



Exercise joy, social support, practice commitment, and athletic efficacy in young basketball players

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ABSTRACT

This study aims to examine the influence of enjoyment in sports and social support on training commitment, as well as the direct and indirect effects of these two variables on athletic self-efficacy through training commitment in young basketball players. The method used in this study is quantitative research, which aims to test certain theories by analyzing the relationship between variables. This research is secondary and adopts the Internet Mediated Research (IMR) method through Google Form, which resulted in 413 research samples. The results of the study indicate that there is a direct effect of enjoyment in sports on social support in young basketball athletes. In addition, the results of the study also show direct and indirect effects of enjoyment in sports through social support on training commitment in young basketball athletes. Furthermore, this study revealed that there are direct and indirect effects of enjoyment in sports and social support on athletic self-efficacy through training commitment in young basketball players. The conclusion of this study is that enjoyment in sports and social support play an important role in increasing training commitment and athletic self-efficacy, which in turn can support the development of young basketball players.



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INTRODUCTION

The young exercisers in this study are students who enjoy basketball. They practice basketball on their own (recreational sports), with basketball clubs outside school and inside school (extracurricular). Tawakkal et al. (2025), a good and conducive environment is very helpful to increase student interest in extracurricular activities organized by the school or institution. The excitement of young sportsmen who choose basketball as their sport of choice is seen when their team succeeds in putting the basketball into the opponent's ring, creating euphoria for the team, coach, and spectators who see the match.

Coaches have an important role in any sport. Marinho et al. (2024) explains that coaches play an important role in the success of youth sports programs where coaches can create an environment that encourages attachment between team members and helps personal achievement that can result in positive personal progress for their students.

Team play in basketball requires team members to work together. Cooperation between team members is formed through commitment to practice. Good cooperation from young sportsmen is formed when team members are familiar (routine training) with the "code of body movements" given by their team members. Non-verbal behavior (NVB) in sport describes the process of capturing non-verbal signals and cues, understanding them, and acting on them. All movements can be considered expressive to some degree including facial, vocal, and postural expressions, as well as touch, proxemics, and gaze.

Commitment to practice builds the confidence of team members to score on their own, with assists or with the cooperation of "shadow movement" scorers to deceive opponents. The coach's role in commitment to practice is very important. Ferrara et al. (2019) explain the importance of the coach's role in commitment to practice, namely the coach's task is to build the concept of "team", highlighting the importance and usefulness of all players, developing the idea that working together aims to get good

performance through training (Ferrara et al., 2019). Young sportspeople who are fit to participate in basketball games have good skills. For example, they can predict the direction of the ball, predict the actual movement or outwit the opponent (through teamwork gained from practicing efficacy).

Research by Otte et al. (2020) indicates that feedback provided by coaches influences athlete skill development, but does not address how this feedback may be influenced by enjoyment of sport and social support. Research by Železnik Mežan et al. (2025) found that social support from peers can increase motivation in young athletes, but does not link it to athletic efficacy. Meanwhile, research by Pulido et al. (2018) shows that commitment to training is positively related to athlete performance, but does not consider enjoyment of sport.

Gaps in previous research include a lack of understanding of how enjoyment of sport and social support interact to influence commitment to training and athletic efficacy. The novelty of this study lies in its holistic approach that integrates enjoyment of sport, social support, commitment to training, and self-efficacy in the context of young basketball players.

This study aims to fill this gap by identifying the extent to which these factors influence each other and their implications for the development of young basketball players. The findings of this study are expected to provide new insights for coaches, athletes, and sports education institutions in designing more effective training programs that focus on the psychological well-being of young athletes.

RESEARCH METHOD

This secondary research adopted the Internet Mediated Research (IMR) method. In this case, the process of adaptation, evaluation and revision, validity and reliability tests of the variables used in the study have been tested by the In Loco Parentis Sports Psychometrics Division Team in Malang. This study involved a population of high school/equivalent students in Madiun Raya. From this study, a sample of 413 students was obtained.

The In Loco Parentis Sports Psychometrics Division team used various types of data and applied them to measure several variables, measuring the level of joy of exercising using Physical Activity Enjoyment Scale (PACES), measuring the social support scale measured using Personal and Social Factor of Resilience (READ), measuring the commitment to practice scale measured using Bandura's Modified Exercise Self-Efficacy Scale (ESES), and measuring the athletic efficacy scale measured using Athlete Self-Efficacy Scale (ASES).

