

Running motivations of non-elite long-distance runners in Indonesia

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Abstract

In recent years, the growing number of long-distance runners in Indonesia has raised questions about the factors that motivate them. This study aimed to analyse the motivations of long-distance runners according to their gender and running experience. This research used a quantitative approach and an internet-based study. A sample consisting of 130 participants (71% were males, and 29% were females) participated in this study and voluntarily completed the survey. The inclusion criterion required that the participants had at least six months of running training with at least three weekly training and had already completed at least one long-distance running race (10K, half marathon or full marathon). In this study, the Indonesian adapted version of Motivation of Marathoners Scales by Masters et al. was used to analyse runners' motivation. Descriptive analysis, t-test, and one-way analysis of variance (ANOVA) were used to analyse the data. The obtained results revealed that runners' gender, health orientation, and personal goal achievement affected the attainment of greater motivation scores. At the same time, recognition and competition showed to have the lowest motives among the runners. There was a significant difference between male and female runners in terms of competition motive ($t = 0.26, p < 0.05$). According to runners' running experience, there were also significant differences in two dimensions, i.e., personal goal achievement ($F = 2.76, p < 0.05$) and competition ($F = 2.59, p < 0.05$). The most significant motivations that were considered were general health orientation, personal goal achievement, life meaning, and self-esteem; these dimensions belong to runners' physical health, achievement, and psychological motives, respectively. In contrast, the recognition and competition factors always resulted in the lowest score, which indicated that runners did not need social recognition and had low competitive motive except for competing with themselves. Future studies require higher participant involvement and evaluation of other research variables that may contribute to Indonesia's long-distance runners' motivations.

Key Words: Long-distance running, motivation, distance runners, endurance training

Introductions

In recent years, the popularity of long-distance running (LDR) races has been rapidly increasing and has become a phenomenon in Indonesia. For example, a similar trend is observed in the USA and Israel (Zach et al., 2017). The studies by He and Xue (2017) and Zhou et al. (2017) indicated that numerous people choose long-distance running for spent their leisure time. The Indonesian LDR organising committee noted that the number of participants has been increasing each year. In addition, LDR events help the government to promote local tourism (Maybank Indonesia, 2019; Pocari Sweat, 2019).

LDR or endurance running is a form of continuous running over distances of at least 3 km. Physiologically, LDR requires aerobic, stamina, and mental strength (Liebermann et al., 2006). Running improves health and prevents issues related to a sedentary lifestyle. Running is a widespread and easily accessible activity because it has few economic restrictions and does not require specific infrastructure for its practice; it can be practiced anywhere at any time (Szabo & Ábrahám, 2013). Long-distance running, on the other hand, need a healthy respiratory system. Runners can utilize a balanced blend of aerobic and anaerobic processes to enable maximal muscular activity and growth during training sessions and to aid in quick recovery (Bolotin & Bakayev, 2017). LDR sport requires the athlete to have a strong commitment during practice and race time. Therefore, it is essential to determine why people commit to LDR.

Motivation for LDR is complex and affected by internal or external factors (Baldwin & Caldwell, 2017; Shipway & Holloway, 2010). Runners with strong intrinsic motivation concentrate on the joy and satisfaction gained throughout training and the initial activity. Extrinsically motivated behaviour ranges from fundamental external needs to integrated control. These acts are linked to consequences that are unrelated to the activity itself. The activity's goal is to prevent unpleasant rewards or repercussions (Buckworth et al., 2007). Participation in an organised race entails both forms of motivation. However, the fundamental premise of running entails personal success, pleasure, competitiveness, and a sense of belonging to the runner community all at the same time (Bell & Stephenson, 2014).

