



Socio-cultural Implications of Self-Determination and Achievement Goal Theory Constructs of Motivation among Fijians athletes with Disabilities

Afrada Shah

Lecturer, School of Arts & Humanities, Fiji National University, Fiji,
afrada.shah@fnu.ac.fj

Victor Alasa

Asst. Prof., corresponding author, School of Education, Fiji National University, Fiji,
victor.alasa@fnu.ac.fj

Fijian athletes with disabilities have been given scant attention in terms of empirical research. This study used the theoretical underpinnings of the self-determination and achievement goal constructs of motivation to examine motivation and goal structures among Fijian athletes with disabilities with the overarching aim being to develop motivation profiles of these athletes. This study attained this by using two self-report measures (SMS-28 and TEOSQ) which are validated measures in the field of sports psychology. Purposive sampling was used, as participants had to meet the inclusion criteria and Fijian athletes with disabilities (N= 101, mean age =26, SD= 11) completed the self-report questionnaires. Cluster analyses revealed three meaningful clusters and as expected majority of Fijian athletes were grouped into the most self-determined category indicating positive athlete behavioral characteristics. Repeated measures ANOVA and cluster analyses were used. Findings indicated that the current sample were more task than ego goal oriented. Further, it was established that majority participants exhibited qualities aligned with the most self-determined cluster profile. These findings have significant implications for sports educators, coaches, leaders in disability-inclusive sports to use sports as a positive tool to promote inclusive sports education and empower Fijian athletes with disabilities.

Keywords: self-determination, sports motivation, disability-inclusive sports, achievement goal orientations, socio-cultural implications

INTRODUCTION

In the Pacific, inclusive sports have primarily been utilized as a transformative tool to address health and social issues. The effectiveness of inclusive sports is clear in Pacific Island Countries such as Samoa, Solomon Islands, Vanuatu, and Fiji, which is the country under study in this research. These countries, including Fiji have established disability-inclusive sports organizations (e.g., the Fiji Paralympic Committee) which

Citation: Shah, A., & Alasa, V. (2023). Socio-cultural implications of self-determination and achievement goal theory constructs of motivation among Fijians athletes with disabilities. *International Journal of Instruction*, 16(4), 787-804. <https://doi.org/10.29333/iji.2023.16444a>

support the fitness needs of individuals with disabilities. In Fiji, history was made when Ilesia Delana, a Fijian athlete with impairment, won Fiji's first gold medal at the 2012 Paralympic event. Delana's success has stimulated an increase in disability-inclusive sports participation, allowing people with impairments to focus on their abilities as well as facilitating essential changes in societal attitudes towards people with disabilities (Kumar, 2012; McBean, Townsend & Petrie, 2022). The Paralympic gold medalist identified sports as a strategy to manage stigma against people with disabilities in Fiji.

There have been many international donor agencies which have provided much needed aid to boost development of Fijian athletes with disabilities (Chanel, 2019). Further, Fiji is also now an accredited member of Virtus which is internationally acknowledged as a global body for disability sports responsible for overseeing the eligibility and classification for athletes with intellectual disabilities (Rakautoga, 2022). Despite the rise in support and interest for inclusive sports in Fiji, athletes with disabilities have been given minimal empirical attention from a scholarly perspective in Fiji whereas there has been an expansion in the body of literature among able-bodied athletes in the past decade (Mumm and O'Connor, 2014; Schaaf, 2006). One of the key aspects that lacked in terms of research were motivation to participate in disability-inclusive sports in Fiji. Motivation and goal orientations are critical tenets of sports psychology research and practice to learn about the nature of athletes to further strengthen their development. Thus, aim of the present study is to identify motivation profiles of athletes with disabilities in Fiji by applying the self-determination model of motivation and achievement goal framework.

The theoretical underpinning of the present study is based on the self-determination theory (Deci & Ryan, 1985) and achievement goal orientations (Nicholls, 1984). The self-determination theory involves socio-cognitive principles and psychological needs. It outlines three types of motivation on a continuum (*intrinsic motivation-IM, extrinsic motivation-EM and amotivation*) as well as factors that influence motivation intensity. The achievement goal theory is also supported by socio-cognitive principles that utilize goal orientations (*task and ego*) to explain the rationale of athlete behavior. The components as well as validity of these frameworks have been well discussed and established in several works about motivation in the area of sports psychology and education. Within the present study, a review of literature will focus on how these frameworks have been explored among athletes with disabilities to set the scholarly background for the current study.

