



Validity and Reliability of the Sport Motivation Scale-II for Ethiopian Athletes

Validez y fiabilidad de la Escala de motivación deportiva II para deportistas etíopes

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Abstract

Introduction: This study focused on validating the Sport Motivation Scale II (SMS-II) in an Ethiopian context, grounded in Self-Determination Theory. Prior to this research, no validated version of the SMS-II existed for Ethiopian athletes despite its relevance in assessing sports-related motivation.

Objective: The main goal was to translate and validate the SMS-II into Amharic to ensure its reliability and applicability among Ethiopian athletes. It was hypothesized that the Amharic version would maintain strong internal consistency and a valid factor structure similar to the original English version.

Methodology: The English version of the SMS-II, which includes 18 items across six dimensions, was translated into Amharic by language experts. Data were collected from 321 team sport athletes (174 men and 147 women) with an average age of 23.48 years. Confirmatory factor analysis and Cronbach's alpha were used to evaluate the instrument's validity and internal consistency.

Results: The Amharic version of the SMS-II demonstrated acceptable model fit indices and high internal consistency across all subscales, with Cronbach's alpha values ranging from 0.816 to 0.865. These results indicate that the translated version is both reliable and valid for use in Ethiopia.

Discussion: The findings align with previous studies that have validated the SMS-II in other languages and cultural settings. The Amharic version showed comparable or improved psychometric properties, suggesting it effectively captures the nuances of athlete motivation within the Ethiopian sports environment.

Conclusions: The Amharic version of the SMS-II is a valid and reliable tool for measuring motivation among Ethiopian athletes. This instrument can support researchers and coaches in designing interventions tailored to improve athletic performance and psychological well-being. Future research should expand the validation to include individual sports and younger athletes.

Keywords

Confirmatory factor analysis, internal consistency, reliability, Self-determination theory, validity.

Resumen

introducción: el estudio se centró en validar la escala de motivación deportiva ii (sms-ii) en el contexto etíope, basándose en la teoría de la autodeterminación. a pesar de su uso global, ninguna investigación previa había confirmado su validez para atletas etíopes.

objetivo: la investigación buscó validar la escala sms-ii mediante análisis factorial confirmatorio para garantizar su fiabilidad y aplicabilidad en medir la motivación de atletas en etiopía.

metodología: la versión en inglés del sms-ii, con 18 ítems en seis dimensiones, fue traducida al amárico por expertos lingüísticos. se recopilaron datos de 321 atletas (174 hombres, 147 mujeres) con una edad media de 23.48 años, todos participantes en deportes de equipo.

resultados: el análisis mostró un ajuste del modelo aceptable, con valores alfa de cronbach entre 0.816 y 0.865 en las subescalas, indicando una consistencia interna sólida.

discusión: los hallazgos coinciden con estudios previos, confirmando la solidez del sms-ii para evaluar la motivación. los altos índices de fiabilidad respaldan su uso en entornos deportivos etíopes.

conclusiones: la versión en amárico del sms-ii es una herramienta válida y fiable para evaluar los niveles de motivación en atletas etíopes.

Palabras clave

Análisis factorial confirmatorio, consistencia interna, confiabilidad, teoría de la autodeterminación, validez.

Introduction

This study is based on the theoretical framework of Self-determination theory (SDT). Self-determination theory is a noticeable motivational theory accepted to identify the contextual and interpersonal factors that underpin on human behaviour (Deci & Ryan, 2000, 2008). Self-determination is used to study of personality development and explains human behaviour through the understanding of basic psychological needs and motivation and their effects on sports performance (Li et al., 2016; Pelletier et al., 2017). Self-determination theory seeks to explain human motivation and behaviour on the basis of individual differences in motivational orientations, contextual predictors of motivation, and interpersonal perceptions. Central to self-determination theory is the distinction between self-determined or autonomous forms of motivation relative to non-self-determined or controlling forms of motivation. The extent to which people experience motivation to engage in activities and behaviour's as autonomous or controlling will determine their persistence with the behaviour in future and whether they gain certain adaptive outcomes such as satisfaction, enjoyment, and psychological well-being (Deci & Ryan, 2000, 2008).

