Move to be Well:

The Global Economy of Physical Activity

Mindful Movement

Equipment & Supplies

Technology

Fitness

Apparel & Footwear

Sports & Active Recreation

OCTOBER 2019

GLOBAL WELLNESS INSTITUTE™
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The Global Wellness Institute (GWI), a 501(c)(3) non-profit organization, is considered the leading global research and educational resource for the global wellness industry and is known for introducing major industry initiatives and regional events that bring together leaders and visionaries to chart the future. GWI positively impacts global health and wellness by advocating for both public institutions and businesses that are working to help prevent disease, reduce stress, and enhance overall quality of life. Its mission is to empower wellness worldwide.

www.globalwellnessinstitute.org

ABOUT THE AUTHORS

Move to be Well: The Global Economy of Physical Activity was co-authored by Ophelia Yeung and Katherine Johnston, Senior Research Fellows at the Global Wellness Institute. Together, they have four decades of experience leading research and strategy development for businesses, universities, research institutions, and multilateral and government organizations under the auspices of SRI International, a Silicon Valley-based technology and innovation company. Since 2008, Ms. Yeung and Ms. Johnston have worked with the team at what has become the Global Wellness Institute to pioneer groundbreaking research on the global wellness economy and its subsectors. Tonia Callender, GWI Research Fellow, contributed significant research in global, regional, and country-level developments. Alice Rusnak, Research Intern, provided assistance in literature and data research.

Move to be Well:
The Global Economy of Physical Activity

Executive Summary

OCTOBER 2019

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EXECUTIVE SUMMARY

Physical activity is essential to health, and yet, collectively we have become more inactive.

Physical activity is intrinsic to wellness, and the link between physical activity and good health has been clinically and scientifically proven. Yet, physical activity has been declining in the past few decades[1], to the point where as many as 27.5%[2] to 31%[3] of adults around the world are now physically inactive. *The Lancet* has described the rise of physical inactivity as "pandemic, with far-reaching health, economic, environmental, and social consequences."[4] There is no question that our modern lifestyles discourage physical activity. Practically all aspects of life – from work and home chores to socialization, shopping, entertainment, etc. – have been transformed by urbanization, technology, motorized transportation, and new business models to become ever more sedentary. Meanwhile, our modern built environments – with auto-centric planning, declining recreational and green spaces, etc. – also discourage natural movement. Not surprisingly, most people now need to schedule time and activities in order to stay physically active.

The global growth of the fitness industry plays an important role in expanding access to physical activity, by making exercise more convenient, affordable, fun, personalized, and results-driven. Health clubs and gyms have experienced tremendous global expansion over the last decade, with over 50% growth in revenues from 2007-2018.[5] In 2017, the Global Wellness Institute (GWI) estimated that the "fitness and mind-body" sector was worth $595 billion, an important component of the $4.2 trillion global wellness economy.[6] The conundrum is that alongside the growth of the fitness industry, physical inactivity, obesity, and chronic disease have all continued to rise. As the fitness industry develops more and more choices for those who are able and can afford to exercise, there remains a massive swath of inactive population who have limited options (including many seniors; women and girls; children and teens; people in poor health; and those living in poor, rural, and marginalized areas). The reality is that participating in "fitness" remains a privilege that is not accessible for many people around the world.

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[1] Ng, S.W., and Popkin, B.M. (2012). Time use and physical activity: a shift away from movement across the globe. *Obesity Reviews* 13(8), 659-680. https://doi.org/10.1111/j.1467-789X.2011.00982.x.

[2] Guthold, R. et al (2018, Sept. 4). Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. *The Lancet Global Health* 6, e1077-1086. https://doi.org/10.1016/S2214-109X(18)30357-7.

[3] Hallal, P.C., et al (2012, July 18). Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet* 380, 247-257. https://doi.org/10.1016/S0140-6736(12)60646-1.

[4] Kohl, H.W., et al (2012, July 18). The pandemic of physical inactivity: global action for public health. *The Lancet* 380, 294-305. https://doi.org/10.1016/S0140-6736(12)60898-8.

[5] IHRSA (2019). *2019 IHRSA Global Report: The State of the Health Club Industry*. https://www.ihrsa.org/publications/the-2019-ihrsa-global-report/. 2007 figures obtained from: https://www.snewsnet.com/press-release/ihrsa-releases-2008-ihrsa-global-report-the-state-of-the-health-club-industry.

[6] Global Wellness Institute (2018). *Global Wellness Economy Monitor.* https://globalwellnessinstitute.org/industry-research/.

The opportunity to engage in physical activity that enables a healthy life should not be a privilege or choice, but a right.

Health-enhancing physical activities are much broader than things that typically take place within a gym or health club. To make good health equitable to all, it is necessary for all populations to engage in physical activities of many kinds, beyond what is generally considered within the narrow definition of "fitness." For this reason, GWI has expanded the scope of this key wellness sector from "fitness and mind-body" to "physical activity." Reversing the global trend of physical inactivity is a gargantuan task that will require concerted efforts by the public and nonprofit sectors, in addition to private enterprises, to improve access and remove barriers to physical activity for all.

What does this study measure?

Physical activity is not only something that we do for our health, but also generates significant economic activity. Expenditures on leisure-time fitness, exercise, and active recreation represent a growing household spending line item, providing business and innovation opportunities for entrepreneurs and investors around the world. The purpose of this study is to measure the size of the **global physical activity market** and its key segments, and to highlight emerging trends, business models, cross-country variations, and public/nonprofit initiatives that can help bring physical activity to all. In this study, the global physical activity market is defined as **consumer spending associated with intentional physical activities performed during leisure and recreation**. The core of the market is the services that allow consumers to participate in three categories of recreational physical activities: **fitness, sports and active recreation, and mindful movement**. It also includes the supporting sectors that enable and facilitate participation in recreational physical activities: **equipment and supplies, apparel and footwear, and technology**.

Physical activity is also supported by significant government expenditures, including publicly-funded infrastructure for active transportation, parks and recreation, sports facilities and programs, physical education in schools, prescriptions for exercise, etc. These public expenditures are massive, made at the national, state/provincial, and local levels in almost every country; however, they are impossible to measure across the world and are therefore beyond the scope of this study. (See discussion of "What This Study Does Not Measure" in *Chapter II* of the full report on the sectors and economic activities that are excluded by this study.)

Physical activity is an $828 billion global market.

The Global Wellness Institute (GWI) estimates that recreational physical activities generated $828.2 billion in private sector economic activity in 2018. Within this market, 44% or $367.7 billion represents direct consumer expenditures on activity participation (fitness, sports and active recreation, and mindful movement). The remaining 56% or $465.9 billion represents the enabling sectors (apparel and footwear; fitness equipment, sporting goods, and related supplies; and fitness- and exercise-related technologies).

GLOBAL PHYSICAL ACTIVITY ECONOMY: $828 Billion in 2018

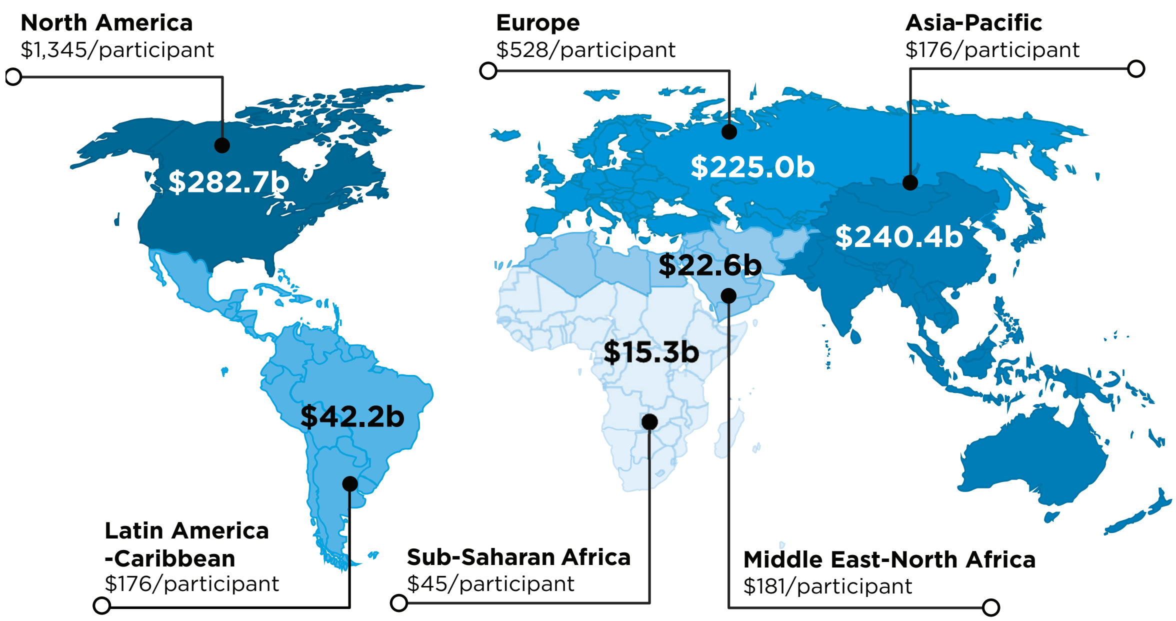
Note: Numbers do not sum to total due to overlap in segments.

