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The Prescription for Wellness Is Fun! Driving Participation in Sport

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Understanding individual behavioral choices and the role individual motivation plays for initial and sustained engagement in physical activity and sport is important to increasing participation rates (Bernard et al., 2005). Using Self-Determination Theory and Achievement Goal Theory framework, this research explored the role of motivation related to participation in sport and physical activity. Specifically, this study focused on the CrossFit® Games Open, a non-traditional virtual mass participation sporting event (MPSE). Prior research has established that non-elite MPSEs are effective events for beginning, but not sustaining, participation in sport and physical activity (Coleman & Sebire, 2016). A large sample (n = 4,325) of participants from the 2018 CrossFit Games Open was surveyed about tenure as a participant and the motivational extraneous factor of participation. The primary finding is that fun is a very important driver of wellness. Additionally, competency factors, as well as commitment to training, support previous outcomes of sport participation research and provide direction to practitioners.

Keywords: motivation, sport participation, mass participation sporting event, virtual events, physical activity, CrossFit

Introduction

Maintaining an active life is essential for promoting positive physical and mental health outcomes (Reiner et al., 2013; Saxena et al., 2005; Staurowsky et al., 2015). However, in developed countries around the world, levels of participation in physical activity and sport have either remained stagnant or declined for more

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than a decade, particularly in youth populations (Lim et al., 2011; Roberts et al., 2017). In both youth and adult populations, the barriers related to an individual's participation in physical activity and sport are well documented and include factors such as increased levels of sedentary activity (e.g., screen time and sitting time), lack of time, sleep, the role of parents, access to coaching, proximity to venues, enjoyment, and self-esteem (Berger et al., 2008; Hoare et al., 2017; Rhodes et al., 2019; Thivel et al., 2018). The present study explores the role of motivation to participate in sport and physical activity in a "mass participation sporting event" (MPSE), the CrossFit Games Open.

Discerning the role that individual motivation plays in relation to participation in an activity is important to understanding behavioral choices and changes in behavioral choices over time (Bernard et al., 2005). Indeed, the underlying motives and factors associated with behavioral choice is important. This allows for replication of environments conducive to sought behaviors (i.e., participation in sport and physical activity). Literature related to motivation and participation in physical activity and sport is robust, spanning topics such as culture (Kondric et al., 2013; Lim et al., 2011; Yan & McCullagh, 2004), youth sport participation (Garcia et al., 2014; Martin, 2020; Weiss, 2019), and demographic variables (Kilpatrick, 2005; Molanorouzi et al., 2015). Previous studies have highlighted that factors affecting motivation are multifarious and should be explored within the specific context in which engagement in physical activity and sport occur (Molanorouzi et al., 2015). This study seeks to respond by investigating motivation within the context of participation in a non-elite virtual MPSE.

Non-Elite Mass Participation Sporting Events

MPSEs are a popular form of sport events that attract many first-time participants (Buning & Walker, 2016). Traditional MPSEs include competitive running events (e.g., marathon or 5K). Non-traditional MPSEs, such as obstacle course races or other themed running activities, have grown in popularity in recent years in part to a focus on "fun, fitness, camaraderie, and achievement" (Buning & Walker, 2016, p. 47). MPSEs are broadly defined as "community-based open-entry events that require participants to engage in moderate-to-high-levels of energy expenditure" (Crofts et al., 2012, p. 149). The performative physical activity is often individualized (e.g., running or cycling), but the goal of the event is to engage in the activity rather than achieve a sport-related outcome (Coleman & Ramchandani, 2010). Coleman and Sebire (2016) found MPSEs were effective for initiating engagement in physical activity for people, but not for sustaining long-term participation in that activity, unless the participant held strong intrinsic and extrinsic forms of motivation.

Research Purpose

The CrossFit Games Open, an online fitness competition owned and operated by CrossFit, LLC, is a virtual MPSE. This global virtual event requires participants to complete multiple CrossFit workouts based on the CrossFit methodology and submit their results online. CrossFit represents a niche space in the discourse on motivation and participation in physical activity and sport because participants are often engaged in a commercialized fitness club that fosters athletic identity alongside regular physical activity (Wegner et al., 2020; Woolf & Lawrence, 2017). Additionally, the initial stage of the CrossFit Games Open is entirely virtual, an increasingly popular method of sport competition. The overarching purpose of this study was to explore levels of motivation and engagement in physical activity for CrossFit Games Open competitors. Specifically, two research questions guided this investigation.