The studies by González-Cutre et al. (2016, 2020) and González-Cutre and Sicilia (2019) have demonstrated how the aforementioned construct is positively associated with the most self-determined types of motivation and with positive consequences, such as life satisfaction, enjoyment, and vitality in Physical Education. González-Cutre et al. (2020) also showed the moderating role of openness to experience in the association between the novelty need satisfaction and well-being.

Researchers demonstrated the efficacy of the self-determination theory in explaining the motivational factors that affect athletes' outcome behaviors and predicting exercise behaviors and sports performance (Hagger & Chatzisarantis, 2007). The self-determination theory characterizes the development of human motivation at different levels by explaining how social-environmental factors affect individuals psychological needs which consequently influence their sports performance (Deci & Ryan, 2002; Mosqueda et al., 2019). A self-determined behaviour is autonomous and self-regulated based on one's psychological development, which indicates the existence of intrinsic motivation, extrinsic motivation, and amotivation (Mosqueda et al., 2019).

Multiple motivation theories promote the investigation of the role of motivation in different contexts. These theories include Maslow's theory, Maslow proposed that motivation is the result of a person's attempt at fulfilling five basic needs: physiological, safety, social, esteem and self-actualization, achievement goal theory, Achievement goal theory (AGT) is a psychological theory that explains how people pursue goals and how their goals can affect their behavior and self-determination theory which says (SDT) is a theory of human motivation and personality that focuses on how people's innate psychological needs and growth tendencies influence their choices. The self-determination theory and achievement goal theory are among the leading motivation theories that explain how social environmental factors or motivation climate influence human motivation (Badubi, 2017).

Motivation is a cornerstone of athletic success. It fuels the relentless pursuit of excellence, driving athletes to overcome challenges such as fatigue, boredom, pain, and the desire to do other things. A highly motivated athlete is more likely to dedicate themselves to rigorous physical conditioning, technical and tactical training, mental preparation, and general lifestyle which include; sleep, diet or proper nutrition, school or work, academic and professional commitment and interpersonal relationships. These factors collectively contribute to optimal athletic performance (Roy, Kathleen r, Vohs, & Dianne, 2007; Deci, & Ryan, (2000; Alderman, 1974; Straub, 1978; Singer, 1986).

Halbrook, Lindsey, Kimberly, J Robert, & E Jocelyn.(2012) found that there are three types of motivation: intrinsic, extrinsic, and motivation. Both intrinsic and extrinsic types of motivation are key factors in the motivation of athletes. Some athletes play sports simply because they love the rush it gives them. Others play in hopes of winning a championship. Some athletes perform with both types of motivation they love the sport, and it is enjoyable for them, but they also are competitive and want to win. Some athletes also strive for greatness in sports so that they can fulfill their need for achievement (Feldman, 2017).

Intrinsic motivation is related to psychological rewards such as those that can usually be determined by the actions and behaviour of the individual managers (Mullins, 2005). Intrinsic motivation is what

causes people to be a part of activities for the pure enjoyment of the activity itself (Feldman, 2017), plays a significant role in human behavior, including athletic performance.

Extrinsic motivation refers to the involvement in an activity to obtain rewards, driven by external rewards or pressures, is often emphasized in sports. Being engaged in activities because of external or internal pressures is considered an extrinsic form of motivation (Vallerand & Bissonnette, 1992).

The Sport Motivation Scale-II (SMS-II) is a widely used tool to assess extrinsic motivation among athletes (Ryan & Deci, 2017). It categorizes extrinsic motivation into four levels: external regulation, where athletes participate to avoid punishment or gain rewards (Ryan & Deci, 2017); introjected regulation, driven by internalized pressure and guilt (Lisa, 2017), and it is Non-self-determination regulation, Participating in sports activities for avoiding punishment or gaining rewards, controlled type (Li et al., 2016, Pelletier et al., 2017); identified regulation, where athletes recognize the value of participation in achieving personal goals (Li et al., 2016); and integrated regulation, where external rewards become integrated with personal values and intrinsic motivation (Pelletier et al., 2017). It is moderately self-determined or autonomous types of motivation (Li et al., 2016; Pelletier et al., 2017). The behaviour are still performed for external reasons (Deci & Ryan, 1985).