Source: Global Wellness Institute

Globally, physical activity spending averages about $306 per participant per year, with $136 spent on participating in activities and $172 spent on apparel, footwear, equipment, sporting goods, and technology devices and services. Per participant expenditures are very high in North America ($1,345) and Europe ($528) while significantly lower in the rest of the world. **Importantly, a large portion of the global population, especially in less wealthy countries, participates in recreational physical activities without spending much money** – for example, playing soccer in an empty field, swimming in a public/community pool, running in the streets, or doing tai chi in a park. Many of these free activities depend on publicly-funded infrastructure such as local parks and recreational centers, but participation in these activities still generates significant private sector economic activities, such as athletic shoes and clothing purchases, government purchases of equipment for community gyms or parks, etc.

Physical Activity Market by Region, 2018

Expenditures on participation in recreational physical activities and supporting products and services (equipment & supplies, apparel & footwear, technology)



Global: $828.2b Expenditures ($306/participant) • 35% Participation Rate

Note: Numbers may not sum to total due to rounding.
Source: Global Wellness Institute

Globally, the top twenty markets account for 86% of all physical activity spending globally. In many large markets, spending on enabling sectors – largely driven by apparel and shoes purchases – can greatly exceed spending on actual physical activity participation, such as in the United States, France, Brazil, India, and South Africa. In other countries, such as South Korea, Australia, and Netherlands, the opposite is the case. The rate of participation in recreational physical activities varies widely among the top markets, ranging from a high of 84% in Australia and Taiwan to a low of 15% in India.

Top Twenty Physical Activity Markets by Market Size, 2018

	Recreational Physical Activities		Enabling Sectors (US$ billions)	TOTAL Physical Activity Market (US$ billions)	Rank in 2018
	Participation Rate*	Market Size* (US$ billions)			
United States	58.8%	$105.0	$162.2	**$264.6**	1
China	48.6%	$53.6	$56.9	**$109.3**	2
Japan	69.6%	$20.8	$23.2	**$43.9**	3
United Kingdom	56.8%	$20.5	$20.6	**$40.9**	4
Germany	56.2%	$20.3	$19.3	**$39.4**	5
France	51.7%	$11.0	$15.4	**$26.3**	6
South Korea	73.7%	$14.2	$9.3	**$23.5**	7
Italy	35.9%	$8.9	$10.5	**$19.3**	8
Canada	48.4%	$9.3	$9.0	**$18.1**	9
Australia	84.1%	$11.4	$5.4	**$16.7**	10
Spain	49.5%	$7.9	$7.8	**$15.6**	11
Brazil	37.7%	$5.9	$8.3	**$14.1**	12
India	15.0%	$3.5	$10.0	**$13.4**	13
Russia	57.8%	$4.9	$7.6	**$12.4**	14
Mexico	44.0%	$4.2	$6.9	**$11.1**	15
Netherlands	65.2%	$6.0	$3.3	**$9.3**	16
Switzerland	71.8%	$5.9	$3.3	**$9.2**	17
South Africa	31.3%	$2.1	$6.1	**$8.2**	18
Taiwan	84.0%	$3.7	$4.1	**$7.7**	19
Sweden	78.0%	$2.8	$3.2	**$5.9**	20

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entryfees, trainers, and related services and methods of participation.*

Note: Figures may not sum to total due to overlap between segments and rounding.

Source: Global Wellness Institute estimates, based upon data from Euromonitor International, Statista, and many other sources

Global Rankings for Recreational Physical Activity by Participation, 2018

	Participation Rate*	Rank
Australia	84.1%	**1**
Taiwan	84.0%	**2**
Norway	83.9%	**3**
New Zealand	83.8%	**4**
Iceland	79.2%	**5**
Sweden	78.0%	**6**
Finland	77.5%	**7**
Mongolia	75.0%	**8**
South Korea	73.7%	**9**
Denmark	73.5%	**10**
Switzerland	71.8%	**11**
Japan	69.6%	**12**
Luxembourg	66.0%	**13**
Netherlands	65.2%	**14**
Singapore	64.9%	**15**
Ireland	64.1%	**16**
Israel	61.5%	**17**
Slovenia	60.2%	**18**
Belgium	59.1%	**19**
United States	58.8%	**20**
Hong Kong	58.2%	**21**
Russia	57.8%	**22**
United Kingdom	56.8%	**23**
Germany	56.2%	**24**
France	51.7%	**25**
Macau	51.1%	**26**
Austria	50.4%	**27**
Cyprus	49.9%	**28**
Spain	49.5%	**29**
China	48.6%	**30**
Canada	48.4%	**31**
Lebanon	48.3%	**32**
Eswatini	48.1%	**33**
Estonia	47.6%	**34**
Poland	47.2%	**35**
Zimbabwe	46.7%	**36**
Papua New Guinea	46.4%	**37**

	Participation Rate*	Rank
Uruguay	45.5%	**38**
Czech Republic	45.3%	**39**
Lithuania	44.4%	**40**
Costa Rica	44.3%	**41**
Mexico	44.0%	**42**
Panama	43.6%	**43**
Trinidad & Tobago	42.5%	**44**
Kuwait	41.8%	**45**
Hungary	41.3%	**46**
Malaysia	41.1%	**47**
Peru	40.7%	**48**
Slovakia	40.5%	**49**
Laos	39.8%	**50**
Malawi	39.6%	**51**
Argentina	39.5%	**52**
Cuba	39.3%	**53**
Turkey	39.2%	**54**
Botswana	39.1%	**55**
Ecuador	39.1%	**56**
Bahrain	38.5%	**57**
Qatar	38.5%	**58**
Brazil	37.7%	**59**
Latvia	37.3%	**60**
Angola	36.0%	**61**
Italy	35.9%	**62**
Togo	35.9%	**63**
Tanzania	35.9%	**64**
Chile	35.7%	**65**
Vietnam	35.7%	**66**
Liberia	34.7%	**67**
Oman	34.7%	**68**
Portugal	34.6%	**69**
Zambia	34.6%	**70**
Uganda	34.3%	**71**
Indonesia	34.2%	**72**
Croatia	33.5%	**73**
Cote d'Ivoire	33.3%	**74**

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*
Source: Global Wellness Institute

	Participation Rate*	Rank
Colombia	33.2%	**75**
Philippines	32.7%	**76**
Tajikistan	32.4%	**77**
Nigeria	32.2%	**78**
Guatemala	31.9%	**79**
Nicaragua	31.8%	**80**
Equatorial Guinea	31.8%	**81**
Namibia	31.6%	**82**
El Salvador	31.5%	**83**
Gabon	31.5%	**84**
Lesotho	31.4%	**85**
Honduras	31.3%	**86**
South Africa	31.3%	**87**
Paraguay	31.3%	**88**
UAE	31.2%	**89**
Greece	31.1%	**90**
Morocco	30.9%	**91**
Kyrgyzstan	30.9%	**92**
Bolivia	30.8%	**93**
Kenya	30.6%	**94**
Romania	30.6%	**95**
Turkmenistan	30.6%	**96**
Uzbekistan	30.0%	**97**
Ghana	29.7%	**98**
Chad	29.4%	**99**
Kazakhstan	29.1%	**100**
Guinea	29.1%	**101**
Gambia	28.7%	**102**
Egypt	28.6%	**103**
Dominican Rep.	28.6%	**104**
Libya	28.5%	**105**
Burundi	28.3%	**106**
Azerbaijan	28.2%	**107**
Jamaica	27.9%	**108**
Benin	27.9%	**109**
Cameroon	27.9%	**110**
Senegal	27.9%	**110**
Thailand	27.8%	**112**

