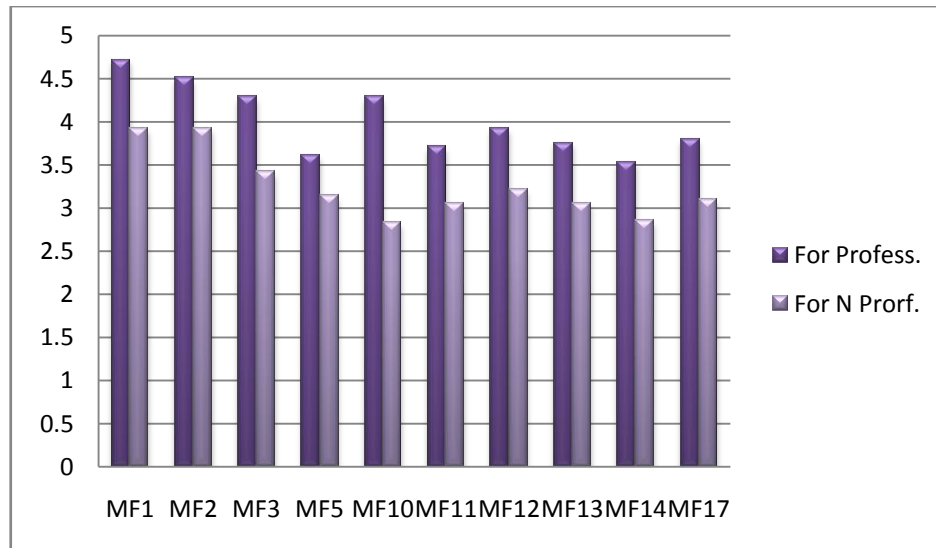
Note. 1) The motivation factor (MF) 1, 2, 6, 7, 8, 9, 13, 14, 15, and 18 are ‘Intrinsic motivation factors’; and the MF 3, 4, 5, 10, 11, 12, 16, 17, and 19 are ‘Extrinsic motivation factors’; and 2) These 19 MFs reflected the ‘Competence Needs’, the ‘Relatedness Needs’ and the ‘Autonomy Need’ in the ‘Self-Determination Theory’ model interpreted by Ryan and Deci (2000)

Figure 1. Three Layers / Groups of Youth Basketball Players' Motivation Factors



Note. These are eight comparisons that reached significant difference level among the 19 comparisons within the ‘Supporting-by’ valuable.

Chart 1. Comparing the Motivation Scores Reached Significant (p .05) Level in ‘Supporting-by’ (school or Parent) valuables



Note. These are eight comparisons that reached significant difference level among the 19 comparisons within the 'Goal-setting' valuable.

Chart 2. Comparison the Motivation Score Reached Significant (p .05) level in the 'Goal-Setting' Valuable

Regarding the current status of this sample's participation motivations, it was clear enough: the Grand mean score for these 101 youth basketball players is 3.69 at a 5-points Likert type scale, this M_{Grand} score is nearly the upper level in this scale or the participants' motivations are at a positive status, that signify in the area their coaches, teachers and administrators have done a pretty good job in order to nurture them become successful athletes even though there are still room for improvement.

The following discussion are about the 18 significant differences among the 38 comparisons results summarize in Table 4: First, there are 8 FMs showed significant differences at $p = .05$ level in the 'Support-by' aspect with support by school scored over support by parent. The reasons behind of these differences have something to do with: (a) in China' so called 'three levels competitive system, the sport school is right on the first level, the government has a special budget for it. (b) Youth players or student-athletes who are enrolled into sport school must have passed the strict testing and selection, signify that whoever been selected possess better athletics prudential or capabilities. (c) More competing experiences and chances on receiving sport psychological education is another reason of students athletes in sport school – (support by school) scored higher than students athletes in the regular school has basketball as a traditional sport – (support by parent). As exhibiting in the Chart 1.