The SMS-II's strength lies in its comprehensive assessment of these motivation types, allowing for a nuanced understanding of athletes' motivations. By identifying the specific factors driving athletes, coaches and sports psychologists can tailor interventions to enhance performance and well-being. Moreover, the SMS-II's reliability and cultural adaptability, as demonstrated by its successful translation and validation in various languages (Dogan, 2000; Nunez et al., 2006), make it a valuable tool for researchers and practitioners worldwide.

By leveraging the insights gained from the SMS-II, coaches and sports psychologists can create a positive and sustainable sports environment that fosters both intrinsic and extrinsic motivation. This, in turn, can lead to improved performance, increased athlete satisfaction, and a more fulfilling sporting experience.

The third type of motivation is amotivation refers to the most negative type or lack of motivation, or no assumptions to participate in any type of activity (Vallerand & Losier, 1999; Li et al., 2016; Pelletier et al., 2017).

The Sport Motivation Scale-II (SMS-II) is a widely recognized tool for assessing athlete motivation. While the questionnaire has been validated for Ethiopian athletes in English, its use in the Amharic language, Ethiopia's primary language, remains limited. This study aims to address this gap by translating and validating the SMS-II into Amharic, ensuring its cultural appropriateness and reliability in the Ethiopian sports context. By establishing the construct validity and factor structure of the Amharic version of the SMS-II, researchers and practitioners can gain valuable insights into the motivational profiles of Ethiopian athletes, facilitating evidence-based interventions to enhance performance and well-being.

Dogain, 2000 Greek version SMS, sample of 134 athletes showed moderate to good internal consistency in the scale of Cronbach's Alpha from 0.46 to 0.78. Nunez, et al (2006) found similar result with 276 sample athletes Cronbach's Alpha ranging from 0.70 to 0.80. The instrument has been translated and validated in (France, Pelletier et al., 2017; Spain Viciano et al., 2017; Hungary Paic et al., 2017) authors presented the validity and reliability of the adapted instrument.

Kalogiannidis, S. (2021). Conducted the study on Impact of employee motivation on organizational performance. A scoping review paper for public sector. The Strategic Journal of Business & Change Management, the review showed that a greater extend employer motivation is much linked to organizational performance. However there are some more factors which influence the motivation.

The self-determined choices can fully meet their personal interests and needs while building self-efficacy, value, and the value behind learning goals, inducing behavioral motivation more effectively (Chiang, 2011). To transform external motivation into internal motivation with a high degree of self-determination, the ideal approach is to meet the basic learning needs of students, enabling them to become interested in learning English from the heart (Wang and Reynolds, 2024; Wang and Wang, 2024). Compared to the traditional passive English education method, self-directed English language learning inspired by the internal motivation to meet the basic needs of learners can have a long-term

effect. As such, learners are generally more able to continue learning, which verifies the importance of the self-learning theory in English education. However, the present self-determination-related studies tend to apply the theory on healthcare (Resnicow et al., 2022), medical care (Ntoumanis et al., 2021), and disabilities (Hansen et al., 2023) to help people with dissatisfaction in a variety of needs recover themselves. The same goes for physical education. The theory has mildly touched upon education such as physical education (Adefila et al., 2020; Saugy et al., 2020; Vasconcellos et al., 2020) is because the theory is arguably helpful in athleticism and health. On the other hand, the theory has not adequately emphasized English learning and there is deprivation in the specific self-determination motivation scale for English learners.

The motivation is very important factor for the better performance. There are many scale to measure the different motivation. Mallet et al., (2007) include an integrated regulation measure in order to represent all SDT constructs. Mallet et al, 2007, The exclusions of some items and proposed a revised SMS-6 version. This new version instrument consists of 18 items comprised of six factors. The SMS-II has been adequate instrument to assess motivation of athletes in sport setting.