	Participation Rate*	Rank
Congo, Rep.	27.6%	**113**
Madagascar	27.6%	**114**
Guinea-Bissau	27.4%	**115**
Puerto Rico	27.3%	**116**
Tunisia	27.1%	**117**
Armenia	27.0%	**118**
Albania	26.9%	**119**
Algeria	26.9%	**120**
Georgia	26.7%	**121**
Timor-Leste	26.3%	**122**
Macedonia	26.2%	**123**
Serbia	26.1%	**124**
Saudi Arabia	26.1%	**125**
Belarus	25.7%	**126**
Iran	25.5%	**127**
Bosnia-Herzegov.	25.5%	**128**
Burkina Faso	25.4%	**129**
Ukraine	25.3%	**130**
Bangladesh	25.2%	**131**
Ethiopia	25.2%	**132**
Bulgaria	25.0%	**133**
Mali	24.4%	**134**
Jordan	24.3%	**135**
Rwanda	24.2%	**136**
Mauritius	24.1%	**137**
Niger	23.6%	**138**
Eritrea	23.1%	**139**
Mauritania	22.0%	**140**
Cambodia	21.4%	**141**
Myanmar	21.3%	**142**
Moldova	20.3%	**143**
Nepal	20.0%	**144**
Sri Lanka	19.2%	**145**
Sierra Leone	18.9%	**146**
India	15.0%	**147**
Haiti	14.0%	**148**
Pakistan	13.2%	**149**
Mozambique	13.1%	**150**

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*
Source: Global Wellness Institute

From *Fitness & Mind-Body* to *Physical Activity*: GWI's New Definition for this Important Wellness Sector

The Global Wellness Institute's (GWI's) most recent *Global Wellness Economy Monitor* estimated the global wellness economy at $4.2 trillion in 2017. *Fitness & Mind-Body* was one of the ten sectors that comprise the wellness economy and was estimated at $595 billion in 2017.[7] In this report, GWI is expanding the definition of this important sector to incorporate a wider range of physical activities – it now includes not only fitness/gym and mind-body ("mindful movement") activities, but also a variety of other sports and active recreation activities that people engage in as part of being physically active. As such, we have renamed the sector *Physical Activity* and now measure it at $828 billion in 2018. The difference between the two figures is due to the expanded definition; they should not be compared as a time series because they are measuring different things. **If we incorporate the expanded *Physical Activity* measurement into the wellness economy, wellness becomes a $4.5 trillion market.** Future editions of GWI's *Global Wellness Economy Monitor* will replace *Fitness & Mind-Body* with the renamed and expanded *Physical Activity* sector.

GLOBAL WELLNESS ECONOMY:
$4.5 Trillion Market

Note: Numbers do not add due to overlap in segments. Dark colored bubbles are the sectors for which GWI conducts in-depth, country-level primary research. Light colored bubbles are sectors for which GWI aggregates global estimates only, drawing from secondary sources.
Source: Global Wellness Institute

[7] Global Wellness Institute (2018).

The $368 billion in consumer spending on recreational physical activities does not capture the full extent of global participation.

Worldwide, GWI estimates that 35% of the population participates in recreational physical activities, spending $367.7 billion out-of-pocket on doing these activities in 2018. Asia-Pacific has the largest expenditures due to its high level of spending in the sports and active recreation category. However, on average Asian consumers spend only $85 per participant per year on doing physical activities, compared with much higher spending rates in North America ($544 per year) and Europe ($256 per year). **The level of *spending* on recreational physical activities does not represent the level of *participation* in these activities.** For example, as a region Latin America-Caribbean has a higher participation rate than Asia-Pacific, although its per participant spending is quite a bit lower. Similarly, Sub-Saharan Africa has a participation rate that is just slightly lower than Asia-Pacific, although the per person spending in Africa is only $12 (as compared to $85 in Asia). People around the world participate actively in recreational physical activities in a variety of public and free venues (e.g., in public parks and plazas, in neighborhood basketball courts or ball fields, in vacant lots, in the streets, and at home).

Recreational Physical Activities by Region, 2018

	Recreational Physical Activities Market (US$ billions)				
	Sports & Active Recreation	**Fitness**	**Mindful Movement**	**TOTAL Market Size* (US$ billions) *(Per Participant)***	**TOTAL Participation Rate***
Asia-Pacific	$83.0	$22.7	$10.9	**$116.6** *($85)*	**33.2%**
North America	$62.4	$40.5	$11.4	**$114.3** *($544)*	**57.8%**
Europe	$69.2	$33.8	$6.3	**$109.2** *($256)*	**46.6%**
Latin America & Caribbean	$9.9	$5.9	$0.3	**$16.0** *($67)*	**36.7%**
Middle East & North Africa	$4.2	$3.3	$0.1	**$7.6** *($61)*	**25.7%**
Sub-Saharan Africa	$1.4	$2.5	$0.03	**$3.9** *($12)*	**31.0%**
Total Recreational Physical Activities Market	**$230.1**	**$108.6**	**$29.1**	**$367.7** ***($136)***	**35.5%**

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Note: Figures may not sum to total due to overlap between segments and rounding.

Source: Global Wellness Institute

Sports and active recreation is by far the most popular way for people to engage in recreational physical activities, accounting for $230.1 billion in spending.

An estimated 33.3% of the world's population regularly engages in sports and active recreation, spending $90 on average, and accounting for $230.1 billion of economic activity in 2018. Sports and active recreation represents two-thirds of all recreational physical activity spending, because these activities are the most diverse, accessible, affordable, and prevalent across every region and population group. The top markets include wealthier countries with high participation rates and high average spending per participant, such as the United States, United Kingdom, Japan, Germany, and South Korea, as well as countries with lower participation rates but very high average spending, such as Italy, Canada, and Spain. Several less wealthy countries also rank among the top twenty – notably China, Brazil, Mexico, and India – because they have large populations and, therefore, a large number of participants and overall expenditures, despite lower average spending rates.

Top Twenty Sports & Active Recreation Markets by Market Size, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ billions)	Rank in 2018
United States	51.5%	$57.6	1
China	43.5%	$42.3	2
United Kingdom	54.1%	$13.5	3
Japan	66.5%	$13.3	4
Germany	52.6%	$12.9	5
South Korea	70.6%	$10.9	6
France	49.3%	$7.5	7
Australia	77.4%	$6.7	8
Italy	33.6%	$5.7	9
Canada	41.9%	$4.8	10
Spain	45.8%	$4.6	11
Switzerland	68.7%	$4.6	12
Netherlands	60.6%	$4.0	13
Brazil	36.8%	$3.7	14
Taiwan	80.7%	$2.8	15
Russia	57.2%	$2.6	16
Mexico	43.5%	$2.3	17
India	12.9%	$1.8	18
Sweden	72.8%	$1.7	19
Ireland	62.3%	$1.4	20

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*
Source: Global Wellness Institute

The $108.6 billion global fitness market is dynamic, diverse, and fast-growing.

GWI estimates that 3.7% of the world's population are members of gyms, health clubs, and fitness studios and/or participate in structured or independent fitness activities or classes on a regular basis. Participants spent $108.6 billion, or an average of $384 per participant in 2018. Within the fitness market, GWI estimates that about 190 million people spend money on memberships, classes, and training at commercial gyms, health clubs and fitness studios, accounting for $83.1 billion in expenditures. Another 58 million or so participate in fitness at venues that often cost much less or nothing, such as public and nonprofit gyms and fitness programs, free outdoor gyms and fitness classes, university fitness centers, etc. Interest in fitness has been growing, with new business models (e.g., luxury fitness, budget gyms, 24-hour gyms, boutique studios, small independent studios, small group training, international and regional franchises, etc.) proliferating around the world to cater to different needs, preferences, and price points.

Top Twenty Fitness Markets by Market Size, 2018

	Fitness Participation Rate*	Fitness Market Size* (US$ billions)	Rank in 2018
United States	29.3%	$37.0	**1**
United Kingdom	17.3%	$6.3	**2**
Germany	16.5%	$6.1	**3**
Japan	7.8%	$5.6	**4**
China	0.8%	$5.5	**5**
Australia	24.3%	$3.9	**6**
Canada	26.4%	$3.5	**7**
France	12.0%	$3.1	**8**
Spain	13.8%	$2.7	**9**
Italy	11.0%	$2.7	**10**
South Korea	9.2%	$2.6	**11**
Brazil	6.2%	$2.0	**12**
Mexico	4.3%	$1.8	**13**
South Africa	5.1%	$1.6	**14**
Netherlands	21.7%	$1.6	**15**
Poland	10.0%	$1.2	**16**
Switzerland	16.8%	$1.0	**17**
India	0.3%	$1.0	**18**
Turkey	3.3%	$1.0	**19**
Sweden	29.4%	$1.0	**20**

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

The $29.1 billion mindful movement market is concentrated in higher-income countries, but practices are quickly spreading throughout the world.