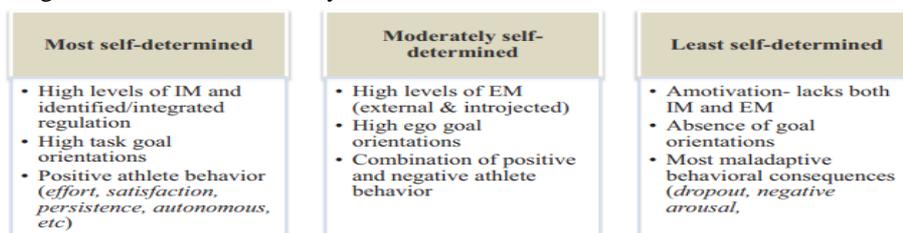


Figure 1
Motivation profiles: The relationship between self-determination & achievement goal theory

Early research in other social context, largely Euro-western and Asian, have established a very close relationship between the constructs of self-determination (Raman et al., 2023) and achievement goal orientations theoretically (refer to figure 1) as well as in application among athletes with disabilities with scholars establishing that these athletes generally demonstrate self-determined motivation profiles which align with both task and ego goals. Their innate satisfaction in participating and achieving task-related rewards were recognized as key factors for inclusive sports participation (Silva, et. al., 2022; Brasile & Hedrick, 1991; Brasile, Kleiber & Harnisch, 1991; Dickinson & Perkins, 1985). Several studies, comprising of athletes with disabilities, ascertained similar findings (Banack, Sabiston & Bloom, 2011; Farrell et al., 2004; Perreault & Vallerand, 2007). In a sample of sitting volleyball athletes, participation motives were mostly derived through intrinsic purposes related to health benefits and development of skills (Kalbli, Gita, Rigler & Szilak, 2004). In addition, athletes also reported levels of extrinsic motivation, mostly pertaining to enhancing social relationships. Similarly, Punch, Russell & Graham (2022), Malloy & Kavussanu (2021) and Shapiro (2003) reported that in conjunction with inherent factors such as commitment, athletes also reported the need to demonstrate competence to social figures. Like intrinsic and extrinsic motivation, task and ego goal orientations were also reported by athletes with disabilities. For example, in a sample of wheelchair basketball, recreational and able-bodied athletes, wheelchair and recreational athletes generally reported higher levels of task goal orientations (Lautenbach, et. al., 2021; Hutzler & Shemesh, 2012). Ego orientations were also reported which were mostly related to competition-oriented climate (Causgrove-Dunn, 2000; Pensgaard et al., 1999; White & Duda, 1993).

Further, it is important to highlight that the presence of extrinsic motivation and ego goal orientations have been attributed to competitiveness, social and parental acceptance (Freire, et al., 2022; Hutzler, Oz & Barack, 2013; Swanson, Colwell & Zhao, 2008). Parental as well as family approval and support have been identified as significant social factors that determine sports participation among athletes with disabilities. In a sample of athletes with intellectual disabilities, self-efficacy and need to engage in sports were significantly related to family support (Hummel, Cohen & Anders, 2022; Van der Ploeg, Van der Beek, Van der Woude & Van Mechelen, 2004). Similar research has shown that perceptions of task orientations among parents were mirrored by task attributes in athletes (Gutiérrez, Caus & Ruiz, 2011). On the other hand, ego viewpoints held by parents were reflected in presence of ego orientations among athletes. The findings also revealed that social support groups were a source of motivation for athletes with disabilities.

For athletes with disabilities, the presence of impairment is a dominant feature throughout their lifetime. To deter the negative impact of impairments, athletes with disabilities use sports to develop a more positive sense of self and gain social acceptance (Goodwin et al., 2009; Farrell et al., 2004). However, social factors are widely recognized as extrinsic sources of motivation. As a result, athletes with disabilities are likely to exhibit extrinsic and ego orientations due to their high consideration for gaining

social acceptance. Scholars (Vallerand, 1997, 2001; Deci, Koestner & Ryan, 1999; Ryan, 1993) also argue that the importance of social acceptance relates to the psychological need of relatedness that enhance self-determination. The role of significant social beings and consequent acceptance of athletes with disabilities within the society is an integral motive for inclusive sports participation. In support of this assertion, Goodwin et al., (2009) reported that wheelchair athlete enhanced levels of confidence and empowerment were generated through feelings of belonging. Similar research demonstrated that significant others such as parents and family provide social support for athletes with disabilities (Farrell et al., 2004). The athletes from this study reported positive emotions which were significantly linked with receiving social approval. Hence, it is important to understand that athletes with disabilities who exhibit external motivation do not necessarily demonstrate maladaptive behavior.

