

Adolescent Athletes' Expectancy Beliefs, Task Values and Types of Motivation in Sports

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ABSTRACT

This study examined adolescent athletes' expectancy-beliefs, subjective task values, intrinsic motivation, extrinsic motivation and amotivation in sports. Two hundred and five athletes (131 males and 74 females) below 21 years old ($15.53 + 2.37$) completed the expectancy beliefs, subjective task values measures and the Sports Motivation Scale questionnaire. The two-way ANOVA results indicated a significant interaction effect between age group, and gender, for expectancy beliefs, and age group, for subjective task values in the expectancy-related beliefs and task values measures. Whereas, for the Sports Motivation Scale, the ANOVA results also showed significant interaction effect between age group and gender for intrinsic motivation as well as age group and gender for extrinsic motivation. However, no significant effect was observed between age, gender and locality was found for amotivation. Expectancy-related beliefs were found to be related with subjective task values ($r = 0.78$) and intrinsic motivation ($r = 0.58$). Whereas, subjective task values were moderately correlated with intrinsic motivation ($r = 0.65$) and extrinsic motivation ($r = 0.54$). Intrinsic motivation was related to extrinsic motivation ($r = 0.83$) but weakly with amotivation ($r = 0.20$). The results concluded that adolescent athletes (young generation) showed a trend of higher self-beliefs and values were also more likely to be intrinsically and extrinsically motivated, a combination of both types of motivation as opposed to earlier literature of

single motivation type. In addition, our results support the relationship in combining Eccles et al. (1993) Expectancy Theory and Self-Determination Theory to improve understanding of motivation in sports.

Keywords: Adolescent athletes, amotivation, beliefs, extrinsic motivation, intrinsic motivation, task values

ARTICLE INFO

Article history:

Received: 06 May 2019

Accepted: 31 October 2019

Published: 30 December 2019

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INTRODUCTION

The understanding between motivation and behaviour utilising the Eccles et al. (1993)'s expectancy-value of achievement choice and self-determination theory (Deci & Ryan, 1985), have provided a deeper insight into the reasons concealing individuals' participation in physical activities and sports. The Eccles et al. (1993)'s expectancy-value theory refers to motivated behaviour that is characterised by voluntary choices, persevering effort, and achievement, which are related with one's perceived expectancy of success and values in certain activities (Ryan & Deci, 2000). The achievement-beliefs and behaviours are influenced by expectancies for success, i.e. self-beliefs about being successful at a task. For example, athletes' evaluation of their ability in different tasks during training and their sense of performance in their tasks. Whereas, the subjective task values refer to the perceived value a task may provide for present and future goals (Grasten, 2016) in which the values are placed by an individual on their success in a domain or task. The task values are attainment, intrinsic, utility and cost (Chin et al., 2009).

The innate satisfaction of the three basic psychological needs of competence, autonomy and relatedness of an individual that resides along a continuous sequence that runs from a non-self-determined to self-determined form of motivation (Ryan & Deci, 2000; Wang et al., 2019; Ratelle et al., 2007, Vallerand, 1997). Intrinsic motivation is engaging in exciting, enjoyable activities which offer the opportunity for learning in an individual that represents the highest

form of motivation. Whereas, extrinsic motivation is regulated by external forces in the forms of rewards or avoiding negative consequences (Byran & Solmon, 2007). The lack of motivation or desire to act is known as amotivation (Ryan & Deci, 2000). Favorable behavior and performance such as concentration and effort are related with higher intrinsic level of motivation which is derived from the enjoyment and satisfaction within oneself (Byran & Solomon, 2007).