According to gender differences, a study by Ogles & Masters (1995) revealed that women's most frequent reasons for running are social requirements and excellent physical condition. However, males are more

motivated to compete and succeed. In a study of female long-distance runners, particularly ultramarathoners, the two most important motivators were general health orientation and psychological coping. Participants favoured task orientation such as finishing the race or achieving specific objectives above ego orientation (Krouse et al., 2011). Another study on ultramarathoners by Frick (2011) found that, while competition has traditionally been more significant for males, it has also grown in prominence among women. Female runners performed higher reason to meet new or old friends than male runners (Summers et al., 1983). A recent study by Nikolaidis et al. (2019) partially confirmed that female and male marathon runners have different motives. Female runners outperformed male runners in terms of psychological coping, self-esteem, and goal achievement. Hanson et al. (2015) study findings on the differences between half, full and ultramarathoners motivation reported that ultramarathoners were less motivated by health orientation and weight concern than the other runners. Affiliation and Life Meaning, on the other hand, motivated them more. In addition, women were more motivated to run for weight control than men.

Another recent study by Waśkiewicz et al. (2019), which observed the motivation between ultramarathoners and another shorter distance of endurance runners, concluded that ultramarathoners had higher scores in affiliation and life meaning. Meanwhile, lower motivation was found in the areas of weight concern, personal goal achievement and self-esteem compared to the shorter distance of endurance runners. Rozmiarek et al. (2021) study found no significant differences based on gender or marital status among 5K, full-marathon, and ultramarathon runners. However, research findings showed weight concerns increase along with increasing age range in all different distance runners.

Several studies explored the motives of long-distance runners with regard to their sociodemographic, training habits and place of residence (Besomi et al., 2017; Starzak & Sas-Nowosielski, 2020; Parra-Camacho et al., 2019). Research by Poczta and Malchrowicz-Moško (2018) reported the significant differences between urban and rural runners in the context of sensation-seeking orientation. The desire to have fun, according to urban runners, was the essential factor. On the other hand, rural runners felt that the essential aspect was the desire to experience powerful emotions associated with involvement. According to Besomi et al. (2017), the study of urban runners' motivation showed that health orientation motivation was correlated with the highest score, and recognition motivation was correlated with the lowest score. Studies by Malchrowicz-moško et al. (2020) and Waśkiewicz et al. (2019) confirmed the results of previous studies. However, the most significant motivation was health orientation and personal achievement. Meanwhile, the lowest dimension was recognition and competition. The motivations for attempting to train for or complete a long-distance race are not always clear or logical. They may vary between male and female runners, as well as beginners and experienced runners. Though there is an increasing number of people who pursue LDR in Indonesia, their motivational factors have not been analysed. Therefore, this study aims to explore the motivations of non-elite long-distance runners in Indonesia according to runners' gender and based on their years of training experience.

Materials and Methods

Participants and Design

This study used a cross-sectional study design and was an internet-based study. Professional running coaches were contacted and asked to update their social media profile with a web-based survey link and information about the survey; they were asked to pass on this information to their running community members and various social media forums. Participants who agreed to complete the study voluntarily were asked to respond to the questionnaire through the Google Forms system. Before completing the questionnaire, participants were familiarised with the aims of this research and asked to provide informed consent for participation in the study. The questionnaire completion time was approximately 10–15 min.

The inclusion criterion required that the participants had at least six months of running training with at least three weekly training sessions and had already completed at least one LDR race (10K, half marathon or full marathon). Previous studies have also used the same sampling method (Zach et al., 2017; Popov et al., 2019).

Because the authors focused on non-elite long-distance runners who participated voluntarily, this research sample is convenient because it focuses on a portion of the long-distance runners' population willing to participate in the internet-based study (Dörnyei, 2007). The data survey collection process was performed between the 3rd and 31st of January 2021.

Instrument

Sociodemographic questions were asked (including gender, age, education and occupation) and questions about runners running behaviour (e.g., years of running experience and weekly running frequency). Questions about LDR events (10K, half marathon and full marathon) that they have ever participated in were also asked. The survey also asked about whether they ran in a group and whether they were community members or non-members.