As a first step, researchers conducted a correlation test on all variables as a prerequisite (Akbar et al., 2023). Furthermore, researchers continued the analysis to path analysis only on variables that showed correlation. Hypothesis testing was conducted to determine whether there is a significant relationship between the independent variable and the dependent variable, by setting a null hypothesis (H0) and an alternative hypothesis (H1) (Mertens & Recker, 2020). The null hypothesis (H0) implies that there is no significant relationship between the independent variable and the dependent variable, while the alternative hypothesis (H1) states that there is a significant relationship between the two variables.

RESULTS AND DISCUSSION

Based on the analysis that has been carried out, the distribution of respondents according to age category can be seen from the following table.

Table 1. Frequency of Age Categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pre-teenage (11-13 years old)	2	0.5	0.5	0.5
	Adolescents (14-17 years old)	119	28.8	28.8	29.3
	Early adults (18-24 years old)	292	70.7	70.7	100.0
	Total	413	100.0	100.0	

Based on the table above, it can be seen that exercisers in the preteen age category with age criteria 11-13 years are 2 exercisers or equal to 0.5%. Teenage age category with age criteria 14-17 years there are 119 exercisers or equal to 28.8%. The early adult age category with the age criteria of 18-24 years old had 292 exercisers or equal to 70.7%. Most of the young exercisers are in early adulthood.

Table 2. Results of Frequency Distribution Analysis of Exercise Excitement Levels

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moderate (48.0-63.0)	7	1.7	1.7	1.7
	High (64.0-79.0)	22	5.3	5.3	7.0
	Very high (80.0-96.0)	384	93.0	93.0	100.0
	Total	413	100.0	100.0	

The table shows the excitement of exercising young exercisers mostly in the very high category, namely 384 or equal to 93%, in the high category there are 22 or equal to 5.3%, in the moderate category there are 7 or equal to 1.7%.

Table 3. Results of Frequency Distribution Analysis of Social Support Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very low (10.0-17.0)	7	0.2	0.2	0.2
	Low (18-25)	2	0.5	0.5	0.7
	Medium (26-33)	7	1.7	1.7	2.4
	High (34-41)	23	5.6	5.6	8.0
	Very high (41-50)	380	92.0	92.0	100.0
	Total	413	100.0	100.0	

Social support of young exercisers in the very low category is 1 or equal to 0.2%, in the low category there are 2 or equal to 0.5%, in the medium category there are 7 or equal to 1.7%, in the high category there are 23 or equal to 5.6%, in the very high category there are 380 or equal to 90.2%.

Table 4. Results of Frequency Distribution Analysis of Level of Commitment to Practice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very low (12.0-20.6)	11	2.7	2.7	2.7
	Low (21.6-30.2)	15	3.6	3.6	6.3
	Medium (31.2-39.8)	35	8.5	8.5	14.8
	High (40.8-49.4)	59	14.3	14.3	29.1
	Very high (50.4-60.0)	293	70.9	70.9	100.0
	Total	413	100.0	100.0	

This section explains the results of the analysis regarding the efficacy of the training shown in the table above. There are 11 or equal to 2.7% in the very low category, 15 or equal to 3.6% in the low category, 35 or equal to 8.5% in the medium category, 59 or equal to 14.3% in the high category, and 293 or equal to 70.9% in the very high category.

Table 5. Results of Frequency Distribution Analysis of Athletic Efficacy Levels

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very low (17.0-29.6)	3	0.7	0.7	0.7
	Low (30.6-43.2)	1	0.2	0.2	1.0
	Medium (44.2-56.8)	5	1.2	1.2	2.2
	High (57.8-70.4)	13	4.6	4.6	6.8
	Very high (71.4-85.0)	385	93.2	93.2	100.0
	Total	413	100.0	100.0	

The athletic efficacy of young sportsmen in the very low category is 3 or equal to 0.7%, in the low category there is 1 or equal to 0.2%, in the medium category there are 5 or equal to 1.2%, in the high category there are 19 or equal to 4.6%, in the very high category there are 385 or equal to 93.2%.