The Sport Motivation Scale-II (SMS-II) is a widely used tool to assess an athlete's motivation and can be useful for Ethiopian athletes for better result of performance as we know Ethiopian athletes are well known in all over the world: There are various reason to apply scale -II on Ethiopian athletes as The SMS-II is based on Self-Determination Theory and reflects recent advances in motivation research. It measures intrinsic and extrinsic motivation, as well as amotivation, to help understand how these factors affect an athlete's performance, well-being, and persistence.

The SMS-II can help researchers and practitioners understand an athlete's motivational profile.

The SMS-II can be used in diverse cultural settings, including Ethiopia. For example, a study validated the Amharic version of the Basic Need Satisfaction for Sport Scale (BNSSS) among Ethiopian athletes. The study found that the BNSSS was reliable and valid, and that satisfaction with basic psychological needs was a good predictor of self-determination theory.

The study of motivation in sports is currently scarce in Amharic-speaking countries. The research of types of motivation in the sport context could help researchers and coaches in Ethiopia to identify effective interventions that could develop athletes' performance and experience. This study helps in better understand the aspects that determine his motivation (i.e., intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and amotivation) among the athlete. Therefore, the objective of our study was to assess the Validity and Reliability of the Sport Motivation Scale-II for Ethiopian athletes

The researcher applied SMS-II questionnaire for this study. The questionnaire were translated and validated for Ethiopian athletes, however it has not been yet translated and validated in Ethiopian (Amharic language). Therefore the aim of this present study was to translate and validate SMS-II into Ethiopian (Amharic language) through adequate transcultural procedures, to establish the construct validity, to determine the factor structure, and to assess the reliability through internal consistency on the six subscales. On the bases of these objectives it is hypothesised that there will be no Validity and Reliability of the Sport Motivation Scale-II for Ethiopian athletes.

Hypotheses

1. The Amharic version of the SMS-II will demonstrate equivalence to the original English version in terms of semantic, idiomatic, experiential, and conceptual equivalence.
2. The Amharic version of the SMS-II will exhibit a similar factor structure to the original English version, confirming its validity in measuring the intended constructs of motivation.
3. The Amharic version of the SMS-II will demonstrate acceptable levels of internal consistency reliability, as measured by Cronbach's alpha, for each subscale.

The proposed study aligns with the Self-Determination Theory (SDT), which posits that intrinsic motivation and autonomous forms of extrinsic motivation are essential for optimal performance and well-being (Ryan & Deci, 2000). By validating the SMS-II in Amharic, researchers can apply SDT principles to understand and enhance the motivation of Ethiopian athletes.

Method

Participant

To ensure a diverse and representative sample, a simple random sampling technique was employed to select 321 athletes (174 males, 54.21%, and 147 females, 45.79%) from various sports federations, including soccer ($n=94$), basketball ($n=73$), volleyball ($n=81$), and handball ($n=72$). Participants ranged in age from 18 to 46 years ($M=23.48$, $SD=5.07$) and had an average of 5.90 years ($SD=3.70$) of competitive experience. Prior to participation, all athletes were provided with detailed information about the study's purpose, their rights, and the voluntary nature of their participation. Informed consent was obtained from each participant.

Sports motivation scale-II

The sport motivation scale-II (SMS-II) was used to assess athlete motivation. This study employed a convenience sampling method to recruit participants from various sports, including, soccer, basketball, volleyball, and handball. The development and validation of the sports motivation scale were anchored on the self-determination theory (Li, Kawabata, & Zhang, 2016, Ryan & Deci, 2000). Studies on the original sport motivation scale (Pelletier et al., 1995) reported some of its limitations that include a lack of internal consistency and inadequate factorial structure (Li et al., 2016). Consequently, a revision of the original sports motivation scale was needed to address its limitations (Pelletier et al., 2013). The revised version of the sports motivation scale was labeled SMS-II (Pelletier et al., 2013).