The socio-demographic factors that influence athletes' perceptions beliefs, task values and self-determination are gender, age and locality. Studies have shown that males have higher expectancy-beliefs than females in sports activities and physical education (Chin et al., 2009; Dawes, 2014; Fredricks & Eccles, 2002; Gao & Xiang, 2008; Grasten, 2016; Xiang et al., 2003; Yli-Piipari et al., 2013). In addition, males also show higher task values than female in sports and physical education (Chow et al., 2012; Eccles et al., 1993; Fredricks & Eccles, 2002; Klomsten et al., 2005; Pang & Sau, 2010). However, other studies examining children reveal no male and female differences in beliefs in physical education, running program, basketball and school sports whereby the boys and girls view these activities as relevant and suitable for male and female (Fredricks & Eccles, 2002; Gao & Xiang, 2008; Jacobs & Eccles, 2000; Xiang et al., 2006; Xiang et al., 2004; Xiang et al., 2003).

Gender differences are also observed in athletes' self-determination profile in which female showed higher intrinsic form of motivation than males in physical education

and sports (Gillet et al., 2012; Monazami et al., 2012). A number of studies has shown that male athletes who are extrinsically motivated are more likely to emphasize on extrinsic factors as compared to intrinsically-motivated female athletes centred on the mastery of task and enjoyment (Jakobsen & Evjen, 2018; Martinovic et al., 2011; Teo et al., 2015). On the contrary, males are shown to have higher levels of intrinsic motivation than females (Afsanepurak et al., 2012; Egli et al., 2011; Teo et al., 2015) and no differences between both gender in their participation in sports (Kline, 2016; Van Heerden, 2014).

Literature has also revealed that there are also differences in children's expectancy-related beliefs and values across age whereby their beliefs and values tend to decline as they mature. Studies have shown that children's expectancy-beliefs on their own abilities and expectancy of success are more positive and confident when they feel capable and competent which lead to better performance on future tasks (Gao & Xiang, 2008; Wigfield & Eccles, 2002; Xiang et al., 2003; Xiang et al., 2004). However, as children age, their expectancy-related beliefs become more realistic with the performance in terms of success or failure expectations (Wigfield & Eccles, 2002). Studies have also shown that task values towards physical education and school sports decline across the elementary and middle schools (Fredricks & Eccles, 2002; Wigfield et al., 1996). In contrast, Xiang et al. (2006) revealed that the children's expectancy-related beliefs and task values had declined across age in their study.

Studies that look into age and motivation found contrasting results on motivation among younger and older students. Gillet et al., (2012) found a decrease in intrinsic motivation from 9 years old to 12 years old children and slowly stabilized when they reached 15 years old among 1600 students of age groups 9 – 17 years. In a separate study, younger students were more intrinsically motivated than older students in their involvement in physical education (Biddle et al., 1999; Digelidis & Papaioannou, 1999). Conversely, younger athletes have shown to be less intrinsically and extrinsically motivated than older athletes (Chin et al., 2016). This is supported by Mladenovic and Marjanovic (2011) study which showed amotivation was much prominent among 12 year old football players and 13 - 14 year old players were more extrinsically motivated as compared to the other age groups.

Few empirical studies have looked at expectancy-related beliefs, values and motivation based on locality. Athletes in the rural areas showed higher task values than urban athletes (Chin et al., 2009). In addition, rural and urban young female athletes have higher task values as compared to the male athletes (Chin et al., 2009). In contrast, urban athletes tend to show higher intrinsic motivation than rural athletes as they can get access to sports facilities, equipment, funding, sports-science services and support from all stake holders in sports (Chin et al., 2012). Furthermore, McHale et al. (2005) revealed that participation in sports provided an optimistic impact on

self-confidence and social competence among urban school children. The urban school youth engagement in sports have positively influenced their self-esteem and social competence (McHale et al., 2001; Tylor et al. 2010). The deprivation of sports facilities, equipment, resources, opportunities, supports, funding, economic constraints and lack of opportunities due to its location have demotivated the rural athletes in terms of their outcome and accomplishment in sports (Hardre et al., 2007). This study aimed to investigate adolescent athletes' expectancy-related beliefs, task values of attainment, utility, interest and types of motivation across gender, age groups and locality. In addition, it aimed to investigate whether expectancy-related beliefs, task values are related to intrinsic motivation, extrinsic motivation and amotivation. The rationale of the study is to help the coaches, sports organizations and authorities to further understand, assess and design intervention programmes that can strengthen and improve the athletes' motivation and performance.