RQ1: Is there a relationship between number of years of participation in the CrossFit Games Open and motivation to participate in CrossFit-brand training?

RQ2: Is there a relationship between CrossFit Open Games participant characteristics (e.g., age, perceived age, and enjoyment) and the impact of motivation factors (e.g., wellness competency) to participation in CrossFit-brand training?

CrossFit and the CrossFit Games Open

CrossFit-brand training is best described as molding individuals to be "equal parts gymnast, Olympic weightlifter and multi-modal sprinter or 'sprintathlete'" (Glassman, 2002, p. 3). The CrossFit methodology views fitness as the cultivation of 10 physical skills that enable an individual to be prepared for a wide range of physical activity tasks (Glassman, 2002). These skills are constantly varied and infused within metabolic conditioning regimens to promote fitness that is "deliberately broad, general, and inclusive" (Glassman, 2002, p. 2). Therefore, CrossFit-brand training is a form of physical activity that is available to anyone, regardless of age or fitness level. The CrossFit methodology is infinitely scalable, as participating in CrossFit-brand training is meant to assist anyone with moving along their constructed health continuum of sickness, to wellnesses, to fitness (Glassman, 2002).

While the CrossFit methodology was conceived as a physical regimen meant to promote overall general health, Glassman's (2002) call to define fitness and therefore the "Fittest on Earth"[1] led to the evolution of CrossFit-brand training as

[1] Trademark of CrossFit

both a fitness regimen and a sport. This becomes apparent in how CrossFit views its participants, classifying every person that engages in CrossFit-brand training as an athlete adhering to the underpinning of Glassman's (2002) often-repeated quote of, "the needs of an Olympic athlete and our grandparents differ by degree not kind" (p. 10). The competitive sport of CrossFit was first tested in a structured way at the 2007 CrossFit Games (CrossFit, LLC, 2021a). By 2011, the CrossFit Games Open was established, which expanded competitive opportunities from the select CrossFit Games athletes to over 26,000 athlete members of the CrossFit-brand training community that participated in the first CrossFit Games Open (CrossFit, LLC, 2021b).

The CrossFit Games Open was initially launched in 2011 as an open access opportunity for anyone in the world to compete in the sport of CrossFit. It has evolved since 2011 in structure, by expanding the availability of athlete categories, but remains an annual test of fitness available to anyone who participates in CrossFit-brand training. Competitors complete a workout each of three to five weeks that is announced Thursday evenings for the duration of the competition. Athletes can compete virtually from any global location, provided equipment is available to complete the workouts, the workout is videoed or "judged" to the movement standards, and the score is submitted by the following Monday. The competition workouts align with the CrossFit methodology, are adjusted (known as "scaling") for varying fitness levels and abilities, and provide an opportunity to track changes in fitness over time via occasional repeated workouts from previous years' events. Once scores are verified, official results are posted on the CrossFit Games Open Leaderboard, allowing participants to view their ranking and filter results via a variety of options (i.e., country, U.S. state, age group, etc.). By providing an accessible competition to begin each season to find "The Fittest on Earth," CrossFit has established an annual virtual sporting event with a structure able to flourish even amidst the COVID-19 pandemic.

Sport Events in the Age of COVID-19

Research exploring motivation for engagement in sport and physical activity is especially timely during the current global pandemic. Measures to contain the pandemic such as social distancing and social isolation support inactivity, which will lead to detrimental long-term physical and mental health outcomes (Woods et al., 2020). The COVID-19 pandemic has disrupted every industry, including sport, and this research is timely in providing insights for the sport industry to better understand what drives motivation for individual participation in virtual MPSEs (Evans et al., 2020). While all elements of modern society have been subverted by COVID-19, sporting events have been especially impacted by mass shutdowns in response to stemming the spread of COVID-19 (Evans et al., 2020).

The long-term impact of the pandemic on sporting events remains unknown but the cancellation or postponement of events will have disruptive biographical impacts on the individuals who utilize those events as an avenue for well-being (Evans et al., 2020; Woods et al., 2020).