Instrumentation

Ethiopian athletes took part in the study. For this study Amharic version sport motivation Scale (SMS-II) Questionnaire which consists of 18 items was translated to Amharic language for better understanding of the questions. The Amharic version translation was done under the guidance of Ethiopian experts. Participants' responses were gathered using an Amharic version of the recent version of the sport motivation Scale (SMS-II) Questionnaire. The 18 questions that made up this sport scale are divided into six subscales. This study established the validity and reliability of the Amharic (an Ethiopian language) translation and validation of the basic psychological needs satisfaction for Sport Scale (SMS-II) Questionnaire in English. All subscales Cronbach's internal reliability coefficients were excellent.

Procedures

First, the University sports academy's ethics commission gave its approval to the research project: the validity and reliability of Sport Motivation Scale- II with Ethiopian athlete, followed by the research in to the relationship among and between basic psychological needs, sport motivation and sports performance. Then, the principal author met and discussed the purpose of the study with the team captains and head coaches by presenting them a letter from Bahir Dar University sports academy dean's office asking for voluntary collaboration during the process of the data collection. Permission was granted to directly collect the data from the participants.

After getting the permission from the concerns teams heads, the questionnaires were issued to the participants during the competitive season. Four data collectors were selected from physical education and sport science department to collect the data from athletes. They were experienced teachers. They explain the items to the athletes briefly to make the entire questions clear to them and to avoid any kind of biasness. The data collectors distributed the SMS-II questionnaires to the participants after briefing the overall purpose the data collection. To translate and adapt the SMS-II instrument the original English language version, developed by (Pelletier et al., 2013) to Amharic the methodological procedures recommended by Vallerand (1989) and endorsed by Banville, D., Desrosiers, P., & Genet-Volet, Y. (2000) was followed:

1. An initial translation with the assistance of three translators who were proficient in the English and Amharic language;
2. Evaluation of the initial Amharic version by four experts independently;
3. Four additional experts collectively examined all the items until they reached a consensus on item wording;
4. We administered this version of the questionnaire to 65 (men=38; women=27) independent ath-

letes from four team and three individual sport types to assess item clarity and accuracy (pilot study);

5. Two Amharic language experts conducted a final review of the Amharic version of the BNSSS to ensure correct syntax, spelling, and grammar were corrected/(Final version).

Ethical Clearance

This study adhered to all ethical guidelines and was approved by the [Bahur Dar University, Sports Academy Ethical Review Board] (Protocol Number: [IRERC 05/2024]). Informed consent was obtained from all participants prior to their involvement in the study, ensuring they were fully informed about the study's objectives, procedures, potential risks, and benefits. Participants were assured of confidentiality and anonymity throughout the research process

Data Collection Process

After getting the permission from the concerns teams heads, the questionnaires were issued to the participants during the competitive season. Four data collectors were selected from physical education and sport science department to collect the data from athletes. They were experienced teachers. They explain the items to the athletes briefly to make the entire questions clear to them and to avoid any kind of biasness. The data collectors distributed the SMS-II questionnaires to the participants after briefing the overall purpose the data collection. To translate and adapt the SMS-II instrument the original English language version, developed by (Pelletier et al., 2013) to Amharic the methodological procedures recommended by Vallerand (1989) and endorsed by Banville, D., Desrosiers, P., & Genet-Volet, Y. (2000) was followed.