More recent research also aligns well with previous literature pertaining to athletes with disabilities who in other social context have demonstrated that such athletes are grounded in self-determination as well as exhibit both task and ego goal orientations. In a qualitative study, McLoughlin et al., (2017) used thematic analyses to determine that participants with disabilities exhibit self-determined constructs of the motivation continuum. Findings from this study also established that external factors such as financial costs, time and lack of opportunities also play a critical role as barriers to sports participation. Kasum and Mladenovic (2017) used a self-perception scale among athletes with disabilities and findings from their study ascertained that sports participation strengthened a positive sense of self-concept among athletes with disabilities, which further replicates the notion of self-determination but using a different scale of measurement for motivating factors in sports participation. The use of self-perception scale in this study can be corroborated with the positive aspects of the self-determination continuum of motivation. The self-perception scale used by Kasum and Mladenovic (2017) confirms that athletes with disabilities can be both intrinsically and extrinsically motivated to participate in sports.

Further, Saebu et al., (2013) used the self-determination model in a longitudinal study during a 3-week sports activity participation among adults with physical disabilities. Findings from this study focused on the perceived autonomy support of the self-determination model which statistically significantly determined satisfactions needs. Needs satisfaction was also correlated with autonomous motivating factors as well as self-efficacy for participation in physical activities. Participants with disabilities who participated in physical activities during this period exhibited more self-determined motivation. Similarly, Frielink et al. (2018) tested the self-determination theory among individuals with intellectual disabilities using structural equation modelling and established that tenets of this theory such as perceived autonomy support had a positive relationship with autonomies motivation, satisfactions of needs, and healthy levels of mental wellbeing. These findings supported the notion that the self-determination theory is not just adaptable for people with physical disabilities or impairments but also has a strong sense of support for those with intellectual disabilities.

Moreover, achievement goal orientations are also aligned well with the self-determination model as goals for athletes in general are contributing factors for the

construct of motivation. Literature has documented that athletes with disabilities usually tend to exhibit achievement goal orientations in comparison to ego goals. For example, in a study which included 140 participants with physical disabilities, the Task and Ego Orientation in Sports Questionnaire (TEOSQ) reflected a greater inclination towards task goals and moderate levels of ego goal orientations (Proios et al., 2019). In 2020, Proios further examined the role of dispositional factors using TEOSQ and other measures such as Athletic Identity Measurement and Measure Athletes' Volition among a sample of 134 people with physical disabilities. Findings from this study established that goal orientations and aspirational competencies are good predictors of the constructs of athletic identity. The findings further established that task goal orientations specifically are good predictors of the three constructs of athletic identity.

As we focus on the aims of the current research study, it is important to reiterate and expand on the problems at the ground level and to elaborate on gaps in existing literature. In other social contexts, sports have been shown to have positive outcomes for people with disabilities. In Fiji, sports in general are a cultural experience, with the nation's collective passion for rugby as well as other sports for able-bodied athletes. Therefore, in perceived application, inclusive sports can have a positive and meaningful impact on the lives of Fijians with disabilities. Devine et al., (2017) eloquently described the barriers of participation in inclusive-sports in the Pacific including discrimination, accessibility issues, lack of facilities and so forth despite the positive outcomes it had for individuals who participated in inclusive-sports. As we focus on the gaps in literature, it is important to note that one of the key gaps is that motivation can be used as a significant counter to barriers has not been well validated in the Fijian context.

Further, in comparison to able-bodied Fijian athletes, there has been very little that has been documented in terms of Fijian athletes with disabilities when it comes to the area of sports psychology and education. We know a lot about their barriers and challenges, however, there is scant literature which attempts to view athletes with disabilities from a more psycho-social perspective rather than the heavily documented 'sympathetic' notion that is excessive in the Pacific context. Therefore, it is important to learn about athletes with disabilities in relation to other constructs of sports psychology. This paper also emphasizes the alignment of the current research to relevant Sustainable Development Goals, (SDG) 4 which focuses on the value of inclusive quality education. This SDG ascertains the rationale of the current paper to provide people with disabilities in general more inclusive and equitable opportunities in various aspects of their lives, including teaching and learning of sports education. Considering this alignment, we anticipate putting forth culturally sound and contextualized findings which will guide practitioners and professionals including educators and coaches working with Fijian athletes with disabilities to depend on evidence-based practice which are guided by the principles of SDG 4.