Shifting to Virtual Participation

As sport leaders navigate event management during and post-pandemic, virtual events have become an increasingly viable stop gap, likely solidifying them as a legitimate future segment of the sport event industry (Agini & Di Stefano, 2020). For example, Running USA (2020a) tracks which of its member events have been canceled, postponed, or switched to virtual. While thousands of races have been canceled, more than 50 member events have switched to virtual offerings, including iconic races such as the Boston Marathon (Running USA, 2020a). Other individual sports, such as ice skating, have found virtual solutions to judging live competitions (Hersh, 2020; Penny, 2020). While not the same as a live experience, a virtual event removes barriers to participation, broadening the audience and competitor pool (Hersh, 2020; Penny, 2020). Similarly, live virtual running events and community running challenges, hosted through the Strava application, provide ample opportunities for sustained physical activity and sport engagement (Browning, 2020). The through line for these virtual forms of engagement is that they provide opportunities for community and connection. While these events are unlikely to disappear once the pandemic is over, there will be a dropoff in participation when live events resume. Event managers should remain cognizant of the role virtual events will continue to play in their sport's portfolio, shifting their perspective of virtual events from a stop gap pandemic measure to recognizing them as a complimentary part of their business model (Agini & Di Stefano, 2020; Running USA, 2020b.).

As people seek to engage in fitness activities, virtual/online events have emerged as a bright spot in the growth of sport. As with other primarily individual sports, CrossFit-brand training incorporates the demonstrated need of connection and community (Whiteman-Sandland et al., 2016). Although the data for this study is from 2018, the CrossFit Games provides a historical example of including a virtual MPSE as part of the portfolio of a larger sport competition since the CrossFit Games Open has been part of the sport since 2011 (CrossFit, LLC, 2021a). Examining this virtual participant-driven event can inform the virtual event management industry, begin a body of knowledge related to motivation and sport participation in virtual events, and ultimately assist in creating virtual event environments that promote engagement in physical activity and sport that continue to thrive post-pandemic across many additional types of sports.

Literature Review

The CrossFit Games Open represents a unique MPSE because it occurs annually within the context of regular participation in an organized physical activity, CrossFit-brand training. Much of the research on CrossFit-brand training has focused on the medical and exercise physiological impacts from participation (Claudino et al., 2018). Other non-physiological research has explored participation in CrossFit-brand training from the perspectives of athlete identity development (Wegner et al., 2020; Woolf & Lawrence, 2017), community support (Whiteman-Sandland et al., 2016), positive health outcomes (Eather et al., 2015), and motivation (Feito et al., 2018). However, no previous research has looked specifically at contextualizing the CrossFit Games Open as an MPSE and the event's influence in motivating participation.

Given the structure and accessible nature of the CrossFit Games Open, the authors argue it is appropriate to contextualize it as a non-traditional MPSE. Previous MPSE research has utilized motivation theories, such as the Self-Determination Theory, to better understand participant motivations for participating in an MPSE and their physical activity attrition after the event (Crofts et al., 2012). This study evaluates participation in the CrossFit Games Open MPSE utilizing Self-Determination Theory and Achievement Goal Theory.

Self-Determination Theory

Self-Determination Theory (SDT) appeared in the literature in the mid-1980s though initial groundwork for SDT can be traced back to the 1970s (Deci & Ryan, 1985; Deci & Ryan, 2008). SDT is a "macrotheory of human motivation" (Deci & Ryan, 2008, p. 1) that has been utilized to explore motivation as it relates to the individual in a variety of life contexts. The application of SDT can be grouped into two broader themes of motivation: (i) autonomous motivation, which includes intrinsic motivation, and (ii) types of extrinsic motivations that integrate with the personal sense of self, and controlled motivation, which consists of extrinsic influences that are either internalized or regulated externally (Deci & Ryan, 2008). Both forms have the potential to impact participation in sport and/or physical activity.

Within autonomous motivation are the basic needs of autonomy, competence, and relatedness, which have been identified to better understand social forces on motivational climate (Deci & Ryan, 2008). Autonomous motivation has been recognized as leading to positive health and well-being outcomes since individuals who demonstrate autonomous motivation are more likely to persist in a given activity and find joy in that activity (Deci & Ryan, 2008). SDT has been utilized in several studies relating to sport, exercise, and physical activity,

making it an appropriate theory to apply to the context of CrossFit-brand training (Almagro et al., 2015; Deci & Ryan, 2008).