Results

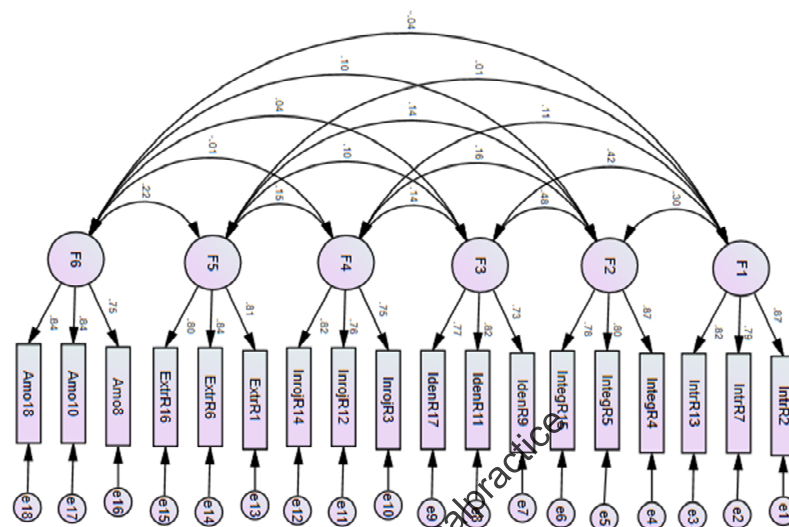
A cronbach's alpha value exceeding 0.7 is generally recommended and considered acceptable for internal consistency (Nunnally, 1978; Nunnally, and Bernstein 1994; Tavakol, M. and Dennick, R. 2011). Additionally, factor loadings greater than 0.5, preferably 0.7 or higher, were considered significant for retaining items in the measurement model (Hair Jr., J.F., Black, W.C., Babin, B.J. and Anderson, R.E. 2009). To further refine the model, modification indices were utilized (see Figure 1 and Table 4).

A confirmatory factor analysis (CFA) was conducted using LISREL 8.5 to assess the factorial structure of the six dimensions of the Ethiopian version of the SMS-II. The model was specified to allow only the relevant construct to load on each item, with no correlated error terms. To evaluate model fit, various goodness-of-fit indices were employed, including the non-normed fit index (NNFI), comparative fit index (CFI), standardized root mean square error (SRMR), and root mean square error of approximation (RMSEA).

While traditional fit indices, such as the Normed Fit Index (NNFI) and Comparative Fit Index (CFI), with values above .90, and the Root Mean Square Error of Approximation (RMSEA) below .08, are commonly used to assess model fit (Bentler & Bonett, 1980), more recent guidelines (Hu & Bentler, 1999) propose stricter thresholds. These stricter guidelines suggest NNFI and CFI values of at least .95, and SRMR and RMSEA values below .08 and .06, respectively. However, it's important to note that overly stringent criteria can increase the risk of Type I errors, leading to the rejection of well-fitting models (Marsh et al., 2004). Therefore, a balanced approach was adopted in this study, considering both traditional and more recent fit index guidelines to ensure a reliable assessment of model fit.

The results of the CFA indicated a good fit for the single-factor model: $\chi^2 / df = 1.136$, $p < .001$, CFI = .994, TLI = .992, IFI = .994, RMSEA = .021, and RMR = .327 (Table 3). Standardized factor loadings were significant ($p < .001$). This robust measurement model served as the foundation for subsequent structural equation modeling (SEM) analyses

Figure 1. Factor structure of SMS-II



Note: F1= Intrinsic Regulation; F2= Integrated Regulation; F3= Identified Regulation; F4= Introjected Regulation; F5=Extrinsic Regulation; F6=Amotivation.

Table 1. Correlations (above diagonal) and internal consistency value: Cronbach's alpha between study variables

Sub-Scales	IR	INR	IDR	IROR	ER	AMO
IR	(.865)					
INR	.271**	(.857)				
IDR	.354**	.406**	(.816)			
IROR	.270**	.141*	.116*	(.821)		
ER	.114*	.120*	.080	.128*	(.857)	
AMO	.045	.090	.023	.007	.190**	(.848)

** Correlation is significant at the 0.01 level (1-tailed)

* Correlation is significant at the 0.05 level (1-tailed)

*p < 0.05. **p < 0.01, 95% CI.

Table 2. mean, standard deviation, and Cronbach's alpha of SMS-II

Dimension	Item N°	Mean	Standard deviation
Intrinsic R	2,7,13	5.46	1.118
Integrated R	4,5,15	5.14	1.215
Identified R	9,11,17	5.76	1.100
Introjected R	3,12,14	5.37	.880
Extrinsic R	1,6,16	3.59	1.482
Amorivated	8,10,18	3.07	1.785

R= regulation

Table 3. Fit indices for six models SMS-II

Parameters	X ²	DF	P-value	X ² /DF	RMSEA	TLI	NFI	CFI	IFI	SRMR	RMR GFI
Values	136.38	120	<0.001	1.136	0.021	0.99	0.95	0.994	0.992	0.0327	0.064 0.96