The runners' motivation was measured by the Motivation of Marathoners Scales (MOMS) (Masters, Ogles, & Jolton, 1993). This instrument consists of 56 items that are divided into nine specific dimensions: health orientation, weight concern, personal goal achievement, competition, recognition, affiliation, psychological coping, life meaning and self-esteem. Each item is rated on a seven-point Likert scale (1 = not a reason, 7 = very important reason). The scale was translated from English into Indonesian by two independent

translators using a back-translation procedure. Cronbach's alpha was calculated for all categories to evaluate the MOMS questionnaire's internal consistency. Alpha values were as follows: health orientation ($r = .85$), weight concern ($r = .80$), personal goal achievement ($r = .87$), competition ($r = .84$), recognition ($r = .86$), affiliation ($r = .85$), psychological coping ($r = .84$), life meaning ($r = .84$) and self-esteem ($r = .81$).

Data Analysis

Data from the survey was collected and entered into the SPSS Statistics 26.0 software for analysis. Cronbach's alphas for the MOMS dimensions were calculated to assess their internal reliability. Descriptive analysis, mean (M) and standard deviation (SD) were calculated. An independent sample t-test was used to determine different motivations in each dimension between runners' gender. A one-way analysis of variance (ANOVA) was used to examine differences in long-distance runners' motivations based on their years of training experience.

Results

Table 1 shows the long-distance runner descriptive statistics, which were divided into five groups by gender, age, education and occupation. The final sample consisted of 130 participants; 71% ($n = 92$) were males, and 29% ($n = 38$) were females; 96.1% ($n = 125$) were 19–50 years old. A total of 68.5% ($n = 89$) of the respondents had university or college education, and 80% ($n = 104$) already worked.

Table 1. Descriptive statistics of the respondents sociodemographic characteristics ($n = 130$)

	<i>N</i>	%
Gender		
Male	92	70.8
Female	38	29.2
Age		
18 or under	3	2.3
19–25	28	21.5
26–35	59	45.4
36–50	38	29.2
51 or above	2	1.5
Education		
High school or less	22	16.9
University or college	89	68.5
Master's degree or higher	19	14.6
Occupation		
Student	22	16.9
Full-time employment	92	70.8
Part-time employment	12	9.2
Not employed	4	3.1

Table 2 shows the descriptive statistics for long-distance runners' behaviour. A total of 90.8% of runners have been running for more than one year ($n = 118$); 77.7% of them usually ran three to four times a week ($n = 101$). A total of 46.9% of them have participated in at least one type of LDR races (10K = 23.1%, half marathon = 11.5% and full marathon = 12.3%); 23.1% of them have participated in at least two types of LDR races (10K and half marathon = 22.3%, 10K and full marathon = 0%, half marathon and full marathon = 0.8%), and 30.5% of them have participated in all LDR races (10K, half marathon and full marathon). In addition, most runners were affiliated with a running group or community, i.e., 63.1% ($n = 82$).

Table 2. Descriptive statistics for the long-distance runners' behaviour ($n = 130$)

	<i>N</i>	%
Years of running experience		
6 months–1 year	12	9.2
1–3 years	40	30.8
3–5 years	43	33.1
5–10 years	26	20.0
More than 10 years	9	6.9
Weekly running frequency		
3–4 times	101	77.7
5 times or more	29	22.3
LDR race participation		
One type of LDR races	61	46.9
Two types of LDR races	30	23.1
Three types of LDR races	40	30.5
Running group or community		
Member	82	63.1
Non-member	48	36.9

Table 3 shows descriptive statistics for long-distance runners' motivations for the total sample and specifically for male and female runners in each of the nine dimensions. For the total sample, health orientation (6.27 ± 0.73) and personal goal achievement (5.90 ± 1.02) attained the highest scores, while competition (3.84 ± 1.72) and recognition (2.88 ± 1.53) attained the lowest scores in dimensions of motivation.

Based on gender differences, both male and female runners were consistently indicating health orientation (males = 6.27, females = 6.28) and personal goal achievement (males = 5.90, females = 5.91) as the highest motivational dimensions, while competition (males = 3.84, females = 4.08) and recognition (males = 2.88, females = 3.03) as the lowest motivational dimensions. The analysis of gender differences revealed significant differences only in competition dimension, while male runners scored significantly higher ($t = 0.26, p < 0.05$).