Overall, a review of existing literature on motivation studies in sports has revealed two significant limitations that will be addressed in the present study. First, even though there has been growing interest in promoting inclusive sports for its positive outcomes, psychological research involving Fijian athletes with disabilities is clearly very limited.

Psychological processes which underlie disabled athlete motivation have been given scant attention in sports psychology research and education. Secondly, and more importantly, majority of existing literature in this area has focused on disabled individuals in Euro-western and Asian countries and as such cannot be completely generalized to the Pacific context. Investigations about Pacific and more specifically Fijian athletes are scant and limited to able-bodied rugby players. Motivation processes among athletes with disabilities in Fiji has not been explored at all by sports researchers and educators. Considering the significance of contextual factors for disabled athlete motivation, an examination of Fijian athletes is certainly warranted. It is very possible that cultural factors in the Pacific region will lead to unique and distinct motivation profiles of Fijian athletes with disabilities when compared to athletes from other socio-cultural backgrounds.

The primary aim of the present study is to identify motivation profiles of Fijian athletes with disabilities by adopting the constructs of self-determination and achievement goal orientations of motivation.

METHOD

Research Objectives

The current research design was guided by the overarching aim outlined before, research objectives and hypotheses which were drawn from the review of existing literature. The overarching aim of the current study is to identify motivation profiles of Fijian athletes with disabilities by adopting the frameworks of self-determination and achievement goal orientations of motivation. This aim is guided by the following research objectives:

- i. To determine levels of intrinsic/extrinsic motivation and task/ego goal orientations among Fijian athletes with disabilities.
- ii. To determine the motivation profile typically demonstrated by Fijian athletes with disabilities.

Research Hypotheses

Based on existing body of literature on motivation and goal orientations in sports, the following research questions and related hypotheses were drawn:

- i. H₁: Athletes with disabilities will report higher levels of intrinsic motivation than extrinsic motivation.
- ii. H₂: Athletes with disabilities will report greater task orientation than ego orientation.
- iii. H₃: Fijian athletes with disabilities are expected to typically demonstrate the most self-determined motivation profile.

Research Design

A correlational quantitative research design with self-report questionnaires was used to assess motivation and goal orientations. The major independent variables for the present study were a) Motivation (Intrinsic, Extrinsic); and b) Goal Orientation (Task, Ego). The major dependent variables were motivation and goal orientation scores. Two or three factor designs were not considered because there were no expectations of

interactive effects. Further, cluster analyses were also used to determine the motivation profiles of Fijian athletes with disabilities.

Sample

The Sports Motivation Scale (SMS-28) and Task and Ego Orientation in Sport (TEOSQ) scales were completed by 101 (51 males, 50 females) athletes with disabilities in Fiji. The age of the participants ranged from 16 to 58 years with the mean age being 26 years ($SD = \pm 11$ years). The sample was represented by 70 *i-Taukei* (indigenous Fijians), 27 Fijians of Indian descent and 4 of other ethnic backgrounds. Due to the limited sampling frame, participants were purposively selected if they met the following conditions:

- i. Presence of any form of disability
- ii. Older than 16 years
- iii. Regularly engaged in sports or physical activity.

The participants were recruited at three urban locations in Suva, the capital of Fiji. The sampling sites included the following organizations:

- The Fiji Vocational and Training Centre
- St. Giles Hospital
- Hilton Special School

The majority ($n=97$) of the participants engaged in disability-inclusive sports as well as physical activities on a regular basis and are considered amateur athletes while the remaining ($n=4$) were elite athletes. Those who had participated in professional sports are considered elite athletes by the Fiji Paralympic Committee. All participants provided their written consent as well as assent (*in cases where participant was not of legal age, consent was taken from their legal guardians*) prior to completing the self-report questionnaires. Participants who voluntarily agreed to and completed the two measures were reasonably compensated for their time and effort.

Measures

A three-part questionnaire was completed by the participants of the present study. Part one of the questionnaire consisted of demographic information and consent form. The other two parts included the two scales that were used to assess motivation (SMS-28) and goal orientations (TEOSQ).

Demographics and consent form. This section of the questionnaire included descriptive and categorical information about participants. For demographic purposes, participants listed their gender, age, ethnicity, and level of participation in inclusive sports. The consent form simply allowed participants to voluntarily provide their approval to participate in the study.