METHOD

Participants

The participants comprised 205 (males=131, females=74) under-21 elite Sarawak athletes competing in the 16th Malaysian Games. Permission were obtained from the State Sports Council, State Education Department and National Sports Associations. This research was approved by the Ethics Committee of University Malaya (UM.TNC2/RC/H&E/UMREC-40).

Data Collection

The questionnaires were administrated to all the participants during the games' centralized camp. The researcher briefed the participants on the nature of the study and their participation were voluntary whereby their consents were obtained and assured of their confidentiality. Participants were briefed on their right to withdraw from the participating in the study without any consequences.

The Eccles et al. (1993)'s expectancy value questionnaire is an eleven items questionnaire designed to assess the ability beliefs, expectancy for success, attainment value, utility value and interest value which had been utilized in the physical education and sports domains (Chin et al., 2009; Gao & Xiang, 2008; Xiang et al., 2004). This measure consists of two subscales i.e., expectancy-related beliefs and expectancy for success (5 items) and subjective task values (6 items). Both subscales were measured on a 7-point Likert type scale anchored at both ends. Both expectancy-related beliefs, subjective task values sub-scales and overall questionnaire demonstrated high internal consistency with alpha reliability coefficients of 0.81 and 0.82 and 0.88 respectively (Chin et al., 2009). The 28-item Sport Motivation Scale (SMS) was developed by Pelletier et al. (1995) based on the framework of the self-determination theory which measured intrinsic motivation, extrinsic motivation, and amotivation. The SMS has 7 sub-scales with 4 items each. Each item is scored on a 7-point Likert scale ranging from 1 (does not

correspond at all) to 7 (corresponds exactly). The SMS internal consistency and validity were found to be good in the physical education and sports domains (Chin et al., 2012; Ratelle et al., 2007; Sebire et al., 2013). In addition, Teo et al. (2015) study on Malaysian's adolescent ten-pin bowlers demonstrated favorable internal consistency of 0.74 to 0.80 for all the subscales.

RESULTS

Table 1 shows that all the questionnaires demonstrated good reliabilities for all its scales. The overall expectancy beliefs and task values scale (EVTV) showed a good internal consistency of 0.93 while subscales alpha coefficients for the expectancy-related beliefs ($\alpha = 0.89$) and subjective task values ($\alpha = 0.90$) were high which were more than the required alpha of 0.7

Table 1
Internal Consistency of expectancy beliefs, task values and sports motivation scale

Scale	Cronbach's Alpha
Overall Expectancy beliefs and task value questionnaire	0.93*
Expectancy Beliefs	0.89*
Subjective Task values	0.90*
SMS	
Overall SMS questionnaire	0.91*
Intrinsic Motivation (IM)	0.88*
IM to Know	0.75*
IM Experience Situation	0.66
IM to Accomplish	0.71*
Extrinsic Motivation (EM)	0.87*
EM External Regulation	0.71*
EM Introjection	0.67
EM Identification	0.80*
Amotivation	0.65

(George & Mallery, 2003). The full SMS, intrinsic motivation and extrinsic motivation subscales demonstrated high reliability of 0.91, 0.88 and 0.87 with a slightly low reliability for amotivation subscale with α value of 0.65 which was retained to measure amotivation which was an integral part of motivation.

The data in Table 2 show the socio-demographic profile of participants. A total of 205 athletes (male=131, female=74, $M = 15.53 \pm 2.37$) were involved in this study. Forty-seven percent of the sample was <15 years old. A third of the sample were Malays and Ibans. Almost 26% of the participants had < 3 years of experience while 27.3% had 3 - 4.9 years of experience and 29.3% had 5-6.9 years of experience. Most participants were state athletes (58.5%). Nineteen percent of the athletes represented the district and 18% played for division. Only a small number of the athletes (4.4%) represented the nation. Almost 88% of the participants ($n=180$) were high school students, 7.3% was undergraduate ($n=15$) while about 5% was working adolescents ($n=10$). Sixty percent ($n=123$) of the participants were from the urban areas with the majority (52.7%) coming from Kuching.