Achievement Goal Theory

Nicholls (1989) published the Achievement Goal Theory (AGT), which discusses motivation as a dichotomous model that frames motivation as task orientation or ego orientation. Like SDT, both frames have the potential to influence participation in sport and physical activity. Task orientation (a.k.a., mastery orientation) focuses on how an individual perceives their capacity for goal attainment based on internal metrics whereas ego orientation (a.k.a., performance orientation) focuses on how an individual perceives their capacity for goal attainment in relationship to others (Almagro et al., 2015). As the research on AGT has developed, Nicholls's (1989) model was expanded upon to include avoidance goals in which an individual's goal is to avoid incompetence in each task (Elliot & Conroy, 2005), which associates with perceived skill level.

AGT has been described as a 2x2 model that subdivides mastery (task) and performance (ego) goals into mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals (Almagro et al., 2015). Under the 2x2 model, the mastery achievement goals focus on an individual's athletic motivations from either an internal motivation where they are motivated to improve based on competency mastery or to avoid regressing in each competency. The performance orientation represents external motivation to improve based on the performance of others or to avoid performing less than others in an athletic setting. While not explicitly included within the AGT framework, perceived competency has been researched as a possible antecedent for predicting motivation based on avoidance or approach as related to master and performance motivational orientations (Almagro et al., 2015).

CrossFit-Brand Training and Motivation

Previous research on motivation for participating in CrossFit-brand training includes studies that used both SDT and AGT. For instance, Partridge et al.'s (2014) study on motivation variables towards the use of CrossFit-brand training utilized AGT and focused on the motivational climate to better understand how membership length and gender impacted goal attainment in CrossFit-brand training. While Patridge et al. (2014) did not find a relationship between motivational climate and membership length, their research supported the previous literature on gender differences associated with goal attainment, where male athletes associate with performance-based goals and female athletes associate with mastery-based goals when participating in CrossFit-brand training.

Two studies have utilized SDT to explore motivation and CrossFit-brand training. Fisher et al. (2016) explored the motivational factors associated with individuals who engaged in CrossFit-brand training rather than other forms of resistance exercise programs. Fisher et al. (2016) found that individuals who participate in CrossFit-brand training are more likely to report intrinsic motivations for sustained participation. Of interest from that study, extrinsic motivations related to personal health were an extension of individual intrinsic motivation for participation (Fisher et al., 2016). Davies et al. (2016) researched basic psychological need satisfaction and its relationship with participation in CrossFit-brand training. Davies et al. (2016) focused on the Basic Needs Theory, a derivative of SDT, to evaluate competence, autonomy, and relatedness for individuals who regularly engage in CrossFit-brand training. This method used in this study included the actual participant attendance frequency reports in the analysis finding that individuals who reported higher levels of autonomy, competence, and relatedness attended more frequently (Davies et al., 2016). Notably, both Fisher et al. (2016) and Davies et al. (2016) discuss the importance of intrinsic motivational factors to sustaining participation in physical activity over time. Essentially, individuals choose to continue to participate in CrossFit-brand training because they enjoy the activity and feel connected to the CrossFit community.

Method

To understand levels of motivation and engagement in physical activity for CrossFit Games Open participants, a survey instrument was developed and administered to a sample of 2018 CrossFit Games Open competitors. The research was approved by the research board of the lead author's institution. The survey was designed to solicit data from around the world about several important aspects of level of engagement with CrossFit-brand training. The survey was written in English in alignment with the primary language used by CrossFit in their global communications. Questions asked about respondents' length of time participating in CrossFit-brand training, as well as an extended list of demographic questions, including military status. Questions to measure advocacy and the multiple drivers of advocacy were also posed.