From the descriptive variables above, the prerequisite test (covariation) can be continued as described in the table below:

Table 6. Results of Covariation Analysis

		The Joy of Sports (Criterion 64.00)	Social Support (Criterion 34.00)	Self-Efficacy in Practice (Criterion 40.80)	Self-efficacy (Criterion 57.80)
The Joy of Sports (Criterion 64.00)	Pearson Correlation	1	0.505**	0.540**	0.585**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	413	413	413	413
Social Support (Criterion 34.00)	Pearson Correlation	0.505**	1	0.508**	0.606**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	413	413	413	413
Self-Efficacy in Practice (Criterion 40.80)	Pearson Correlation	0.540**	0.508**	1	0.586**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	413	413	413	413
Self-efficacy (Criterion 57.80)	Pearson Correlation	0.585**	0.606**	0.586**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	413	413	413	413

Note: ** Correlation is significant at the 0.01 level (2-tailed)

The covariation analysis results show that all probabilities have a value of 0.05. Because the probability $(0.00) < \alpha (0.05)$ all variables meet the prerequisites of path analysis. H_0 is rejected and H_1 is accepted. The joy of exercise, social support, commitment to practice, athletic efficacy are suitable for the main analysis (path analysis).

Based on preliminary analysis, it appears that joy of exercise, social support, commitment to practice and athletic efficacy have a close relationship. This is evident from the significant correlation between them, which is consistent with the findings of Pedazhur and Kerlinger (in Roebianto, 2020) with a significance level of 0.05. Therefore, all these variables will be included in the subsequent path analysis. The theoretical model that will be analyzed further is as follows.

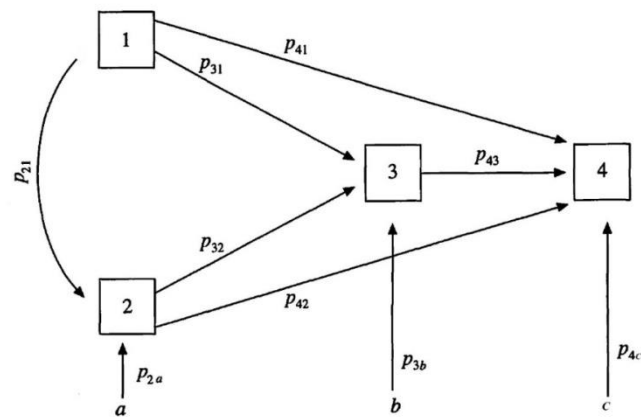


Figure 1. Research Theoretical Model

Description:

X1 : Exercise Excitement

X2 : Social Support

X3 : Commitment to Practice

Y : Athletic Efficacy

The first hypothesis after the covariation prerequisite test that must be tested in further analysis is that there is a significant relationship between the effects of joy of exercise and social support on young basketball players in Madiun Raya. The results are as follows:

Table 7. Results of Sub Structural Path Analysis 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.505 ^a	0.255	0.253	3.771

a. Predictors: (Constant), The Joy of Sports (Criterion 64.00)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.548	2.300		8.498	0.000
	The Joy of Sports (Criterion 64.00)	0.293	0.025	0.505	11.853	0.000

a. Dependent Variable: Social Support (Criterion 34.00)

The results of the analysis show that the probability of exercise joy on social support $(0.000) < \alpha (0.05)$, Beta Path coefficient P21 $(0.505) > \text{path coefficient } 0.05$, and $R^2 = 0.255$. So that the residual coefficient $p_{2a} = \sqrt{1 - R^2} = \sqrt{1 - 0.255} = \sqrt{0.745} = 0.863$.

The analysis results show that the path coefficient p21 $(0.505) > 0.05$ so that the path is still used in the main analysis. H0 is rejected and H1 is accepted. Path coefficients p21 and p2 are included in the causal model:

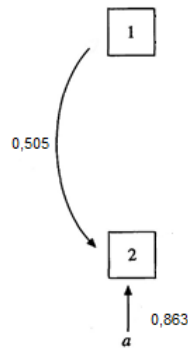


Figure 2. Causal Model of Sub Structure 1

After examining the results of sub structural path analysis 1, the following table shows the results of sub structural path analysis 2.

Table 8. Results of Sub Structural Path Analysis 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.605 ^a	0.366	0.363	6.075
a. Predictors: (Constant), Social Support (Criterion 34.00), The Joy of Sports (Criterion 64.00)				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-23.298	4.018		-5.798	0.000
	The Joy of Sports (Criterion 64.00)	0.386	0.046	0.381	8.364	0.000
	Social Support (Criterion 34.00)	0.551	0.079	0.316	6.937	0.000

a. Dependent Variable: Self-Efficacy in Practice (Criterion 40.80)

The results of the analysis show the probability of joy of exercise on commitment to practice $(0.000) < \alpha(0.05)$ and the probability of social support on commitment to practice $(0.000) < \alpha(0.05)$. Beta path coefficient p31 (0.381) > path coefficient 0.05 and Beta path coefficient p32 (0.316) > path coefficient 0.05. And $R^2 = 0.366$ so that the residual coefficient $p3b = \sqrt{1 - R^2} = \sqrt{1 - 0.366^2} = \sqrt{0.634} = 0.796$.