Table 3 showed the ANOVA for expectancy beliefs, task values and types of motivation based on age groups, gender and locality. The ANOVA analysis for expectancy-related beliefs showed that there were significant main effects for age group ($F(1, 197) = 6.47, p < 0.05$) and gender ($F(1,197) = 12.97, p < 0.05$) but no significant main effect of locality ($F(1,197)$

Table 2
Profile of the participants

Characteristics		N	%
Gender	Male	131	63.9%
	Female	74	36.1%
Age group (year)		15.53 ± 2.37	
	<15 yrs	97	47.3%
	>15 yrs	108	52.7%
Race	Iban	67	32.7
	Bidayuh	28	13.7
	Chinese	22	10.7
	Malay	72	35.1
	India	7	3.4
	Other races	9	4.4
Years of competing	0-2.9 yrs	53	25.9%
	3-4.9 yrs	56	27.3%
	5-6.9 yrs	60	29.3%
	7-8.9 yrs	31	15.1
	>9 yrs	5	2.4%
Level of competition	District	39	19%
	Division	37	18%
	State	120	58.5%
	Country	9	4.4%
Type of school	Secondary	180	87.8
	IPG/IPT	15	7.3
	Working	10	4.9
Locality	Urban	123	60.0
	Rural	82	40.0
Town	Kuching	108	52.7
	Sri Aman	11	5.4
	Sibu	14	6.8
	Miri	6	2.9
	Lambang	7	3.4
	Sarikei	4	2.0
	Kapit	7	3.4
	Samarahan	38	18.5
	Bintulu	3	1.5
	Mukah	2	1.0
Betong	5	2.4	

=1.52, $p > 0.05$). However, There were no significant differences for age x gender ($F(1, 197) = 1.67, p > 0.05$, partial $\eta^2 = 0.008$), age x location ($F(1, 197) = 1.84, p > 0.05$, partial $\eta^2 = 0.003$), gender x locality ($F(1, 197) = 0.52, p > 0.05$, partial $\eta^2 = 0.008$). In

addition, there was no significant interaction between age x gender x locality ($F(1, 197) = 0.09, p > 0.05$, partial $\eta^2 = 0.001$).

The ANOVA analysis for subjective task values showed that there were significant main effects for age group ($F(1,197) = 7.33, p < 0.05$) but not significant for gender ($F(1, 197) = 3.50, p < 0.05$) and locality ($F(1,197) = 1.73, p > 0.05$) main effect. The result also showed no significant interaction between age x gender ($F(1, 197) = 1.34, p > 0.05$, partial $\eta^2 = 0.007$), age x location ($F(1, 197) = 2.18, p > 0.05$, partial $\eta^2 = 0.011$), gender x locality ($F(1, 197) = 1.27, p > 0.05$, partial $\eta^2 = 0.006$). Furthermore, no significant interaction effect was shown on age x gender x locality ($F(1, 197) = 0.70, p > 0.05$, partial $\eta^2 = 0.004$).

The ANOVA analysis for intrinsic motivation revealed that there were significant main effects for age group ($F(1,197) = 9.15, p < 0.05$), gender, ($F(1, 197) = 10.56, p < 0.05$) but no significant main effect for locality ($F(1,197) = 0.20, p > 0.05$). There was no significant interaction between age x gender ($F(1, 197) = 1.29, p > 0.05$, partial $\eta^2 = 0.007$), age x location ($F(1, 197) = 0.05, p > 0.05$, partial $\eta^2 = 0.001$), gender x locality ($F(1, 197) = 0.17, p > 0.05$, partial $\eta^2 = 0.001$). There was also no interaction effect for age x gender x locality ($F(1, 197) = 0.03, p > 0.05$, partial $\eta^2 = 0.001$).