Sports Motivation Scale (SMS-28). The Sports Motivation Scale (SMS-28) was developed by Pelletier et al., (1995) to measure sources of motivation among athletes. The 28-item scale, based on the self-determination continuum, has 7 sub-scales that assess the different types of intrinsic and extrinsic motivation. These sub-scales are made up of four items each and are categorized under:

- intrinsic motivation (*to know, accomplish and experience stimulation*)
- extrinsic motivation (*identified, introjected and external regulation*)
- amotivation.

The items were rated on a 7-point Likert scale ranging from 1 (=does not correspond at all) to 7 (=corresponds exactly).

The three sub-scales of intrinsic motivation represented the most autonomous or most self-determined motivation. These are intrinsic motivation to know (e.g., “For the pleasure of discovering new performance strategies”), intrinsic motivation to accomplish (e.g., “For the pleasure that I feel while executing certain difficult movements”) and intrinsic motivation to experience stimulation (e.g., “For the excitement I feel when I am really involved in the activity”). The three sub-scales of extrinsic motivation represented moderately autonomous and external forms of self-determination. These are external regulation (e.g., “To show others how good I am good at my sport”), introjected regulation (e.g., “Because I would feel bad if I was not taking time to do it”) and identified regulation (e.g., “Because it is a good way to learn lots of things which could be useful to me in other areas of my life.”). Amotivation represented absence of autonomy and the least self-determined motivation dimension (e.g., “I often ask myself; I can't seem to achieve the goals that I set for myself.”).

Task and Ego Orientation in Sport Questionnaire (TEOSQ). Duda (1989) developed the Task and Ego Orientation in Sport Questionnaire (TEOSQ) to measure achievement goal orientations in sports. It includes 13 items that assess task and ego goal orientations which are based on different situations in sports. The items were measured on a 5-point Likert scale which ranged from 1 (strongly disagree) to 5 (strongly agree). Seven items measured task goal orientations (e.g., “I learn a new skill and it makes me want to practice more”) while 6 items measured ego goal orientations (e.g., “I score the most points/goals/hits/etc.”).

Validity and reliability of SMS-28 and TEOSQ scales. The psychometric properties of SMS-28 as a sports motivation construct have been validated in a few studies involving athletes with disabilities (Kolayis, 2012; Banack et al., 2011). Cultural validation of SMS-28 has been established among various cultural contexts and languages such as in Italy (Candela et al., 2014), Brazil (Filho et al., 2010), Turkey (Kazak, 2004), Greece (Alexandris et al., 2002), Bulgaria (Chantal et al., 1996). The validity of TEOSQ as a construct to measure task and ego goal orientations has been confirmed in multiple studies involving athletes with disabilities (Hutzler, et al., 2013; Hutzler & Shemesh, 2012; Chen et al., 2007; Skordilis et al., 2001). Cultural validation of TEOSQ has been established among various samples including Spain and Portugal (Castillo, et al., 2010), China (Wang, Liu, Sun, Lim & Chatzisarantis, 2010), Botswana (Malete, 2006).

Within the present study, Cronbach alpha values indicated high internal reliability of items that measured intrinsic motivation (*to know, accomplish and experience stimulation*), external regulation, introjected regulation, identified regulation and amotivation (Table 1). For items measuring task and ego goal orientations on the TEOSQ scale, moderate internal consistency was confirmed. Cronbach's alpha values for the 7-task goal orientation and 6 ego goal orientation items were .77 and .68

respectively. Overall, past studies and reliability analysis from the present study provide a good support for the construct validity of SMS-28 and TEOSQ scales within different cultural contexts and inclusive sports settings; hence making these scales appropriate to be employed in the present study to assess motivation and goal orientations of Fijian athletes with disabilities.

Table 1
Internal reliability of SMS-28 using cronbach alpha values

SMS-28 Variable	Cronbach Alpha (α)
Intrinsic Motivation to Know	.83
Intrinsic Motivation to Accomplish	.84
Intrinsic Motivation to Experience Stimulation	.84
External Regulation	.74
Introjected Regulation	.76
Identified Regulation	.83
Amotivation	.75
Intrinsic Motivation (Collective of intrinsic motivation to know, accomplish & experience stimulation)	.92
Extrinsic Motivation (Collective of external, introjected and identified regulation)	.88