The population of interest were the 416,424 individuals registered to compete in the 2018 CrossFit Games Open, of whom 407,408 were 18 years of age or older, with women comprising 43.1% of participants. In collaboration with CrossFit, LLC, an invitation to complete an online survey was sent via CrossFit, LLC, to a stratified sample of 46,140 CrossFit Open Games participants from 114 countries. An incentive for participation was offered in the form of a drawing to win one of 50 registration fee waivers for the 2019 CrossFit Games Open. There

were 46,107 successful email deliveries, of which 22,832 were opened and 4,406 clicked on the survey link, resulting in 4,325 useable responses. The respondents represent a 9.3% response rate and a 1.0% sample of the overall population of interest. This response rate is a similar response rate to other fields using online surveys with valid email invitations (Poynton et al., 2019).

To address the two research questions, six wellness variables and three competency variables were examined through the instrumentation. These variables represent either intrinsic or extrinsic motivation factors as well as focus on skill mastery as described by AGT and SDT. The six wellness variables were measured using a Likert-type scale asking participants to gauge the importance of each variable in their decision to start CrossFit-brand training. The three competency variables also utilized a similar scale to assess the importance of each variable in the decision to start CrossFit-brand training.

The six wellness factors are (i) to improve my health markers, (ii) to lose weight, (iii) to get fit, (iv) to stay fit, (v) to prevent health problems & improve overall health, and (vi) to reduce stress. The three competence variables are (i) skill level, (ii) to perform better at other sports, and (iii) to perform better at other physical activities. To answer the research questions, we completed a correlative analysis between the number of CrossFit Games Open participants and the motivation variables described. We then completed a second correlative analysis of those motivation variables against the participant characteristics of age, perceived age, and level of enjoyment. Enjoyment was measured on a five-point Likert scale by asking participants to respond to the importance of CrossFit-brand training being fun.

Results

Sample Characteristics

The sample of respondents were representative of the larger population of CrossFit Games Open participants in terms of gender (57.0% male), age (M = 38.8 years), and country of residence (57.4% from the United States). Although there was no population level information for comparison, the sample characteristics also included that 85.2% were Caucasian, mean household income was $113,254 USD, and most (70.7%) held a university degree. A broader demographic breakdown of the participants can be found in Table 1.

> ***RQ1:*** Is there a relationship between number of years of participation in the CrossFit Games Open and motivation to participate in CrossFit-brand training?

Table 1. Selected Participant Demographics

# CrossFit Games Open Participation	%
1	40.80
2	28.00
3	12.70
4	8.75
5+	9.68
Race/Ethnicity	**%**
White	85.16
Black	1.42
Asian	1.71
Hispanic	6.97
More than One Race	1.83
Native American	0.59
Other	0.65
Pacific Islander	0.41
Prefer not to answer	1.24
Household Income in $US	**%**
$0-$49,999	20.65
$50,000-$99,999	27.88
$100,000-$149,999	20.92
$150,000-$199,999	9.95
$200,000-$249,999	5.74
$250,000+	7.44
Prefer not to answer	7.40
Education Level	**%**
Primary School Completion	0.30
Current High School/Secondary School Student	0.88
Some High School/Secondary School	1.68
High School/Secondary School Diploma	7.67
Current Student at University or College	3.87
Some University or College	14.88
Degree from University or College	42.34
Post-Graduate Degree or Professional Designation	28.37
Perceived Skill Competency	**%**
I Rx all WODs	12.46
I Rx most WODs	30.34
I do a mix of Rx'd and scaled movements and weights in WODs	40.00
I scale all WODs	4.76
I scale most WODs	12.12
Gender	**%**
Male	57.00
Female	42.86
Non-Binary	0.03
Other	0.07
Prefer not to answer	0.03
Age	**%**
18-34	38.12
35-39	17.83
40-44	15.18
45-49	12.08
50-54	7.69
55-59	5.19
60+	3.91
Country of Origin	**%**
United States	57.38
Cananda	9.10
Australia	4.43
Brazil	2.73
United Kingdom	6.42

a Percentage of all participants in the 2018 CrossFit Games Open

Participants in this study were asked to report the number of times they participated in the CrossFit Games Open, with 40.8% of the respondents reporting that 2018 was their first year participating. Most of the participants (59.2%) have participated in more than one CrossFit Games Open, with 9.68% of respondents participating five or more times, 8.75% participating four times, 12.7% participating three times, and 28% participating twice.