The ANOVA analysis for extrinsic motivation showed significant main effects for age group ($F(1,197) = 6.96, p < 0.05$), gender ($F(1, 197) = 11.52, p < 0.05$) but insignificant main effect for locality

Table 3

Analysis of variance for expectancy belief, subjective task values, intrinsic motivation, extrinsic motivation and amotivation as a function of age groups, gender and locality

Variable	df	MnSq	F	Sig.	η^2
Expectancy Belief					
Age	1	10.73	6.47	0.00*	0.062
Gender	1	5.35	12.97	0.01*	0.032
Location	1	1.26	1.52	0.22	0.008
age x gender	1	1.38	1.67	0.20	0.008
age x location	1	0.43	1.84	0.47	0.003
gender x location	1	1.52	0.52	0.18	0.009
age x gender x location	1	0.08	0.09	0.76	0.000
Subjective Task Values					
Age	1	7.16	7.33	0.01*	0.036
Gender	1	3.41	3.50	0.06	0.017
Location	1	1.69	1.73	0.19	0.009
age x gender	1	1.31	1.34	0.25	0.007
age x location	1	2.13	2.18	0.14	0.011
gender x location	1	1.24	1.27	0.26	0.006
age x gender x location	1	0.69	0.70	0.40	0.004
Intrinsic Motivation					
Age	1	6.82	9.15	0.00*	0.044
Gender	1	7.87	10.56	0.00*	0.051
Location	1	0.15	0.20	0.66	0.001
age x gender	1	0.96	1.29	0.26	0.007
age x location	1	0.04	0.05	0.92	0.000
gender x location	1	0.13	0.17	0.68	0.001
age x gender x location	1	0.02	0.03	0.88	0.000
Extrinsic Motivation					
Age	1	5.90	6.96	0.01*	0.034
Gender	1	9.77	11.52	0.00*	0.055
Location	1	0.85	1.01	0.32	0.005
age x gender	1	0.74	0.87	0.35	0.004
age x location	1	0.05	0.06	0.80	0.000
gender x location	1	0.20	0.23	0.63	0.001
age x gender x location	1	0.00	0.11	0.74	0.001
Amotivation					
Age	1	0.18	0.12	0.73	0.001
Gender	1	0.49	0.00	0.56	0.002
Location	1	0.14	0.10	0.76	0.000
age x gender	1	0.31	0.21	0.65	0.001
age x location	1	0.40	0.27	0.61	0.001
gender x location	1	3.21	2.16	0.14	0.011
age x gender x location	1	0.65	0.44	0.51	0.002

($F(1,197) = 1.01, p > 0.05$). There was no significant interaction between age x gender ($F(1, 197) = 0.87, p > 0.05$, partial $\eta^2 = 0.004$), age x location ($F(1, 197) = 0.06, p > 0.05$, partial $\eta^2 = 0.001$), and gender x locality ($F(1, 197) = 0.23, p > 0.05$, partial $\eta^2 = 0.001$). There was no interaction effect for age x gender x locality ($F(1, 197) = 0.11, p > 0.05$, partial $\eta^2 = 0.001$).

Finally, the ANOVA analysis for amotivation revealed that there were no significant main effects for age group ($F(1,197) = 0.12, p > 0.05$), gender ($F(1, 197) = 0.00, p > 0.05$), and locality ($F(1,197) = 0.10, p > 0.05$). There was no significant interaction between age x gender ($F(1, 197) = 0.21, p > 0.05$, partial $\eta^2 = 0.001$), age x location ($F(1, 197) = 0.27, p > 0.05$, partial $\eta^2 = 0.001$), gender x locality ($F(1, 197) = 2.16, p > 0.05$, partial $\eta^2 = 0.011$). There was also no age x gender x locality interaction effect ($F(1, 197) = 0.44, p > 0.05$, partial $\eta^2 = 0.002$).