Table 3. Long-distance runners' motivations for the total sample and specifically for male and female runners

	Total (n = 130)	Males (n = 92)	Females (n = 38)	Independent sample t-test	
	M ± SD	M ± SD	M ± SD	t	p
Health orientation	6.27 ± 0.73	6.28 ± 0.68	6.26 ± 0.85	0.11	0.910
Weight concern	4.93 ± 1.48	4.89 ± 1.52	5.02 ± 1.40	-0.45	0.655
Personal goal achievement	5.90 ± 1.02	5.91 ± 0.97	5.86 ± 1.12	0.26	0.798
Competition	3.84 ± 1.72	4.08 ± 1.71	3.25 ± 1.63	0.26	0.012*
Recognition	2.88 ± 1.53	3.03 ± 1.57	2.51 ± 1.39	0.18	0.081
Affiliation	4.32 ± 1.44	4.46 ± 1.37	3.98 ± 1.57	0.17	0.085
Psychological coping	5.10 ± 1.28	5.06 ± 1.29	5.20 ± 1.28	-0.60	0.553
Life meaning	5.38 ± 1.29	5.31 ± 1.27	5.57 ± 1.35	-1.05	0.294
Self-esteem	5.39 ± 1.10	5.40 ± 1.04	5.38 ± 1.24	0.07	0.943

*p < 0.05

Male runners insignificantly exceeded female runners on the motivational scales for personal goal achievement, recognition and affiliation. They scored lower on weight concern, psychological coping and life meaning ($p > 0.05$) (see Fig. 1).

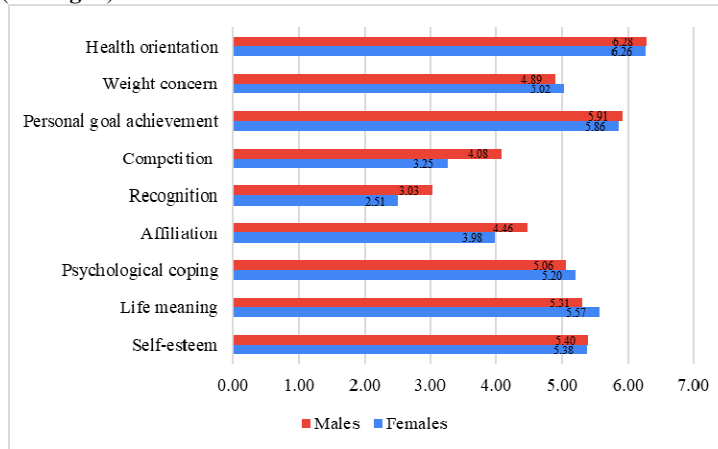


Fig. 1. Bar chart of means in each dimension for male and female runners

Table 4 shows the associations of five groups with different running experience. There were statistically significant differences in motivation. Compared to other groups, runners with more than ten years of running experience had more significant motivations in personal goal achievement ($F = 2.76, p < 0.05$) and competition ($F = 2.59, p < 0.05$).

Table 4. Comparison of long-distance runners' motivations with different running experience

	Years of Running Experience					F	p
	6 months–1 year	1–3 years	3–5 years	5–10 years	>10 years		
	M ± SD	M ± SD	M ± SD	M ± SD	M ± SD		
Health orientation	5.78 ± 0.74	6.39 ± 0.69	6.33 ± 0.70	6.23 ± 0.79	6.26 ± 0.75	1.78	.138
Weight concern	5.04 ± 1.45	5.28 ± 1.39	4.81 ± 1.40	4.59 ± 1.51	4.81 ± 2.15	1.00	.413
Personal goal achievement	5.76 ± 1.02	5.95 ± 0.93	5.93 ± 0.99	5.53 ± 1.17	6.78 ± 0.38	2.76	.031*
Competition	3.48 ± 1.80	3.84 ± 1.62	3.85 ± 1.72	3.42 ± 1.75	5.44 ± 1.34	2.59	.040*
Recognition	2.96 ± 2.04	3.12 ± 1.52	2.60 ± 1.25	2.69 ± 1.63	3.54 ± 1.69	1.11	.353
Affiliation	3.72 ± 1.66	4.73 ± 1.48	4.30 ± 1.38	3.99 ± 1.42	4.32 ± 1.05	1.70	.155
Psychological coping	5.07 ± 1.51	5.39 ± 1.27	4.90 ± 1.22	4.96 ± 1.21	5.22 ± 1.55	0.87	.484
Life meaning	4.90 ± 1.31	5.70 ± 1.21	5.24 ± 1.29	5.14 ± 1.31	6.00 ± 1.34	1.97	.104
Self-esteem	5.18 ± 1.39	5.51 ± 1.23	5.28 ± 0.87	5.21 ± 1.15	6.24 ± 0.60	1.88	.119