GWI estimates that 3.8% of the world's population participates in mindful movement activities on a regular basis, with a total spending of $29.1 billion in 2018. Yoga is the predominant activity, followed by tai chi and qigong, Pilates, barre, and a range of other niche activities that are less mainstream (e.g., Gyrotonic, Feldenkrais, etc.). Worldwide, people participating in mindful movement spent an average of $101 per year in 2018. The rising popularity of mindful movement practices has been accompanied by a proliferation of ways in which to participate – gyms, independent studios, YMCAs and community centers, streaming apps, books and instructional DVDs, and so on – and this is especially the case with yoga. A significant portion of the growth in yoga practice worldwide is in online, at home, and low-cost methods of practicing, which is expanding access and lowering cost barriers to participation.

Top Twenty Mindful Movement Markets by Market Size, 2018

	Mindful Movement Participation Rate*	**Mindful Movement Market Size*** (US$ billions)	**Rank in 2018**
United States	17.7%	$10.4	**1**
China	7.1%	$5.8	**2**
Japan	6.3%	$1.9	**3**
Russia	1.4%	$1.3	**4**
Germany	7.7%	$1.2	**5**
Canada	15.3%	$1.0	**6**
Australia	17.1%	$0.9	**7**
United Kingdom	4.2%	$0.7	**8**
India	4.0%	$0.7	**9**
South Korea	5.1%	$0.7	**10**
Spain	9.5%	$0.6	**11**
Italy	4.8%	$0.5	**12**
Netherlands	9.7%	$0.4	**13**
France	4.7%	$0.4	**14**
Taiwan	8.6%	$0.4	**15**
Switzerland	5.8%	$0.2	**16**
Brazil	1.1%	$0.2	**17**
Hong Kong	9.0%	$0.2	**18**
Denmark	13.8%	$0.1	**19**
Sweden	9.2%	$0.1	**20**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Enabling sectors account for $465.9 billion of the physical activity market.

The physical activity enabling sectors include a wide array goods and services that support or enhance people's participation in recreational physical activities. GWI estimates that the enabling sectors generated $465.9 billion in global economic activity in 2018, or an average of $172 per participant. Apparel and footwear is the largest category ($332.7 billion), followed by equipment and supplies ($108.6 billion). Technology is the smallest of the enabling sectors, at $26.3 billion.

North America is the region with the largest market for the enabling sectors ($171.2 billion) and is also largest in two sub-categories – apparel and footwear, and equipment and supplies. Asia-Pacific is the second-largest market overall ($125.5 billion) and leads in the technology segment. In every region, expenditures on the enabling sectors (both overall and per participant) are higher than expenditures on actually participating in recreational physical activities. This is primarily due to the high level of spending on apparel and footwear.

Physical Activity Enabling Sectors by Region, 2018

	Physical Activity Enabling Sectors Market (US$ billions)			
	Technology	**Equipment & Supplies**	**Apparel & Footwear**	**TOTAL Market Size* (US$ billions) *(Per Participant)***
North America	$8.6	$40.0	$123.1	**$171.2** *($814)*
Asia-Pacific	$10.8	$27.6	$87.5	**$125.5** *($92)*
Europe	$4.8	$35.0	$77.4	**$116.5** *($274)*
Latin America & Caribbean	$1.0	$2.9	$22.3	**$26.2** *($110)*
Middle East & North Africa	$0.4	$2.6	$12.1	**$15.1** *($121)*
Sub-Saharan Africa	$0.7	$0.5	$10.3	**$11.5** *($34)*
Total Physical Activity Enabling Sectors	**$26.3**	**$108.6**	**$332.7**	**$465.9** *($172)*

Note: Figures do not sum to total due to overlap between segments and rounding.

Source: Global Wellness Institute estimates, based upon data from Euromonitor International, Statista, Crunchbase, and other sources

The physical activity market is expected to enjoy robust growth in the next five years.

For the next five years, GWI projects that the physical activity economy will grow by 6.6% annually, significantly faster than global GDP growth (5.1% annually, as projected by the IMF). The physical activity economy is projected to surpass $1.1 trillion, and Asia-Pacific will overtake North America as the largest region by expenditures. Over 40% of the increase in the physical activity market will be in Asia-Pacific region. China and India together are projected to account for nearly one-third of the market growth, while the United States will account for one-quarter of the increase and Europe will account for one-fifth. Around the world, rising concern about obesity and chronic disease and the awareness of their link to inactivity will continue to push governments, nonprofits, medical systems, employers, and consumers to pay more attention to physical activity. In lower- and middle-income countries and regions, demand for exercise opportunities will be fueled by expanding populations and a growing middle class with rising disposable incomes, who are increasingly embracing healthier and more active lifestyles.

Physical Activity Market Growth Projections, 2018-2023

	Projected Market Size (US$ billions)		Projected Average Annual Growth Rate
	2018	**2023**	**2018-2023**
Total Physical Activity Economy	**$828.2**	**$1,139.7**	**6.6%**
By Region			
Asia-Pacific	$240.4	$373.5	9.2%
North America	$282.7	$366.0	5.3%
Europe	$225.0	$287.9	5.1%
Latin America-Caribbean	$42.2	$56.6	6.0%
Middle East-North Africa	$22.6	$33.0	7.8%
Sub-Saharan Africa	$15.3	$22.7	8.2%
By Sector			
Active Recreation & Sports	$230.1	$323.4	7.0%
Fitness	$108.6	$147.9	6.4%
Mindful Movement	$29.1	$52.1	12.4%
Apparel & Footwear	$332.7	$453.1	6.4%
Equipment & Supplies	$108.6	$139.4	5.1%
Technology	$26.3	$39.8	8.6%

Source: Global Wellness Institute estimates, based upon economic and industry sector projections from the IMF, Euromonitor, Statista, and GWI's data and projection model

Growth in consumer spending on physical activity will not guarantee increasing participation. Public and private sectors must work together to address the physical inactivity crisis.

The irony in these projections is that ever-increasing consumer spending on physical activity is not necessarily the solution to the global crisis of physical inactivity. From a public health perspective, the aim is simply to get more people more active, more often – regardless of whether they spend more money while doing so. The question we must ask is whether the growth in expenditures reflects more wealthy and able-bodied people (who already have a higher propensity for physical activity) spending more money on the latest fitness fads, gadgets, and apparel? Or does it reflect growing participation rates among people who were not previously physically active? In most countries, the growth projections incorporate both, at varying rates.

We do not have to spend any money at all in order to be physically active and stay healthy, especially when we have access to good parks, recreation, and outdoor amenities, and when we get enough "natural movement" in our daily lives. The world needs more appealing spaces and options for the one-quarter to one-third of adults who are physically inactive (by WHO standards), and for the two-thirds of the population who are not currently participating in recreational physical activities (by GWI's estimates), in order to engage these people in physical activities they enjoy, at price points that are accessible to them. As such, investment in public infrastructure, parks, outdoor gyms, school programs, physical education, etc. is critically important.

GWI firmly believes that government expenditures on fitness and other recreational physical activities are complementary to the private fitness and recreation industries, and not a competitor or substitute. If the aim is to reduce sedentary behavior and expand access to facilities and services that support physical activity, then both public and private efforts are essential. Physical activity and participation rates are so low in countries around the world, there are enormous opportunities to grow the market and reach new customers – and there is a health imperative to do so. Governments, nonprofits, and private enterprises and entrepreneurs all have a major role to play.

Business innovations and public initiatives can help to overcome barriers to physical activity, mitigate a public health challenge, and expand market opportunities.

The $828.2 billion global physical activity sector, while enormous, is currently only engaging about one-third of the world's population. The large and growing share of inactive population represents a major ongoing, global public health challenge. The solution lies in addressing the major barriers to physical activity across all spheres of life – transportation, domestic, and occupational physical activity ("natural movement"), as well as leisure and recreation options, and the recreational physical activity sector is a critical part of the solution.

GWI research and review of dozens of national and cross-country surveys revealed the major motivations and barriers to physical activity worldwide. Among adults, the top reasons for not engaging in physical activities are: **lack of time; lack of interest; physical or health conditions; and lack of motivation of habit**. Among youth, the top reasons are: **lack of time, lack of convenient facility or activity near home; not having fun; and prefer to do something else**. Across countries, time constraints are typically a more significant barrier in higher-income countries. In lower-income countries, a lack of interest or motivation and lack of access to facilities are cited more often as barriers. More surprising is that physical conditions (e.g., health-related reasons, illness, age, or the perceived inability to engage in physical activity) are frequently mentioned as a barrier, more so than cost/money constraints or access to facilities. Personal safety and being uncomfortable at a gym are also mentioned as a concern by women and girls in some countries where gender and social norms discourage female participation in sports and outdoor recreation, prevent activities in co-ed settings, or prohibit physical activity for females in general.