The Relationship Between Expectancy-Beliefs, Subjective Task Values, Intrinsic Motivation, Extrinsic Motivation and Amotivation

Table 4 shows the relationship between expectancy-beliefs, task values, intrinsic motivation, extrinsic motivation and amotivation. The score of expectancy values and subjective task values were highly correlated ($r = 0.78$). Expectancy values and intrinsic motivation were shown to be moderately correlated at $r = 0.58$.

Subjective Task values were moderately correlated with intrinsic motivation ($r = 0.65$), and extrinsic motivation ($r = 0.54$). Intrinsic motivation was highly correlated with extrinsic motivation at 0.83 but weakly correlated with amotivation ($r = 0.20$). Amotivation was lowly correlated with all other components.

DISCUSSION

In line with the objective of the study, the results showed that male athletes had higher beliefs than female athletes. This finding was consistent with previous studies, which found that males showed higher competence beliefs than females (Gao & Xiang, 2008; Wigfield et al., 1997; Yli-Piipari et al., 2013). This could be due to the occurrence of gender-role stereotyping due to need to be feel socially accepted by the societies. These socially constructed gender-role stereotyping could pressure the boys and girls to behave in ways in order to satisfy society's expectations (Yli-Piipari et al., 2013). The male athletes are more likely to enjoy physical activities which deem to be challenging as sports have been

Table 4
Correlation between expectancy values, subjective task values, and three types of motivation

	Expectancy Beliefs	Subjective Task Values	Intrinsic Motivation	Extrinsic Motivation	Amotivation
Expectancy Values	-	0.78	0.58	0.48	0.04
Subjective Task Values	-	-	0.65	0.54	0.04
Intrinsic Motivation	-	-	-	0.83	0.14
Extrinsic Motivation	-	-	-	-	0.20
Amotivation	-	-	-	-	-

perceived as masculine-typed tasks by societies. When the athletes feel that the activity is appropriate based on their gender role, they would feel more competent and maintain their effort, even under adverse conditions over time (Chalabaev et al., 2013). Stereotyping could decrease the female's performance and increase male's performance which could lead female towards negative health consequences by not exercising due to gender inequalities in health and physical activities in the long run.

However, certain findings from this study conflicted with previous studies. For example, previous studies found that younger athletes have lower beliefs and task values than older athletes whose values tend to decrease across middle school years (Jacobs & Eccles, 2000; Xiang et al., 2006). However, our results supported the findings of Yli-Piipari et al. (2013), which showed that students' task values were stable across time. It could be that sports and physical education were taught by specialised physical education teachers that support athletes' needs in sports and physical education better than the untrained PE teachers. The trained PE teachers are able to adopt relevant strategies and pedagogical approaches that can motivate and enhance the adolescent athletes' learning and value in sports and PE. Moreover, the mastery motivational climate created by the coaches could have resulted in the older athletes valuing sports for interest (intrinsic), attainment and utility (extrinsic) reasons more than younger athletes. The findings also revealed that

the male athletes had higher intrinsic and extrinsic motivation than female athletes. The male athletes internalized sports involvement as interesting, satisfying and enjoying. In addition, they are able to develop and improve their competency in their skills which lead to a sense of accomplishment improvement.

The enjoyment that male athletes experience in sports are more likely to continue in their engagement in sports due to their higher perceived competence. In addition, all stakeholders in sports such as coaches, PE educators and trainers need to strategize programmes that covers a broad variety of activities based on their level of abilities and competencies in order to increase the level of intrinsic motivation among the female athletes. As male athletes were also extrinsically motivated which is line with previous studies (Gillet et al., 2012; Monazami et al., 2012). The findings implied that external forces motivate the male athletes in the forms of recognition, approvals, rewards attractiveness and goods in sports. Therefore, it is necessary to always challenge these athletes to boost up their self-esteem and confidence in training to excel in their performance. Studies had shown the importance of an athlete being intrinsically and extrinsically motivated whereby the athlete would strive to be better and win competitively (McHale et al., 2005). In line with our current studies, Gillet et al. (2012) reported that intrinsic and extrinsic motivation were higher among older athletes as compared to the younger athletes. On the contrary, physical education participation

was on the decline as students progressed through 5th to 9th grades. This could be due to lack of emphasis, time allocation and priority given to sports in secondary schools, which tends to focus more on academic and examination excellence.