*p < 0.05

Discussion

This study aimed to investigate the motives of long-distance runners in Indonesia in terms of their gender and years of training experience. Runners' motivations identified in this study were similar to previous study findings for both genders by Besomi et al. (2017); Malchrowicz-moško et al. (2020); Waśkiewicz et al. (2019). The most significant motivations that were considered were general health orientation, personal goal achievement, life meaning and self-esteem; these dimensions belong to runners' physical health, achievement and psychological motives, respectively. This demonstrates that the intrinsic psychological factor may motivate runners to train and participate in the races constantly. As we know, consistency in training and participation in LDR events takes significant sacrifice and effort. In contrast, recognition and competition factors always attained the lowest scores, which indicated that runners did not need social recognition and had lower competitive motives compared to competing with themselves. Both male and female runners reported to have the same reasons; however, there was a significant difference in competition motives, and male runners exceeded female runners. The previous research supports this finding by Frick (2011).

In terms of weight concern motive, in this study, female runners show higher motivation than male runners but did not significant. This finding shows a similar result as a study by Hanson et al. (2015). Since females have more attention on what they eat, weight, and body shape concerns than males (Voges et al., 2019). This indicates that female runners were more likely to use LDR training and races to control their weight. In terms of meeting friends through LDR activity, this study found a different result from the previous study by Summers et al. (1983). Male runners show to have a higher affiliation motive compared to female runners.

This study reported different runners' motivations according to their running experience compared to those of Malchrowicz-moško et al. (2020). The above-mentioned authors reported that there were no significant differences. In contrast, the results obtained in this study indicated significant differences in the runners who have been running for over ten years; these runners tended to have higher personal goal achievement and competition motives compare to those runners with less year of running experience. Interestingly, this runners' category was found to have a lower score in recognition motives, which means they did not need social recognition.

Certain limitations of this research were the sampling method and number of respondents, which did not allow the obtained findings to be generalised to the whole population of Indonesian non-elite long-distance runners. Thus, future studies are expected to include more respondents and study more variables (e.g., runners' residence in rural or urban areas) like a previous study conducted by Parra-Camacho et al. (2019) that may correlate with runners' motivation. Another suggestion is to compare the long-distance runners' motivation according to their specific running distance, such as 10K, half-marathon, full-marathon or ultramarathon.

The results of this study suggest that relevant governments, sports associations or private organisations should design LDR activities and events as a medium to attract tourism, promote public health, and provide support for developing non-elite long-distance runners' population based on the combination of their running motivations.

Conclusion

The findings of this research indicate that long-distance runners participating in LDR are largely driven by a desire to improve their health and achieve personal goals, and only to a minor extent was motivated by the desire to be recognised and realise themselves when competing with others. However, particular motivations differ between males and females and between runners with different running experiences.

Although competition, recognition and affiliation were the lowest reasons for both gender participating in LDR, male runners were found to have a higher motivation than female runners in these three dimensions, but not significant. However, female runners slightly have higher weight concerns than male runners.

In addition, runners who have been running for over ten years were particularly motivated by their personal goal achievement, and based on statistical data, were more competitive. Nevertheless, this runners' category also performed lower motivation in recognition.

Finally, these research findings can help the practitioners better understand why people are participating in LDR training and races. The results can also guide researchers for further studies with bigger sampling and study more variables that can affect long-distance runners' motivation in Indonesia since runners have different types and their motivations must be different.

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