Top Barriers to Physical Activity Worldwide	Top Motivations for Physical Activity Worldwide
Adults **1.** Lack of time **2.** Lack of interest **3.** Physical or health conditions **4.** Lack of motivation or habit	**Adults** **1.** Maintaining good health **2.** Stress reduction or relaxation **3.** For fun or pleasure
Youth **1.** Lack of time **2.** Lack of convenient facility or activity near home **3.** Not having fun **4.** Prefer to do something else	**Youth** **1.** For fun, entertainment, or joy of movement **2.** To be with friends **3.** To be fit or healthy

Source: Global Wellness Institute review of over 75 studies and surveys across 60 countries

The full report provides numerous examples of innovations, new business models, and public policy initiatives that can help overcome barriers to physical activity, increase participation, and extend the many benefits of movement to more people around the world. These approaches are summarized below.

Mitigating time constraints and increasing convenience. The market has developed many new approaches, services, and businesses to make physical activity more flexible and convenient.

- Apps and digital services are enabling workouts on demand.
- New business models and technologies are revolutionizing the home gym.
- The fitness-hospitality nexus enables people to continue their exercise routines during travel.

Making physical activity a daily habit. As natural movement declines in daily life, there are ways to re-insert movement back into our routine activities and the places where we spend much of our time.

- Workplace wellness initiatives incorporate physical activity into work days.
- New business models are enabling fitness for freelancers.
- Physical education in schools builds lifelong physical activity habits.
- Schools can incorporate movement for children throughout the day.

Making physical activity fun and appealing. Recognizing that consumers are more motivated by fun than by a sense of obligation, businesses and communities have introduced different ways of making physical activity more fun and appealing.

- Build connections with leaders, teams, tribes, and communities.
- Put the "play" back into youth sports.
- Leverage technology to make physical activities fun and rewarding.
- Dance as exercise.

Enabling movement in all physical conditions. The activities and businesses that exist today mainly serve people who are already active or capable of conducting physical activity, leaving out many people whose physical conditions (related to age, medical conditions, disability, injury, etc.) make it difficult for to them to participate. There are opportunities to serve this population, who could benefit greatly from physical activities.

- This rise of silver fitness.
- Mainstreaming therapeutic and recovery fitness.
- Prescribing exercise.

Embedding physical activity in the built environment. An important way to engage more people in physical activity is by making movement a default in daily life, through infrastructure, design, and convenient amenities.

- Designing buildings, neighborhoods, and cities to encourage natural movement.
- The rise of wellness real estate.

Making physical activity affordable and accessible to everyone. Accessibility of facilities and affordability remain important barriers to physical activity, especially for people with lower incomes or who live in low-resource areas. Both private businesses and the public sector can play important roles in improving accessibility and lowering cost barriers.

- The growth of high-value, low-price gyms.
- The importance of small business in serving communities.
- Safe and comfortable spaces for women and girls.
- Government investments in infrastructure and programs are critical for improving access.

Research Scope and Methodology

The definitions, conceptual framework, and estimation models for the global economy of physical activity are developed by the authors under the auspices of the Global Wellness Institute (GWI). All data presented in this report are for the year 2018. The analysis and figures are based on extensive primary and secondary research conducted from January 2018 to August 2019, including literature reviews, qualitative and quantitative research, and expert interviews.

Country-level data on physical activity participation rates and expenditures are developed by the authors using our proprietary databases and economic models, cross-referenced with in-house data and research conducted by GWI and the authors for other key wellness industries (e.g., wellness real estate, wellness tourism, workplace wellness, etc.). Key public and private sources consulted include: World Bank, International Monetary Fund, World Health Organization, United Nations, Eurostat, Euromonitor International, Statista, government ministries and statistical agencies, and a wide variety of country-specific and industry-specific organizations, databases, publications, and media sources. Specific resources used to develop different types of data presented in this report are listed below:

- ***For physical activity participation rates, motivations, and barriers:*** Sports/recreation/physical activity population surveys conducted at the country level by government ministries, public statistical agencies, and nonprofit/academic research institutes (over 330 studies across 94 countries, in 17 languages); regional sports/recreation/physical activity data gathered by the European Union/Eurostat (in 28 EU member countries); WHO STEPwise Approach to Surveillance (STEPS) country reports (conducted in 113 countries); International Health, Racquet, & Sportsclub Association (IHRSA) global and regional reports (covering 65 countries); activity-specific participation studies and data from a variety of research institutes, journal articles, private organizations, media, websites, etc. (e.g., yoga studies conducted by *Yoga Journal* or the German Professional Association of Yoga Teachers/BDY).

- ***For physical activity expenditures:*** Spending data were gathered from the same sources listed above, as well as consumer expenditures data from Euromonitor International and from national consumer expenditure/household budget surveys conducted on a regular basis by governmental statistical agencies in 67 countries around the world.

- ***For physical activity enabling sectors (technology, equipment, apparel):*** GWI relied primarily on data from Euromonitor International, Statista, and Crunchbase for these segments, supplemented by numerous industry-specific organizations, publications, websites, and media sources, and GWI's own original research for some technology segments.

GWI's estimates generally do not directly mirror data found in any of the sources listed above, because we have made adjustments to ensure numbers fit our definitions and methodology, and we have used our own estimation models to fill in data for countries not covered by these sources.

Move to be Well:
The Global Economy of Physical Activity

Full Report

OCTOBER 2019

GLOBAL WELLNESS INSTITUTE™
EMPOWERING WELLNESS WORLDWIDE

I. PHYSICAL INACTIVITY: A RISING GLOBAL CRISIS

Physical activity is essential to health, and yet, collectively we have become more inactive.

Human beings are born to move. The strength, agility, and speed of our bodies have been integral to the existence and survival of the human race for millennia, from hunter-gatherer societies to agrarian and nomadic communities. Physical abilities and athleticism have been valued and celebrated across civilizations, as documented in art and artifacts dating from antiquity. Challenging our bodies, competing with one another, watching competitions as a community, and celebrating the achievements of our best athletes bring thrills, excitement, and collective pride and joy – from the ancient Greek games to the modern Olympics, and from the local tennis league to our children's swim meets.

Physical activity is intrinsic to wellness, and the link between physical activity and good health has been clinically and scientifically proven. As advocated by physicians and public health authorities around the world, a regular and adequate level of physical activity is vital to our health in all aspects: muscular and cardiorespiratory fitness; bone and functional health; energy, balance, and weight control; and lowering the risks of depression and many chronic diseases (hypertension, coronary heart disease, stroke, diabetes, various types of cancer). Yet, in recent decades there has been an alarming trend of declining physical activity in countries around the world.[1] According to the World Health Organization (WHO), 23% of adults (over 18 years) and 81% of adolescents (ages 11-17) were not physically active enough in 2010.[2] More recent data indicate that as many as 27.5%[3] to 31%[4] of adults may be physically inactive. Across countries, low or declining physical activity levels tend to be associated with high or rising national income levels. Research also shows that women and girls tend to be more inactive than men and boys.[5]

These trends are occurring at a time when we need physical activity more than ever to mitigate the rise of obesity and chronic disease, as well as the impacts of population aging. Obesity, which is linked with physical inactivity, has nearly tripled worldwide since 1975; 39% of adults are now overweight.[6] Physical inactivity and obesity are key lifestyle risk factors that directly contribute to the rise of chronic or noncommunicable diseases (including heart disease, stroke, cancer,

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[1] Ng, S.W., and Popkin, B.M. (2012). Time use and physical activity: a shift away from movement across the globe. *Obesity Reviews* 13(8), 659-680. https://doi.org/10.1111/j.1467-789X.2011.00982.x.

[2] WHO (2018, Feb. 23). Physical Activity: Key Facts. *WHO Fact Sheet.* https://www.who.int/news-room/fact-sheets/detail/physical-activity. Accessed July 23, 2019.

[3] Guthold, R. et al (2018, Sept. 4). Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. *The Lancet Global Health 6*, e1077-1086. https://doi.org/10.1016/S2214-109X(18)30357-7.

[4] Hallal, P.C., et al (2012, July 18). Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet* 380, 247-257. https://doi.org/10.1016/S0140-6736(12)60646-1.

[5] Hallal (2018). See also: WHO (2014). *Global Status Report on Noncommunicable Diseases.* https://www.who.int/nmh/publications/ncd-status-report-2014/en/.