The analysis results show that the path coefficient p31 (0.381) > 0.05 and p32 (0.316) > 0.05 path coefficient so that the path is still used in the main analysis. H0 is rejected and H1 is accepted. The path coefficients p31, p32 and p3b are included in the causal model:

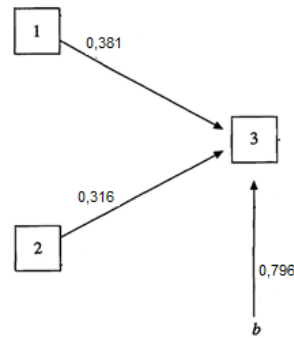


Figure 3. Causal Model of Sub Structure 2

The next step is to conduct the results of the path analysis of sub-structure 3, according to the following table:

Table 9. Results of Sub Structural Path Analysis 3

Table 9: Results of Path Structural Path Analysis						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		0.702 ^a	0.518	0.515	5.727	
a. Predictors: (Constant), Self-Efficacy in Practice (Criterion 40.80), Social Support (Criterion 34.00), The Joy of Sports (Criterion 64.00)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.119	3.940		3.583	0.000
	The Joy of Sports (Criterion 64.00)	0.297	0.047	0.271	6.304	0.000
	Social Support (Criterion 34.00)	0.625	0.079	0.331	7.889	0.000
	Self-Efficacy in Practice (Criterion 40.80)	0.293	0.047	0.271	6.290	0.000
a. Dependent variable: Self-efficacy (Criterion 57.80)						

The results of the analysis show the direct effect of the probability of exercise excitement on athletic efficacy (0.000) $< \alpha(0.05)$, the probability of social support on athletic efficacy (0.000) $< \alpha(0.05)$, the probability of commitment to practice on athletic efficacy (0.000) $< \alpha(0.05)$. Beta path coefficient P41 (0.271) $>$ path coefficient (0.05), Beta path coefficient P42 (0.331) $>$ path coefficient (0.05), Beta path coefficient P43 (0.271) $>$ path coefficient (0.05). $R^2 = 0.366$ so that the residual coefficient $p4c = \sqrt{1 - R^2} = \sqrt{1 - 0.518} = \sqrt{0.482} = 0.694$.

The indirect effect of joy of exercise on athletic efficacy through commitment to practice = $P31 \times P43 = 0.381 \times 0.271 = 0.103$. The indirect effect of social support on athletic efficacy through commitment to practice = $P32 \times P43 = 0.316 \times 0.271 = 0.085$.

The analysis results show that the path coefficient $p41 (0.271) > 0.05$, path coefficient $p42 (0.331) >$ path coefficient 0.05, Beta path coefficient $p43 (0.271) >$ path coefficient (0.05) so that the path is still used in the main analysis. H_0 is rejected and H_1 is accepted. Path coefficients $p41$, $p42$, $p43$ and $p4c$ are included in the causal model:

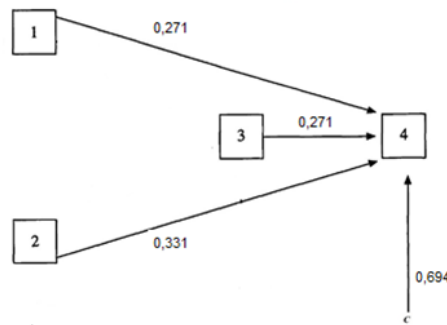


Figure 4. Causal Model of Sub Structure 3

If all path coefficients are included in the research causal model:

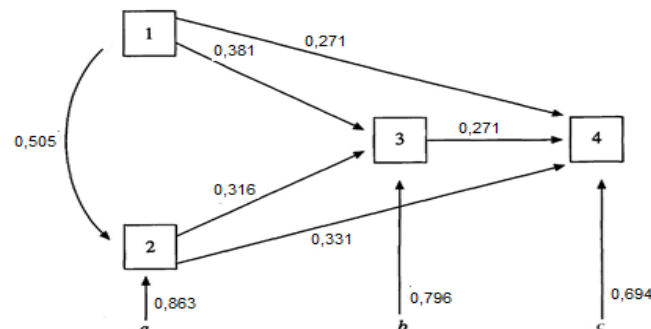


Figure 5. Causal Model of Research All Coefficients

Thus, it can be concluded that there is a direct effect of exercise excitement on young exercisers' social support, a direct and indirect effect of exercise excitement through social support on commitment to practice, and a direct and indirect effect of exercise excitement, and social support on athletic self-efficacy through commitment to practice young basketball exercisers in Madiun Raya.