Procedures

In order to recruit potential participants, permission was requested and attained from the Fiji National Council for Disabled Persons. Participants were verbally requested to voluntarily participate in the study and were presented with an information sheet as well as a consent form prior to data collection. Prior to all data collection, participants were reminded of their rights to voluntary participation, to withdraw from the study at any point in time without any consequences and confidentiality of their responses. Initially, the researcher collected data on a one-on-one basis due to the special needs of participants. Due to time constraints, remaining data collections were conducted in reasonably sized groups whereby each group consisted of 10 participants. In order to minimize sampling errors, researcher and research assistants verbally went over the two measures with the participants to facilitate better comprehension of each statement if required by participants. Various strategies were employed to ensure that participants were able to comprehend and respond to all the statements in the two scales. For instance, post completing surveys, researcher and research assistants went over the entire survey again to ensure that participants had understood and responded to all the items. Upon completion of sports measures, participants were debriefed about the purpose of the study, their rights as participants and were presented with reasonable compensation for their time and effort.

FINDINGS

Motivation Processes and Goal Orientations

A repeated measures ANOVA analysis was conducted within subjects to compare differences in intrinsic and extrinsic motivation dimensions. Repeated measures ANOVA with a Greenhouse-Geisser correction determined that there was no statistically

significant difference between the means of intrinsic and extrinsic motivation ($F(1, 100) = .777, p = .38$); thus, rejecting H_1 . Descriptive statistics showed little fluctuations between intrinsic ($M=5.05, SD=1.4$) and extrinsic mean scores for motivation ($M=4.99, SD=1.31$).

Repeated measures ANOVA analysis was also conducted within subjects to compare differences in task and ego goal orientations. Consistent with this H_2 , a repeated measures ANOVA with a Greenhouse-Geisser correction determined that there were significantly greater levels of task orientation in comparison to ego orientation, $F(1, 100) = 123.047, p < .005$. Descriptive statistics demonstrated differences between task ($M=3.29, SD=.42$) and ego ($M=2.44, SD=.69$) goal orientations.

Motivation Profiles of Fijian Athletes with Disabilities

A simple hierarchical cluster analysis was performed using Ward's method with a Euclidean distance measure to identify motivation profiles of Fijian athletes with disabilities. The agglomeration schedule was used to identify the number of clusters. A sharp increase within the agglomeration schedule (21 %) suggested a three-cluster solution to be suitable.

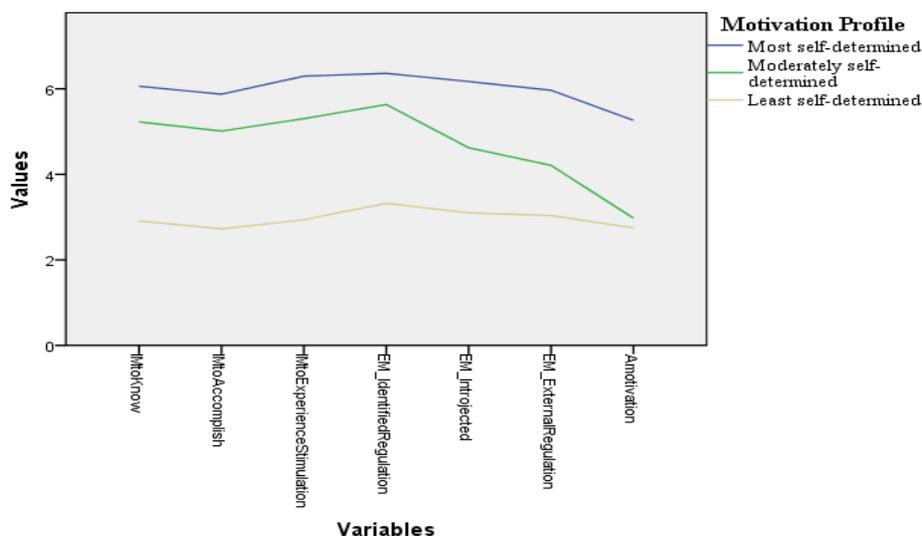


Figure 2
Motivation profiles of Fijian athletes with disabilities

According to Figure 2, the three clusters represent the most self-determined, moderately self-determined and least self-determined profiles. Cluster 1 was categorized as the most self-determined and represented 53.5% of the sample ($N=54$). Athletes within this cluster demonstrated the highest levels of autonomous forms of motivation (intrinsic motivation and identified regulation). External and introjected regulation values were slightly lower than intrinsic motivation and identified regulation. Within this profile, amotivation was moderately lower than intrinsic and extrinsic constructs of motivation.