[6] WHO (2018, Feb. 16). *Obesity and Overweight Fact Sheet.* http://www.who.int/mediacentre/factsheets/fs311/en/.

diabetes, chronic lung disease, etc.), which are collectively responsible for 71% of deaths worldwide every year.[7]

Our sedentary lives draw increasing alarm from public health authorities and the media, with warnings like "sitting is the new smoking" and "your sedentary lifestyle will kill you." *The Lancet* has described the rise of physical inactivity as "pandemic, with far-reaching health, economic, environmental, and social consequences." Physical inactivity is the fourth leading cause of death in the world, responsible for more than 5 million preventable deaths each year.[8] The global economic burden of physical inactivity was estimated at $67.5 billion in 2013 ($53.8 billion in direct healthcare costs and $13.7 billion in productivity losses).[9]

How did we become so inactive?

There is no question that our modern lifestyles and livelihoods require much less physical exertion than those of previous generations of farmers, fisherman, herders, tradesmen, and industrial workers. At work, at home, and at leisure, our lives have become more sedentary. With urbanization, new technologies, and the rise of the service economy, a growing share of people work in jobs that require sitting for most of the day. At home, physical chores such as cooking and cleaning have been greatly eased by modern appliances and industrialized food production. Meanwhile, the digital revolution has enabled us to shop, socialize, and consume news and entertainment without leaving our homes or even our sofas.

The trend is equally, if not more, alarming for children, fewer of whom walk to school than ever before. Across cities and suburbs, the spontaneous and unsupervised outdoor play of past generations has been replaced with scheduled playdates, structured lessons, and sports leagues – activities to which children are transported in vehicles. Similar to adults, teens now have less motivation to be active, while glued to their mobile devices for social media, gaming, and entertainment.

Many environmental factors also contribute to the rise of physical inactivity around the world. As essential physical tasks steadily disappear in our daily lives, they have not been replaced by other types of built-in movement. Our modern built environment – both urban and suburban – is often described as obesogenic, with many factors interacting and conspiring against a physically active lifestyle:

- The design of neighborhoods and buildings in the past half-century has largely prioritized the speed and convenience of vehicular traffic, with the unintended result of making walking or cycling an unpleasant, inconvenient, or even dangerous way to travel. Too many people automatically drive short (and walkable) distances, from work to school to errands, simply because there is no easy way to cross a highway on foot, or to walk from one shopping center or office park to another.

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[7] WHO (2018, June 1). *Fact Sheet: Noncommunicable diseases.* http://www.who.int/en/news-room/fact-sheets/detail/noncommunicable-diseases.

[8] Kohl, H.W., et al (2012, July 18). The pandemic of physical inactivity: global action for public health. *The Lancet* 380, 294-305. https://doi.org/10.1016/S0140-6736(12)60898-8.

[9] Note that this study expresses the $67.5 billion of economic losses in "international dollars," which means that the values in each country are converted to dollars at a purchasing power parity rate that accounts for differentials in the prices of goods and services across countries. Ding., D., et al (2016, July 27). The economic burden of physical inactivity: a global analysis of major non-communicable diseases. *The Lancet* 388, 1311-1324. https://doi.org/10.1016/S0140-6736(16)30383-X.

- Density, overcrowding, and sprawl are becoming the way of life for many people, especially for those living in the world's largest and rapidly-growing metropolises. Lack of sidewalks, heavy traffic, auto-centric planning, and uneven public transit development have made walking or biking less viable as a transportation option, even for city-dwellers. Many do not have adequate access to parks, green space, or sports and recreational facilities near their homes. Some people live in areas where crime and safety concerns discourage them from being outdoors. Some stay indoors because of poor air quality and pollution.
- Similarly, most modern buildings have been designed for efficiency and comfort, rather than encouraging movement – for example, placing elevators prominently in lobbies, while hiding narrow and dark stairways, as if the stairs are designed to discourage people from using them. All those missed opportunities to move in our daily lives – short distances not walked, flights of stairs eschewed, etc. – have now become the "steps" that we need to make up each day in order to meet our daily requirements for physical activity.

Not surprisingly, in just a generation or two, physical activity has become less natural and more structured and intentional. Recent systematic reviews of data for adults in wealthier countries find that work-related physical activity and use of active transit have been decreasing over time while leisure-time physical activity (e.g., fitness and sports) has been increasing. For youth in wealthier countries, physical activity during physical education classes has also declined since the 1990s.[10] (Data for lower-/middle-income countries are too sparse and inconsistent to draw conclusions about these kinds of time trends.) In order to stay active, we now have to schedule time to exercise. However, with long working hours, long commutes, dual income families, and other pressures of modern life, many simply cannot find time to exercise during their limited leisure hours. Others many find it unaffordable or inconvenient to do so. (See *Chapter IV* for more discussion of the barriers to physical activity.)

Physical activity versus fitness: A privilege, a choice, or a right?

In 2017, the Global Wellness Institute (GWI) estimated wellness to be a $4.2 trillion global economy, comprised of ten industries that enable consumers to incorporate wellness activities and lifestyles into their daily lives. "Fitness and mind-body" was among the largest wellness industries, estimated at $595 billion.[11] In recent years, fitness innovations and new business models have generated significant consumer and media excitement, as well as new participants and competition in the fitness market. Leveraging new technologies, the science of exercise physiology, and better understanding of consumer motivations, the fitness industry is quick and innovative in testing out new approaches to serve unmet needs, and in making exercise more convenient, affordable, fun, personalized, and results-driven. Health clubs and gyms alone have experienced tremendous global expansion over the last decade, with over 50% growth in revenues from 2007-2018.[12]

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[10] Hallal (2018). See also: Knuth, A.G., and Hallal, P.C. (2009). Temporal Trends in Physical Activity: A Systematic Review. *Human Kinetics* 6(5), 548-559. http://dx.doi.org/10.1123/jpah.6.5.548.

[11] Global Wellness Institute (2018). *Global Wellness Economy Monitor*. https://globalwellnessinstitute.org/industry-research/.

[12] IHRSA (2019). 2019 *IHRSA Global Report: The State of the Health Club Industry*. https://www.ihrsa.org/publications/the-2019-ihrsa-global-report/. 2007 figures obtained from: https://www.snewsnet.com/press-release/ihrsa-releases-2008-ihrsa-global-report-the-state-of-the-health-club-industry.

However, it would be naïve to expect that a growing global fitness industry would be adequate to solve the worldwide epidemic of physical inactivity. In fact, the opposite seems to be the case: **physical inactivity, obesity, and chronic disease have all continued to rise globally even alongside the explosion of the fitness industry.**

There are many possible reasons for this gap. Although the commercial fitness sector is expanding its reach, these businesses are still primarily targeting those who are more able and likely to exercise – the educated, more affluent, younger demographics, and those living in major urban centers and wealthy suburban areas. Recent analysis of the "geography of fitness" by Richard Florida and *CityLab* found that the availability of fitness and recreational facilities across the United States tracks closely with key socioeconomic indicators (e.g., higher incomes, education levels, and "creative class" and high-tech occupations).[13] If this kind of analysis could be conducted on a global level, the disparities would likely be even more stark. The reality is that participating in "fitness" remains a privilege that is not accessible for many people around the world.

The opportunity to engage in physical activity that enables a healthy life should not be a privilege or choice, but a universal right.

While fitness businesses vie for market share by providing more choices to those who are able and can afford to exercise, there remains a massive swath of inactive population who have limited options, including seniors, women and girls, children and teens, people in poor health, and those living in rural and marginalized neighborhoods. **To make good health equitable to all, it is necessary to broaden the focus from exercise and fitness to all types of physical activities, for all people. The fitness industry is but one piece of this larger puzzle, because people can engage in physical activities in many ways and places. Reversing the global trend of physical inactivity is a gargantuan task that will require concerted efforts by the public and nonprofit sectors in addition to private enterprise.**

For this reason, GWI has expanded the scope of this key wellness industry sector from "fitness and mind-body" to "physical activity" (see page 22). In this report, GWI aims to build understanding of physical activity as an economic activity (and the role of fitness and mind-body within that broader scope), as well as explore emerging business models and public policy approaches that are expanding access and addressing key barriers to physical activity across different regions and populations.

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[13] 1) Florida, R. (2019, Jan. 8). Your Fitness Resolution Might Be Easier If You're Rich. *CityLab*. https://www.citylab.com/life/2019/01/fitness-exercise-affluent-class-divides/579592/. 2) Florida, R. (2019, Jan. 10). The Geography of American Gym and Fitness-Center Brands. *CityLab*. https://www.citylab.com/life/2019/01/fitness-studio-gym-density-income-education-resolution/579595/.