Table 4. Item-factor loadings, Error terms of SMS-II item scores

Dimension	Item N°	Item factor loading	AVE	CR
Intrinsic R	2	0.87	0.6844	0.88
	7	0.79		
	13	0.82		
Integrated R	4,	0.87	0.6684	0.86
	5	0.80		
	15	0.78		
Identified R	9	0.73	0.5746	0.80
	11	0.72		
	17	0.82		
Introjected R	3	0.75	0.6042	0.82
	12	0.76		

	14	0.82		
Extrinsic R	1	0.81	0.672	0.86
	6	0.84		
	16	0.80		
Amotivation	8	0.75	0.6579	0.85
	10	0.84		
	18	0.84		

Note. AVE=average variance extracted each construct; CR= composite reliability of each construct

Discussion

The present study aimed to translate, adapt, and validate the Sport Motivation Scale-II (SMS-II) into Amharic, the primary language of Ethiopia, to assess the motivational profiles of Ethiopian athletes. The original SMS-II, developed by Pelletier et al. (2013), is a widely used instrument that measures six types of motivation based on Self-Determination Theory (SDT; Deci & Ryan, 2008).

The Amharic version of the SMS-II demonstrated adequate reliability and validity. The internal consistency of the subscales, as measured by Cronbach's alpha, was comparable to previous studies (Dogan, 2000; Nunez et al., 2006). Additionally, the model fit indices indicated a good fit with the original model, providing strong evidence for its construct validity. These findings align with previous research on the SMS-II in various cultural contexts (Pelletier et al., 2017; Viciano, et al., 2017; Paic et al., 2017; Mallett et al., 2007).

While some studies have reported lower levels of internal consistency for certain SMS-II subscales (Pelletier et al., 2013), the current study found acceptable levels for all subscales. Furthermore, the Amharic version exhibited stronger correlations between subscales compared to the original version (Pelletier et al., 2013). This suggests that the Amharic version may provide a more nuanced understanding of the complex interplay between different types of motivation in Ethiopian athletes.

The successful translation, adaptation, and validation of the SMS-II into Amharic provide a valuable tool for researchers and practitioners to assess the motivation of Ethiopian athletes. This tool can be used to identify individual differences in motivation, monitor changes in motivation over time, and develop targeted interventions to enhance athlete performance and well-being.

The present study, while valuable, had some limitations. Firstly, it was confined to ball game athletes, excluding individual sports and younger athletes. To gain a more comprehensive understanding of athlete motivation in Ethiopia, future research should involve a diverse sample of athletes across various sports and age groups. Secondly, given Ethiopia's multilingual nature, future studies should consider translating the SMS-II into multiple languages to accommodate athletes from different linguistic backgrounds. Additionally, incorporating qualitative methods, such as interviews, can provide richer insights into the complex factors influencing athlete motivation. Finally, as scale development is an ongoing process (Ng et al., 2011), future research can explore further refinements and adaptations of the SMS-II to enhance its measurement precision and cultural relevance.

Conclusions

In conclusion, this study successfully translated, adapted, and validated the Sport Motivation Scale-II (SMS-II) into Amharic, providing a reliable and valid tool for assessing the motivation of Ethiopian athletes. The findings indicate that the Amharic version of the SMS-II possesses strong psychometric properties, with high levels of internal consistency and construct validity across all six dimensions of motivation.

The results highlight the significant role of motivation in athletic performance and emphasize the importance of understanding the various factors that influence athlete motivation. By utilizing the Amharic version of the SMS-II, researchers and practitioners can gain valuable insights into the motivational profiles of Ethiopian athletes, enabling the development of targeted interventions to enhance performance and well-being.

Future research should consider expanding the sample to include a broader range of athletes, including those from individual sports and younger age groups. Additionally, exploring the cultural nuances of motivation in different regions of Ethiopia and translating the scale into other relevant languages may provide a more comprehensive understanding of athlete motivation in this diverse country.

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