Cluster 2 was labelled as moderately self-determined and represented 19.8% of the sample (N=20). Athletes in this cluster demonstrated moderate levels of intrinsic and extrinsic forms of motivation. External and introjected regulation scores were lower than IM and identified regulation scores. Like cluster 1, amotivation scores were lower than intrinsic and extrinsic motivation scores on the same profile.

Cluster 3 represented the least self-determined motivation profile and included 26.7% of the sample (N=27). Compared to clusters 1 and 2, cluster 3 represented low scores on intrinsic and extrinsic motivation. When compared to intrinsic and extrinsic motivation within this cluster, amotivation score was moderate.

A follow up ANOVA revealed significant effect of cluster membership on each sports motivation construct (Table 2). Tukey's post-hoc analysis indicated significant differences ($p < .001$) among the three motivation profiles, except for amotivation between the moderate and least self-determined profiles ($p = .683$).

Table 2

ANOVA report on cluster membership

	Most self-determined (N=54)		Moderately self-determined (N=20)		Least self-determined (N=27)		F	Sig
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Intrinsic Motivation to Know	6.05	.81	5.22	1.09	2.90	.65	77.23	$P < .001$
Intrinsic Motivation to Accomplish	5.87	.94	5.02	1.28	2.72	.60	58.75	$P < .001$
Intrinsic Motivation to Experience Stimulation	6.29	.56	5.30	1.14	2.93	.62	97.77	$P < .001$
Identified Regulation	6.36	.61	5.63	1.04	3.32	.89	80.17	$P < .001$
Introjected Regulation	6.17	.70	4.63	1.34	3.10	.54	63.39	$P < .001$
External Regulation	5.96	.74	4.21	1.23	3.04	.60	67.12	$P < .001$
Amotivation	5.25	.92	2.97	1.11	2.75	.91	65.62	$P < .001$

Thus, the cluster analysis identified three motivation profiles exhibited by Fijian athletes with disabilities demonstrating various intensities of motivation dimensions. Hypothesis 3 was supported as the majority of the participants were typically grouped within the most self-determined motivation profile.

DISCUSSION

It is important to reiterate existing literature gaps, which acted as the genesis for the current study. There was very little known about Fijian athletes with disabilities from a psychological construct perspective. The present study examined motivation profiles of Fijian athletes with disabilities by examining constructs of the self-determination and achievement goal frameworks. Two out of the three hypotheses were statistically significant and the implications of these will be discussed.

As predicted through H₂, there was a significant difference between levels of task and ego goal orientation as Fijian athletes with disabilities gravitated towards task goals more. This finding converges with past research studies in the field of sports psychology which documented a greater presence of task goal orientation among athletes with disabilities (Kasum & Mladenovic, 2017; McLoughlin et al., 2017; Chen et al., 2007; Hutzler & Shemesh, 2012; Causgrove-Dunn, 2000). This particular finding might also be explained by the presence of disability and characteristics of the Fijian culture. As shown in previous literature (Causgrove-Dunn, 2000; Hutzler & Shemesh, 2012), athletes with disabilities are typically task oriented which are also contingent to intrinsic sources of motivation. In relation to culture, positive traits such as humbleness, modesty and altruism are common among Fijian communities. As such, scores on ego goal orientations demonstrate lower ego-enhancing goals and behavior among Fijian athletes with disabilities. The low intensity of ego orientation is likely to be a cultural characteristic when compared to athletes with disabilities from other contexts who exhibited high ego goal orientations (Skordilis et al., 2002; Gutierrez & Caus, 2006).

Further, the results supported H₃ that majority of Fijian athletes with disabilities fit within the most self-determined motivation profile. This motivation profile was represented by high levels of intrinsic motivation, extrinsic motivation, and low levels of amotivation. This finding can be considered culturally unique to the current sample. This is simply because theoretically, extrinsic motivation is considered to have an undermining effect on intrinsic motivation (Deci & Ryan, 1985). The simultaneous presence of both intrinsic and extrinsic constructs of motivation challenges theoretical notions and indicates that both are important for Fijian athletes with disabilities.

The high intensity of self-determined forms of motivation within this profile is consistent with previous literature (Wang et al., 2002; Vallerand, 1997, 2001) which is indicative of positive athlete behavior. Fijian athletes within this profile seem to hold positive attitudes towards inclusive-sports participation. High levels of intrinsic motivation within this profile suggest focus on skills development, personal improvements with regards to inclusive-sports participation, persistence, and lower dropout behavior. In addition, Fijian athletes also demonstrated inclination towards extrinsic forms of motivation. Focus on extrinsic factors suggests that these athletes participate in sports to achieve social acceptance, support, and engage in competitive events as well as other externally controlled outcomes.