Second, there are 10 FMs showed significant differences at $p = .05$ level in the 'Goal-setting' aspect with setting their goal for professional scored higher than those of setting their goal for non-professional. The reasons behind of these differences have something to do with: (a) it is not hard to comprehend that higher goal setting needs higher motivation, higher persistent and greater willpower. (b) Any kind of goal setting is based on one's objective analysis about his / her special ability or capability. (c) Similar to what have

described on the 'Support-by' aspect above. (d) As presenting in the Chart 2 as well. (e) Research showed that higher level of goal setting motivation was found among the highest level's athletes who were competing in their sports [8]. (f) More successful athletes were educated and believed that goal setting is a key driving force in competitive sports, and a vital factor in the development of gifted youth players. (See Chart 2. as well).

On the other hand, to the youth basketball athletes who came from regular school has basketball as traditional sport, when they facing those motivation factors (such as: meet friends, contest winners, get the recognition, establish prestige, and become a professional player), their reaction or responds were not as exciting as those from sport-school. Their common responds are: showed less excitement to those factors or elements; because they have gone through different situation in their practices, trainings, and attending competitions, more importantly, this type of athletes usually have higher academic ambition, they may have plan to play in a college or an university team, but to 'make new friends', 'contest winners', 'become a professional', 'establish prestige' in basketball, and 'become a coach in future' and so on that might not in the list of their most import things to be accomplished. Similarly, a situation like in the USA, (the America National Collegiate Athletics Association), China also has a National Collegiate Athletics Association. In another word, for those youth basketball players who love to player basketball, they still have a chance to pursue their sport star dream by playing in their future university / college varsity team; therefore the findings of this investigation came out with 10 out of 19 comparisons between the goal setting for professional group scored significant higher than those of goal setting for non-professional group.

Additionally, although the YBPs at the traditional sports school have less times for practicing and competing, plus the reality tell them that: there is much less opportunity for them

to become a basketball-star; but they are still in the category of 'promising youth basketball player' and have possibility to play in the university varsity level. Over the years, many Chinese YBPs who graduate from the traditional basketball school have been playing and competing in the Chinese National University Games [21]. Where these motivations come from? Probably these can be attributed to the 'Intrinsic motivation'.

As indicated at the 'Introduction and background section', "research studies involved participation motivations in youth basketball players are extremely limited", however, one article titled "How to motivate your young athlete to get better" (Cohn, P., & Cohn, L., 2016) has suggested that: In order to motivate your youth athletes, coaches need to know what factors get your athletes motivated. The following factors was in their suggestion list: 1) Love to practice and compete; 2) Like to work on weaknesses so they can improve; 3) Get excited about competition; 4) Want to win and hate to lose; 5) Have high expectations for their performance; 6) Are dedicated to their sport; 7) Stay committed even when challenged; and 8) Go after their goals with intensity [8].

Then, what further discussions can we make? Besides some similarities exist between the current study and those previous studies, there are some differences exist as well. For example, using the previous studies findings for the other sports (Note: since the lacking of resources in youth basketball athletes' participation motivations, we have employed the research findings from the other youth sports). Miguel and Machar (2007) in their review of literature "Motivation in Tennis" summarized [7]: a) 'Enjoyment', 'Having fun', and 'Passion on the sport' were rated as top three important motivation factors for the success of youth tennis players, b) 'Improving performance', 'Keeping fit' and 'Socializing' were rated as their basic reasons for the youth tennis players' involvement in the sport, c) 'Feeling important and popular', and 'Earning rewards' were ranked as less important motivations, and d) School / club / team atmosphere and having a good relationship with the coach were also regarded as an impacted factors on players' participation motivation [7]. Interestingly, although our study and their studies were conducted in two different sports but findings from these two studies were similar, that is: the results from the two studies showed: the most important and basic reasons for the youth players engaged in sport practices and competitions were more in similarities than those in differences (See table 2 for details).