II. UNDERSTANDING THE ECONOMY OF PHYSICAL ACTIVITY

Defining physical activity

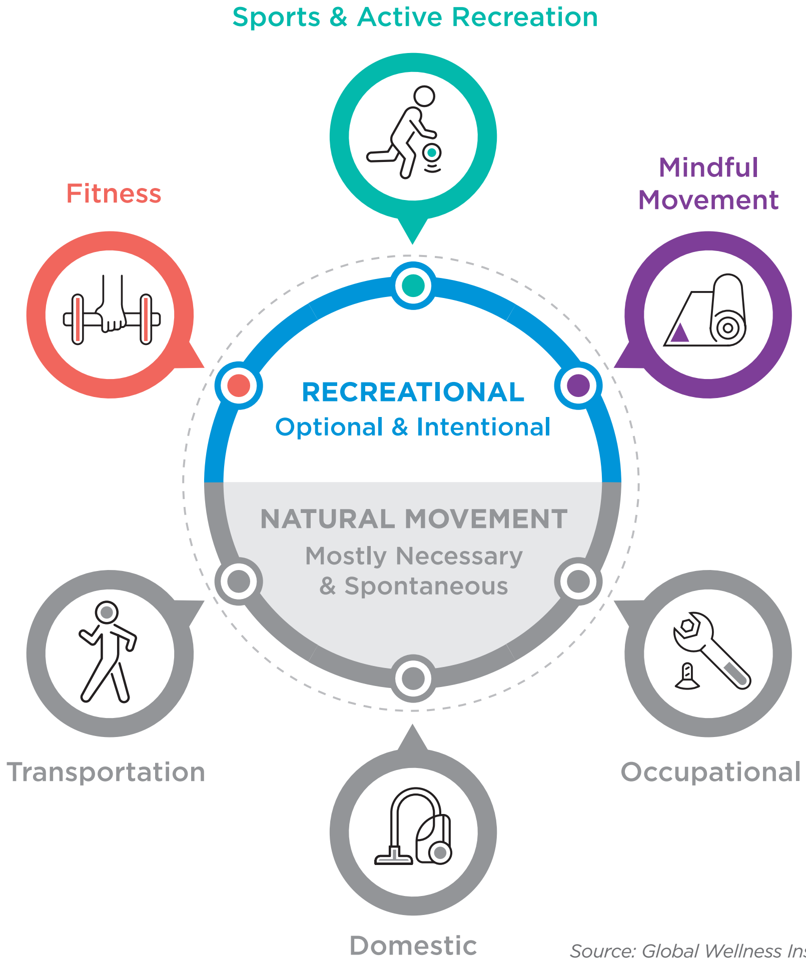
At its essence, physical activity is about movement. **The World Health Organization (WHO) defines physical activity as "any bodily movement produced by skeletal muscles that requires energy expenditure – including activities undertaken while working, playing, carrying out household chores, travelling, and engaging in recreational pursuit."** According to the WHO, in order to maintain good health, children and adolescents need 60 minutes of moderate- to vigorous-intensity physical activity daily, and adults need 150 minutes of moderate-intensity physical activity, or 75 minutes of vigorous-intensity physical activity, on a weekly basis.[14] The benefits of physical activity are varied, widely proven, and well-known, including: preventing chronic disease, reducing stress, managing weight, strengthening functional mobility, improving sleep, alleviating depression, improving cognitive function, and so on. To receive these benefits, our engagement in physical activity needs to be regular, consistent, and sustained – not intermittent, only during holidays, or only when we want to lose weight or can find the time.

We can engage in physical activities in many ways. Some types of movement are essential to our daily lives, such as doing manual labor, walking to work or to the store, climbing stairs, doing household chores, gardening, and so on. Termed ***natural movement***, these kinds of activities have been the core of physical activity for humankind for millennia – including **occupational, domestic, and transportation-related physical activity**. Unfortunately, as discussed in *Chapter I*, these activities are now on the decline around the world, progressively discouraged by our modern lifestyles and built environments.

We also engage in optional and intentional movement as part of our hobbies and leisure time. ***Recreational physical activity*** can include going to the gym, playing sports, taking a walk or cycling for fun, dancing, children playing on a playground, and so on. As mentioned in *Chapter I*, recreational physical activities have been rising in wealthier countries. There are many possible reasons for this increase: 1) rising levels of income and development give us more free time and resources for pursuing leisure activities; 2) our awareness of the importance of physical activity for health is growing; 3) as we expend less energy during our daily tasks we are able to expend more energy during leisure; and 4) access to facilities and infrastructure for recreational physical activities is rising in many places.

[14] WHO (2018, Feb. 23). Physical Activity: Key Facts. *WHO Fact Sheet.* https://www.who.int/news-room/fact-sheets/detail/physical-activity. Accessed July 23, 2019.

Types of Physical Activity



Source: Global Wellness Institute

If we engage in enough natural movement during our daily tasks, then it is not necessary for us to compensate with recreational physical activity in order to meet WHO guidelines and stay healthy. This is the case, for example, in the world's "Blue Zones" – places with very high life expectancy, where living environments encourage routine natural movement.[15] This is also the case in many lower income countries. Uganda, for example, was rated the "most active" nation in *The Lancet's* most recent physical activity study, with only 5.5% of adults physically inactive – because people walk to work, do manual jobs, grow their own food, and have to stay active to survive.[16]

In most of the world, however, our living environments, jobs, and lifestyles are less and less conducive to natural movement, while recreational physical activity is becoming increasingly essential in order to stay healthy.

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[15] See: 1) Merle, A. (2018. July 19). The Healthiest People in the World Don't Go to the Gym. *Medium.* https://medium.com/s/story/the-healthiest-people-in-the-world-dont-go-to-the-gym-d3eb6bb1e7d0. 2) Why Diet and Exercise Don't Work – 9 Questions for Dan Buettner. *Blue Zones*. August 2016. https://www.bluezones.com/2016/08/diet-exercise-dont-work/.

[16] Brueck, H. (2019, Apr. 23). Finland and Uganda are the world's fittest countries — here's what they do to stay in shape. *Business Insider.* https://www.businessinsider.com/worlds-fittest-countries-reeal-how-to-stay-in-shape-2019-4?utm_source=hearst&utm_medium=referral&utm_content=allverticals. Cites physical activity data from: Guthold, R. et al (2018, Sept. 4). Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. *The Lancet Global Health* 6, e1077-1086. https://doi.org/10.1016/S2214-109X(18)30357-7.

The evolution of recreational and leisure physical activity

Activities such as going to the gym, doing yoga, running marathons, playing basketball, and other forms of exercise have garnered greater attention as they have grown in popularity and proliferated globally in recent decades. However, these activities are not new and have evolved out of leisure and recreational pastimes that have been around for thousands of years.

Organized sport and recreation have deep and ancient roots.

Systems and organizations created specially to cultivate strength, agility, speed, power, precision, and skill have existed since ancient times. Images of wrestling, boxing, and other sports have been found in archaeological evidence from the ancient Sumerians and Egyptians (2,000-3,000 B.C.). The word "gymnasium" has Greek roots, tracing back to the public institutions devoted to exercise/training, communal bathing, and scholarly education of young men in ancient Greece. While martial arts traditions in Asia date back thousands of years, the systematization of Chinese martial arts started as early as 200 B.C., and Shaolin-style kung fu was taught at the Shaolin temple as early as 1,500 years ago.[17] In the 1700s-1800s, a system of gymnastics was developed in clubs in Germany, Sweden, and Western/Northern Europe (known as *turnverein* in Germany). Most of the popular recreational sports we play today – soccer, baseball, basketball, volleyball, tennis, rugby, swimming for leisure, etc. – originated more recently, in 19th century Europe and the United States, as the Industrial Revolution gave people more leisure time in which they could play or observe sports. Throughout most of history, physical training systems and institutions have been closely connected with masculinity, cultivation of combat skills, and enhancing battle readiness and military strength. Widespread participation of women and girls in sports and competition did not happen until the 20th century, alongside social changes and new rules, such as the 1972 Title IX legislation in the United States (which prohibited sex-based discrimination in federally-funded education programs and has had a wide impact on women's participation in athletics).[18] Nonetheless, in the 21st century female athletes continue to face restrictions and second-class status across most of the world.

[17] See: 1) Henning, S.E. (1999). Academia Encounters the Chinese Martial Arts. *China Review International* 6(2), 319-332. https://doi.org/10.1353/cri.1999.0020. 2) *The History of Fighting*, http://www.historyoffighting.com/. 3) Chinese martial arts, *Wikipedia*, https://en.wikipedia.org/wiki/Chinese_martial_arts.

[18] Bell, R.C. (2008, March 14). A History of Women in Sport Prior to Title IX. *The Sport Journal.* http://thesportjournal.org/article/a-history-of-women-in-sport-prior-to-title-ix/.

The modern fitness industry emerged with the commercialization of training gyms and fitness clubs.