A task-supporting motivational climate that is oriented towards intrinsic and extrinsic factors has resulted in athletes who are older developing intrinsically and extrinsically in performing their activities throughout the year or season. This is in line with Yli-Piipari et al. (2013) study that revealed high motivation profiles were characterised by highly intrinsically and extrinsically students in their involvement in physical education. The satisfaction, personal accomplishment and interest that were attained through sports has resulted in the older athletes engaging more in it. On the contrast, external factors in terms of gaining recognition, results, rewards, pressure from peer and significant others such as friends, coaches, teachers and parents could have pressured the athletes to participate in sports. The transition from lower to upper secondary school does not result in changes in athletes' motivation as compared to previous studies, which show a developmental shift from intrinsic to extrinsic as they progress from primary to secondary school (Chin et al., 2012). It seems that the older athletes have learnt to adapt to the competitiveness and demands of the sports that have become more impersonal, formal, evaluative and controlling. However, the requirement for

successful outcomes has created constant pressures regardless of age to train harder and longer from intense training to year-round competition. The non-self-determined form of motivation among the older athletes have resulted in negative outcomes in the form of lesser effort, enjoyment, satisfaction and boredom which could be due to lack of perceived autonomy support from significant others.

From the locality perspective, the finding does not support the previous study whereby urban male athletes had higher beliefs than rural male athletes, and rural athletes had higher task values than urban athletes (Chin et al., 2009). Chin et al. (2012) found urban athletes to be more intrinsically motivated than rural athletes. The non-significant differences in beliefs, values and types of motivation could be due to the role of significant others that provide a source of positive influence in these adolescent athletes. Despite the challenges, the ongoing commitment and involvement of significant others such as PE teachers, principals, coaches, parents and communities by providing adequate resources, opportunities, chances and guiding effort are able to sustain the athletes' level of beliefs and values in receiving quality sports coaching. This inferred that athletes are indifferent and similar within the variables of these two theories. Therefore, one's must be able to persist, tolerate and endure the hardships and sacrifices needed to survive to perform within the ever-changing environment in competitive sports.

The positive relationship between belief, task values, intrinsic motivation and extrinsic motivation supports the findings of previous studies, which revealed similar results (Chin et al., 2009; Van Heerden, 2014; Xiang et al., 2004). This implies that athletes who have higher beliefs in sports would be more intrinsically motivated as they value it as more exciting and extrinsically motivated as it is reflected towards the extrinsic values of utility and attainment. Therefore, these findings have shown that autonomous motivation correlated positively with beliefs and task values in cultivating adolescent athletes' long-term involvement in sports. The limitation of the study is that the participants are from just one state i.e., Sarawak therefore our conclusion cannot be generalised to the entire country. The future direction may include the comparison of team-based or individual based sports and the level of participation among athletes and non-athletes.

CONCLUSIONS

The study is able to contribute to the field of knowledge on gender, age group and locality on adolescents' beliefs, values and levels of autonomy in sports. For long term, it is imperative for adolescent athletes to be intrinsically motivated in order to sustain their level of performance and fitness. Furthermore, the higher authorities across sectors would need to be committed and accountable in delivering and implementing their policies and efforts to meet the athletes' physical and psychological needs to that

enable the adolescent athletes to enjoy and capitalise the benefits of sports in the long run. Additionally, Malaysian athletes' motivation could be better understood by integrating Eccles et al. (1993) expectancy-value model of achievement choice and self-determination theory.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the assistance provided by the Sarawak State Sports Council, the National Sports Institute Satellite Kuching and the Sarawak Education Department.

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