DISCUSSION

A young exerciser's enjoyment of sports will be evident when he has successfully mastered the basic skills of basketball so that he has the confidence to show his skills on the basketball court with his friends, increasingly wanting to be involved in extra-curricular basketball and compete in basic skills with teammates.

The results of this study support the opinions of Nima (2023) and Golaszewski & Bartholomew (2019). The joy of exercise that explains its influence on social support is the young exerciser's own enjoyment of the sport of basketball, the pride of a exerciser with his physical appearance obtained from the support of his parents, the pride of a young exerciser when learning basketball skills so that he has basketball skills obtained from coaches and teammates and his immediate environment.

Research conducted by Oktadinata et al. (2024) also shows that intrinsic motivation (sense of interest, attention and activity) and extrinsic (environment and tools/facilities) underlie high school students participating in extracurricular basketball. The main reason underlying students participating in extracurricular basketball is that they are happy because they get support in the form of facilities and infrastructure from the environment, extracurricular teachers.

The joy of exercising and social support together affect the commitment of young basketball players in Madiun Raya. Commitment to practice can be owned by a young exerciser if a young exerciser has satisfaction, enjoyment from playing basketball and getting social support from the young exerciser's closest environment such as parents, coaches teammates.

Commitment to practice is very important in the development of individual skills to achieve optimal performance. Young athletes who have high commitment will be more disciplined in following

the training schedule, more diligent in improving basketball skills and skills, and more consistent in improving their performance.

The results of this study support the opinions of (Ginis, 2025; Martínez-Alvarado et al., 2021; Niu et al., 2025). The joy of exercise that explains its influence on social support is the young exerciser's own enjoyment of the sport of basketball, his mastery of basketball skills which then becomes basketball proficiency formed through the benefits of involvement in practicing together.

Research conducted by Hodge et al. (2023) also showed that satisfaction can predict the level of commitment to exercise. Athletes who showed higher commitment to training had higher coach support and had higher intrinsic motivation. Satisfaction with basic needs (fulfillment of needs and coach support).

Winning will be the greatest source of joy for a young basketball player because all his hard work is paid off with a winning achievement. Every practice, every sweat poured out, and every challenge faced during the game will finally be paid off when victory is achieved. Victory in basketball reflects teamwork, well-implemented strategies, support from coaches, teammates. This happiness is not only felt personally, but also becomes a pride for the school and the environment that has supported him on his way to the peak of achievement.

The results of this study support the opinions of Golaszewski & Bartholomew (2019) and Lutz (2022) where being a contingent of school representatives to participate in basketball matches gives a sense of pride to basketball players while giving them the responsibility to give their best performance for school, giving young athletes the opportunity to show their training commitment with coaches and teammates.

Research conducted by Shi et al. (2025) showed that internal motivational factors (skill level, competitive performance, and mental health) and social support significantly increased athletes' engagement and motivated them to devote themselves to training and competition with enthusiasm, passion, confidence, and conviction.

CONCLUSIONS

Based on the data analysis and discussion that has been carried out, the researcher can conclude that there is a direct effect of exercise excitement on social support, there is a direct and indirect effect of exercise excitement through social support on commitment to practice, and there is a direct and indirect effect of exercise excitement, and social support on athletic self-efficacy through commitment to practice young basketball players in Madiun Raya.

Based on the research results obtained, several suggestions and recommendations can be made as follows: **First**, coaches and basketball club managers are advised to design training programs that not only focus on developing technical skills but also create a fun and exciting atmosphere for young athletes. Activities involving recreational games and competitions can increase the enjoyment of sports. **Second**, it is important for coaches and teammates to provide stronger social support to young athletes. **Third**, sports education institutions and basketball clubs are advised to develop integrated training programs, encompassing psychological, social, and physical aspects, to help young athletes develop self-efficacy and improve their performance on the court. **Fourth**, conduct regular monitoring and evaluation of young athletes' development, both in terms of skills and psychological aspects, to ensure that they receive appropriate support and can overcome challenges faced during the training process. **Finally**, conduct training for coaches on the importance of social support and how to create an environment that supports the enjoyment of sports, so that trained coaches can be more effective in building commitment and self-efficacy in young athletes. By implementing these suggestions, it is hoped that the sports experience for young basketball players will be improved and support their overall development.

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