Descriptive results on the six wellness factors found that "to stay fit" had the highest rank ($M = 4.65$), followed by "to get fit" ($M = 4.64$) and "to prevent health problems & improve overall health" ($M = 4.56$), followed by "to reduce stress" ($M = 4.39$), with the other two ranked lower, "to lose weight" ($M = 3.77$) and "to improve my health markers" ($M = 3.73$). On the competence variables, "to perform better at other physical activities" ($M = 4.30$) was highest ranked, well ahead of "to perform better at other sports" ($M = 3.67$) and "skill level" ($M = 3.34$). An interesting finding, via a t-test, is that "to perform better at other physical activities" ranked significantly higher than "to perform better at other sports" ($t = 237.95$, $p < .001$).

In terms of respondents' internal motivations to start CrossFit-brand training, the most important drivers were "to get fit," "to prevent health problems" and "to improve overall health." Most respondents reported a mean skill level (3.67), suggesting that most continue to have skills to work on and master. This is important because skill mastery is known to be a motivational influence for individuals to continue their participation in sports and physical activity (Almagro et al., 2015).

Table 2 details the correlations between the number of years of participation in the CrossFit Games Open and motivation variables. Of note, participation in the CrossFit Games Open is found to be negatively correlated ($p < .01$) to the intrinsic and extrinsic variables that are associated with participating in CrossFit-brand training. Results show that (i) as participation in the CrossFit Games Open increases, the importance of preventing health problems, reducing stress, and losing weight decreases, and (ii) the importance of performing better at other physical activities decreases (all at $p < .01$).

Table 2. Correlations for Study Variables

	CrossFit Opens		Actual Age	Perceived Age	Enjoyment
Wellness Variable	***M***	***r***	***r***	***r***	***r***
1. To improve my health markers	3.73	-.024	.052**	.018	.186**
2. To lose weight	3.77	-.062**	-.048**	.001	.157**
3. To get fit	4.64	-.015	-.065**	.022	.308**
4. To stay fit	4.65	.013	-.025	.018	.346**
5. To prevent health problems & improve overall health	4.65	-.050**	-.017	.029	.301**
6. To reduce stress	4.39	-.046**	-.125**	.018	.356**
Competency Variable	***M***	***rs***	***r***	***r***	***rs***
1. Perceived skill level	3.34	.275**	-.230**	.003	.530**
2. To perform better at other sports	3.67	-.003	-.106**	.004	.249**
3. To perform better at other physical activities	4.30	-.038	-.085**	-.010	.316**

*Correlation is significant at the < .05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

RQ2: Is there a relationship between CrossFit Open Games participant characteristics (e.g., age, perceived age, and enjoyment) and the impact of motivation factors (e.g., wellness and competency) to participation in CrossFit-brand training?

Participants were asked to provide both their actual age and the age they feel. On average, they reported that they felt 7.6 years younger than they are, with a large range (SD = 9.52 years) and the most common response being that participants felt the same age that they were (22% of answers). As seen in Table 2, as participants increased in age, they reported that they were less likely to report the wellness variables of "to get fit" ($p < .01$), "to reduce stress" ($p < .01$), "to perform well at other physical activities" ($p < .01$), or "to lose weight" as important ($p < .01$). Perhaps the most interesting result of this research is that "having fun" is highly and significantly correlated ($p < .01$) with all nine of the wellness and competency factors explored in the study. Additionally, the more fun the activity, the more likely the participant will complete ("RX") all the movements in the CrossFit workout of the day ("WOD") ($p < .01$). This finding indicates that the enjoyment (or fun) improves as participants age.