To be precise, regarding the differences, when contract to the factors of 'feeling important and popular', 'earning rewards', 'team atmosphere' and 'good relationship with coach' from the previous study compare to the factors of 'technical content and unique value', 'an extraordinary skills', 'for fun', 'for biography', 'for establish prestige', 'for professional', 'for establish self-esteem', and 'contest winners' in our study; some differences do exist between the two studies (as presented in Table 4).

5. Conclusions

Based on the above exhaustive discussion, the following three points can be concluded: 1) Both 'Intrinsic factors' and 'Extrinsic factors' possess comparable impact power on the YBPs' motivations. 2) The ten 'Intrinsic factors' in the AQYBPM-c.v. (Zeng & Xie, 2015) were the core motivation factors, and possess significant higher impact on these YBPs' participation motivation. 3) Regardless intrinsic motivation or extrinsic motivation, there are some factors or reasons possess higher impact power than the other factors or reasons; meanwhile, there are also some factors or reasons hold less impact power than the others factors or reasons. 4) Gender is not the determination aspect in the players' participation motivation, but 'Support-by' and 'Goal-setting' are. 5) The YBPs who support-by school possess higher motivations than those support-by parents; and set 'goal for professional' possess higher motivation than those set 'goal for non-professional'. Youth basketball coaches, trainers, and administrators should make exhaustive diagnoses and analyses before implementing these findings to advices and educate their youth players; this should be the right way to improve their coaching, training and management.

5.1. Limitations

We do realize several limitations exist in the current study. The No.1 is the size of sampling was relatively small. The No. 2 is the data collection scope only covered a City although it is the capital city in a most developed province in China. The No. 3 is basketball coaches from those varsity teams might have some kinds of impacts on their players' participation motivations, but the "Coach's influence factor" was not included in the scope of the current study. Lastly, the participants in the current study were selected on purpose. Future study can be improved on the above limitations by including the "Coach's influence factor" in the research scope (e.g., creating some open-ended questions for coaches to answer); extend data collection to more cities or provinces; and select participants more thoroughly.

5.2. Recommendations and Advices

The present study explored the YBPs' participation motivations and related elements from Nanjing City, China. The 'Technical content & unique value', 'To develop a Extraordinary skills', 'For getting healthier', 'For enjoyment and happiness', 'To improve my own-biography', 'To improve physical fitness', 'To make new friends', 'To contest winners', 'To meet friends', and 'To reduce working pressure' have been identified as the top ten reasons or factors for these YBPs engaged in the sport of basketball. The advices could be provided for the YBPs are: (1) Basketball is a sport that requires different psychological skills; motivations are part of those skills. (2) Higher level of goal-setting motivation was found among professional top players when compared to those less successful players and non-professional players, because Goal-setting motivation,

comprehended as a driving force in basketball play, is an essential factor in the development of talented youth players. (3) The core motivations that support YBPs' initial engage in the sport of basketball are: "Content and unique-value", "Fun and get rid of boredom", "To contest winners", "For healthier", "Enjoyment and happiness", "To shape body", and "To improve playing level". (4) Less important motivation factors as perceived by the YBPs were: reduce working pressure; satisfying family's will; establish prestige among friends; being popular and earning rewards. From other perspective, team atmosphere and having a good relationship with coaches also influenced youth athletes' participation motivations. Moreover, although the values of youth athletes' participation motivations have been recognized by many youth sports researchers (e.g., Cohn & Cohn, 2016; Miguel & Machar, 2007; Smith, Balagurer & Duda, 2006) [8, 7, & 5]. Further research studies, however, are definitely needed, especially in the area of youth basketball, to further examine what factors of reasons that truly motivated the young athletes taking part in the sport they love, that will enable the sport educators to better cultivate and educate their youth athletes' motivations, even the psychological knowledge and skills; may be that is the better way for nurturing our future sport stars.

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