Moreover, H₁ which predicted that Fijian athletes with disabilities would exhibit higher levels of intrinsic motivation in comparison to extrinsic motivation was rejected. The lack of a significant difference between these two constructs can be explained by two factors. First, the hypothesis was based on literature which had primarily incorporated Euro-western and Asian sample. From a cultural perspective, Schaaf (2006), Mumm and O'Connor (2014) emphasized that both intrinsic and extrinsic factors are important for athletes from the Pacific to engage in sports. Second, due to the presence of disability, intrinsic motivation combined with extrinsic factors such as the continuous need to prove abilities and achieve social acceptance may have been precipitating factors for the presence of similar intensity of both constructs of motivation (Devine et al., 2017).

This study made a unique contribution to self-determination and achievement goal theoretical frameworks by providing an extended understanding of motivation of athletes with disabilities through the Fijian cultural lens. First, with regards to extrinsic forms of motivation, it was determined that it can be simultaneously present with intrinsic motivation as both are important for social development of Fijian athletes with disabilities. Extrinsic motivation was also confirmed to have a positive and statistically significant correlation with task goal orientation. Given the simultaneous presence of intrinsic forms of motivation, it can be assumed that these athletes are more likely to exhibit positive cognitive, affective, and behavioral consequences related to inclusive sports. This finding was in contradiction to existing theoretical framework and literature which asserted that social or external factors typically have an undermining effect on intrinsic motivation. Hence, the current findings challenge existing theoretical notions by emphasizing that external sources of motivation are not entirely negative and are important for the psyche of some athletes, especially in the social context of Fijian athletes with disabilities.

IMPLICATIONS

There are a few valuable implications that are impactful at various levels. From a research perspective, it brings attention to learning more about Fijian athletes with disabilities from a less 'sympathetic' perspective and more about their psyche in relation to the field of sports psychology in general. Further, findings from this study can effectively guide professionals working with Fijian athletes with disabilities including coaches and sports educators. Developing motivation profiles of athletes with disabilities is integral to predicting sports behavior. Factors underpinning motivation sources of athletes provide insight into their behavior and choices related to inclusive-sports participation. Motivation structures identified among athletes can help educators, coaches and other professionals who work in inclusive-sports education to nurture athletes who are enthusiastically and positively committed to sports participation. Among Fijian athletes with disabilities, motivation profiles can be used to identify factors important for the athletes' psyche and potential growth. In addition to innate talent, motivation and achievement goal constructs can help determine the level of commitment and focus of athletes in inclusive sports. If coaches and sports educators have more knowledge about athletes in this context, more effective guidance can be presented. Further, effective reward systems can be set up as well as psychological and social support to enhance athletes' performance. The importance of external factors or more specifically social incentives for athletes with disabilities has been confirmed in other contexts in addition to Fiji. Donor agencies, coaches and sports educators can work together to ensure that there are adequate social support structures in place for athletes with disabilities, especially considering how important extrinsic constructs of motivation can be. It is also important to note that motivation factors and achievement goal behavior may evolve over time due to life experiences. Therefore, motivation profiles should be periodically assessed among athletes to identify and address maladaptive behavior effectively.

CONCLUSION

This study examined the motivation constructs of athletes with disabilities using self-determination theory and achievement goal orientations. It corroborated with previous literature as it established the relationship between motivation constructs with goal orientations. The findings suggested that Fijian athletes with disabilities are intrinsically and simultaneously extrinsically motivated and more task oriented in comparison to ego oriented. The unique motivation profiles of Fijian athletes with disabilities validated that the presence of extrinsic motivation is not always undermining on intrinsic motivation. It is anticipated that extrinsic factors such as social acceptance and support play a crucial role for the development and success of these athletes. It is recommended that further research be conducted using a more explorative research design to better understand the cultural implications of factors contributing to motivation constructs and achievement goals among Fijian athletes with disabilities and other Pacific Island Countries. We have established that motivation profiles using a multiple theoretical approach are integral to presenting a more holistic overview of athletes' psyche. This is valuable not just for athletes but also for coaches and sports educators, as this research is aligned to SDG 4 and its findings provide support for quality inclusive and equitable sports education.

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