Discussion and Implications

The current study builds upon the previous literature on motivation, MPSEs, and CrossFit-brand training by examining motivation for participation in CrossFit-brand training using a combined AGT and SDT framework. This research adds to literature on MSPEs by categorizing CrossFit-brand training as a physical activity that can be utilized for an MPSE via the CrossFit Games Open. Classifying the CrossFit Games Open as an MPSE broadens the scope of activities traditionally perceived as an MPSE since running is often the central physical activity associated with traditional and nontraditional MPSEs (Buning & Walker, 2016). Unlike other MPSEs, the CrossFit Games Open MPSE inverts the formula for initiating physical activity where the MPSE is the cause for beginning activity but not tied to long-term participation in that activity (Coleman & Sebire, 2016). As participation in CrossFit Games Open is tied to the companion fitness club associated with the CrossFit methodology, participants in the CrossFit Games Open are participating in the MPSE and persisting in the physical activity because of the companion fitness club, not because of the event. This is evident from the 59.2% of study respondents who have participated in the CrossFit Games Open for more than one year. An implication for other MPSEs is that a method for retaining participants is to provide a persistent opportunity for engagement in the physical activity outside of the event. Event organizers should shift their perspective from hosting a one-off MPSE to cultivating a community around their MPSE using physical activity as the conduit for community engagement. CrossFit-brand training, and by extension the CrossFit Games Open, provides a potential solution to the drop-off in physical activity after the completion of the MPSE because a sense of community is tied to sustained participation in physical activity and the sport (Coleman & Sebire, 2016; Whiteman-Sandland et al., 2016).

Motivation

Previous research on motivation and CrossFit-brand training by Fisher et al. (2016) and Davies et al. (2016) connects intrinsic motivation with continued participation in CrossFit-brand training, noting that enjoyment is important to sustaining participation in physical activity and sport. This research further supports the claim that a higher level of enjoyment is an important factor for sustained participation in CrossFit-brand training as "having fun" is highly and significantly correlated ($p < .01$) with all nine of the wellness and competency factors explored in the study. This finding offers an explanation as to why CrossFit Games Open participants continue to participate in both CrossFit-brand training and the CrossFit Games Open even though participation in those activities over

time is negatively associated with the wellness and competency variables that were important to initiating their participation in sport and physical activity. Fun is considered to be the pinnacle of intrinsic motivation as described by Deci and Ryan (2008), suggesting that sustained participation is tied both to the amount of fun the participants are having in the activity as well as the continued opportunity for skill development (as the majority of participants reported being in the middle of the perceived skill scale).

The implication for gym owners and other members of the sport/fitness industry is that there needs to be an ideological shift from attracting clients with motivation based on goal achievement related to improving health outcomes to attracting clients because the activity is inherently enjoyable. In this instance we characterize the activity to include the community and cultural elements surrounding the physical activity that contributes to the individual's sustained enjoyment. This may seem counterintuitive considering the strong ties between engagement in physical activity and positive physical/mental health outcomes, but sustained engagement rather than initial engagement is the goal for gym and sport industry business (Reiner et al., 2013; Saxena et al., 2005; Staurowsky et al., 2015).

Virtual MPSEs and the Pandemic

While the present research was not conducted during the COVID-19 pandemic, as an established virtual MPSE, the CrossFit Games Open participants provide a snapshot for why individuals persist in a virtual event year after year. As previously stated, the level of enjoyment of a participant was strongly tied to ongoing event participation. In 2021 the CrossFit Games Open still occurred as a virtual MPSE, supporting Agini and Di Stefano's (2020) and Running USA's (2020b) assertion that recognizing virtual events as a complement to in-person events is a good event management practice. Since the CrossFit Games Open has been a virtual MPSE since 2011, it was already an established part of the larger CrossFit, LLC event portfolio. An implication for fitness/sport industry business owners is to evaluate the successes related to engagement during the pandemic's disruption of the industry to continue to build on those bright spots rather than abandon new practices once the industry returns to normal (Evans et al., 2020). The participant/client retention strategies that were successful during the pandemic will continue to be useful measures to build sustainability in the future.

Limitation and Future Research

This research has an important limitation to recognize. The data, although big data, is from a single event and a single occurrence of that event. Expansion of the sample in future research will be advantageous to this research area. Future

research should survey participants in other MPSEs where fun and achievement are central to physical activity. For example, evaluating how non-traditional MPSEs such as adventure races build community outside of the event and retain participants would add to the literature on non-traditional MPSEs. Additionally, research using a sport marketing lens to evaluate how the intrinsic variable of fun is associated with initial and sustained participation in MPSEs would be valuable for understanding how to attract new membership to organizations in lieu of health outcomes associated with goal attainment.

The global pandemic is having significant impacts on MPSEs that rely on physical participation in large groups. While the CrossFit Games Open can be conducted as a virtual-only event, that mode of delivery could substantially alter motivations related to fitness, and should be analyzed, including the links of pandemic-related impacts to the wellness levels of participants.

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