The YMCA, founded in London in 1844, is often credited as the first pioneer in the modern fitness movement. The first YMCAs with gymnasiums were built in 1869, and in 1881 a Boston YMCA staffer, Robert J. Roberts, coined the term "bodybuilding" and developed group exercise classes that were a precursor to today's fitness workouts.[19] The "health club" in its modern form – a facility with training equipment, systems, and classes – can largely be traced to Jack LaLanne, who founded the first gym in the United States in 1939. LaLanne designed the first modern machines for strength training (e.g., cable pulley machine, leg extension machine, etc.) and developed fitness programs such as aerobics and resistance training.[20]

Fitness gyms and health clubs began to gain mass acceptance in the 1970s and 1980s, when what began as a fringe concept for mostly male weight lifters and body builders – notably, with the founding of Gold's Gym in Venice, California – gradually grew into a series of health club chains, spearheaded by pioneering companies such as World Gym, 24 Hour Fitness, LA Fitness, and Bally. Still, fitness clubs remained mostly the domain of men until Jane Fonda launched her massively successful exercise videos in the early 1980s, popularizing aerobic routines and weight lifting among women and attracting them to join fitness clubs. The format of the comprehensive, multi-purpose gyms continues to this day, and in recent years the market has been supplemented by "boutique" studios, most of which focus on a single format or training system, such as cycling, yoga, barre, boxing, CrossFit, boot camp, etc.

The mass adoption of mindful movement is amplifying the benefit of physical activities.

Practices such as yoga and tai chi have commanded a following for thousands of years, but the mass, worldwide adoption of mindful movement is a relatively recent phenomenon. Over the last couple of decades, many of these ancient or longstanding practices have been co-opted by the world of fitness, adapted to appeal to modern gym-goers. Alongside this trend, our concept of exercise and fitness is also evolving – from workouts characterized by pounding, pumping, fat burn, and muscle building, toward more deliberate, mindful modules focused on toning, balance, flexibility, alignment, and breath. Yoga, Pilates, and barre have become exercise staples from high-end comprehensive gyms to neighborhood YMCAs; their rising popularity has spawned independent studios and branded chains all across the world. Underlying this development are several factors. Our fast-paced, stressful modern lives are fueling demand for slower-paced, mindful movement and exercise. Among the overworked, sleep-deprived, and anxiety-ridden, as well as those who suffer from chronic pain and disease, many are seeking relief in exercise, physical activities, and non-medical solutions. Across the board, there is growing interest in, and

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[19] Weeks, L. (2015, June 2). How the YMCA Helped Shape America. *National Public Radio.* https://www.npr.org/sections/npr-history-dept/2015/06/02/410532977/how-the-ymca-helped-shape-america. See also: Eschner, K. (2017, Dec. 29). The YMCA First Opened Gyms to Train Stronger Christians. *Smithsonian Magazine.* https://www.smithsonianmag.com/smart-news/ymca-first-opened-gyms-train-stronger-christians-180967665/.

[20] Dalleck, L. (n.d.). From Ancient Greece to Zumba: 50 Events, People and Trends That Have Shaped the History of Fitness (Part 1). *American Council on Education Certified News*. https://www.acefitness.org/certifiednewsarticle/2109/from-ancient-greece-to-zumba-50-events-people-and. Accessed July 25, 2019. See also: Evolution of the Fitness Industry: A Brief History of the Public Gym. *ClubReady*, 15 Feb. 2017. https://www.clubready.club/blog/evolution-of-the-fitness-industry-a-brief-history-of-the-public-gym.

increasing recognition of, the importance of mind-body health. Emerging scientific and clinical studies are offering preliminary endorsements of the efficacy of yoga, tai chi, Pilates, and other mindful movement practices in the mitigation of hypertension, back pain, anxiety and depression, cognitive decline, fall risks in older adults, and other health conditions.

While some mindful movement practices have deep and ancient roots, many people are attracted to the physical and mental benefits they experience from these practices, and do not necessarily subscribe to the underlying spirituality, philosophies, and systems (e.g., Hinduism, Ayurveda, Taoism, Buddhism, chakra, chi, energy flow, etc.). Purists may cringe at the proliferation of "power vinyasa yoga" and "yogalates," but the mainstreaming of these longstanding practices has created a powerful intersection between the fields of exercise/fitness and mental wellness. This growing intersection also brings other benefits, such as drawing more attention to breathing, balance, alignment, posture, injury prevention, recovery, and healing in the fast-paced world of fitness.

Today's fitness and exercise practices are evolving to meet modern needs.

In a way, the rise of the commercial fitness sector is a consumer response to the failure of our modern lifestyle, environment, and healthcare system to keep us active and healthy. As we become more sedentary, we must now treat physical activity as an intentional health-maintenance routine. Strong consumer demand is driving the vibrant and diverse fitness sector that we see today. One does not have to be a researcher or industry analyst to notice the proliferation of fitness clubs and studios in recent years – in cities and suburbs, from New York to Shanghai, from London to Dubai – not to mention the friends and family who have taken up yoga, spinning, or Zumba; the growing number of runners and joggers on the street and in the parks; the rising popularity of marathons, cycling, and adventure races; and the widespread use of fitness trackers, gadgets, and apps. Displays of physical prowess and athleticism have become popular Instagram-able moments, and even the latest status symbols. The aspiration for an active lifestyle has filtered into clothing, propelling athleisure and activewear into a fast-growing fashion category, while technological gadgets and innovations infiltrate all aspects of the industry.

The economy of physical activity

Physical activity is not only something that we do for our health, but also generates significant economic activity. As leisure-time fitness, exercise, and active recreation become more popular, they also become a growing household spending line item, and the potential for profitability and innovation has attracted entrepreneurs and investors in markets around the world.

The economic activity generated by physical activity is massive, because it includes not only consumer spending in the private sector, but also significant public sector expenditures. In fact, the public expenditure component is probably larger for the physical activity sector than for any of the other nine wellness industries studied by the Global Wellness Institute (see page 22), because so many physical activities rely on publicly-funded infrastructure.

Types of Expenditures on Physical Activity

Recreational Physical Activity Spending	
Primarily PRIVATE spending: • Fitness & exercise • Mindful movement • Sports & active recreation • Apparel, equipment, technology	**Supported by PUBLIC spending:** • Parks & recreational facilities & programs • Sports facilities & programs • Physical education • Rx for exercise

Natural Movement Physical Activity Spending	
Primarily PUBLIC spending: • Urban planning • Active transit (walking/ cycling)	**Supported by PRIVATE spending:** • Architecture & design • Apparel & equipment for active transit

Source: Global Wellness Institute

- **Natural movement physical activities** are primarily supported by public policy and public expenditures, because these are largely a function of the environments in which we live and work. For example, in response to the rise of sedentary behavior, obesity, and chronic disease, many governments are investing in new urban planning approaches and transportation infrastructure that encourage daily movement and use of active transit. Natural movement can also be facilitated through private spending on real estate and design, such as offices or homes that encourage daily movement via active design principles (e.g., open/accessible stairways). GWI believes that governments, real estate developers, transportation planners, architects, and design/planning professionals have a vital role to play in creating buildings and neighborhoods that encourage us to embed physical activities into our daily lives. This topic was addressed in depth in GWI's 2018 report, *Build Well to Live Well: Wellness Lifestyle Real Estate and Communities*,[21] and so it is not the primary focus of this report.

- **Recreational physical activities** are primarily driven by private consumer expenditures. Individuals and families are increasingly choosing to spend money to participate during their leisure time in a wide range of physical activities that interest them, including joining a gym or YMCA, attending a fitness class, doing mindful movement (e.g., yoga, Pilates), participating in a recreational sports team, swimming laps, running marathons, and so on. Other expenditures include clothing, shoes, equipment, sporting goods, and technology devices/services that support participation in these kinds of activities. ***These kinds of consumer expenditures on recreational physical activities are the primary focus for this report.***

To be sure, the public sector also plays an important role in supporting recreational physical activity. Governments fund physical education classes in schools, which provide children with early exposure to a variety of sports and physical activities and help instill lifelong healthy habits. In every country, governments support recreational sports in a variety of ways, from building and maintaining public sports fields, swimming pools, tennis courts, and running paths and trails, to providing funding for youth and community sports leagues and training programs. In a smaller number of countries and regions, governments also fund public gyms and fitness facilities and classes, which sometimes offer free or subsidized fees for selected population groups. In some countries with nationalized health systems, public health expenditures may support subsidized gym memberships and fitness classes for patients with chronic conditions or risk factors. Although it is not possible for GWI to estimate the level of local, regional, and national government expenditures around the world on these kinds of programs and facilities, they are not insignificant. *Chapter IV* in this report explores some of the innovative ways that public policies and expenditures are complementing the private sector to expand access to and participation in physical activities.

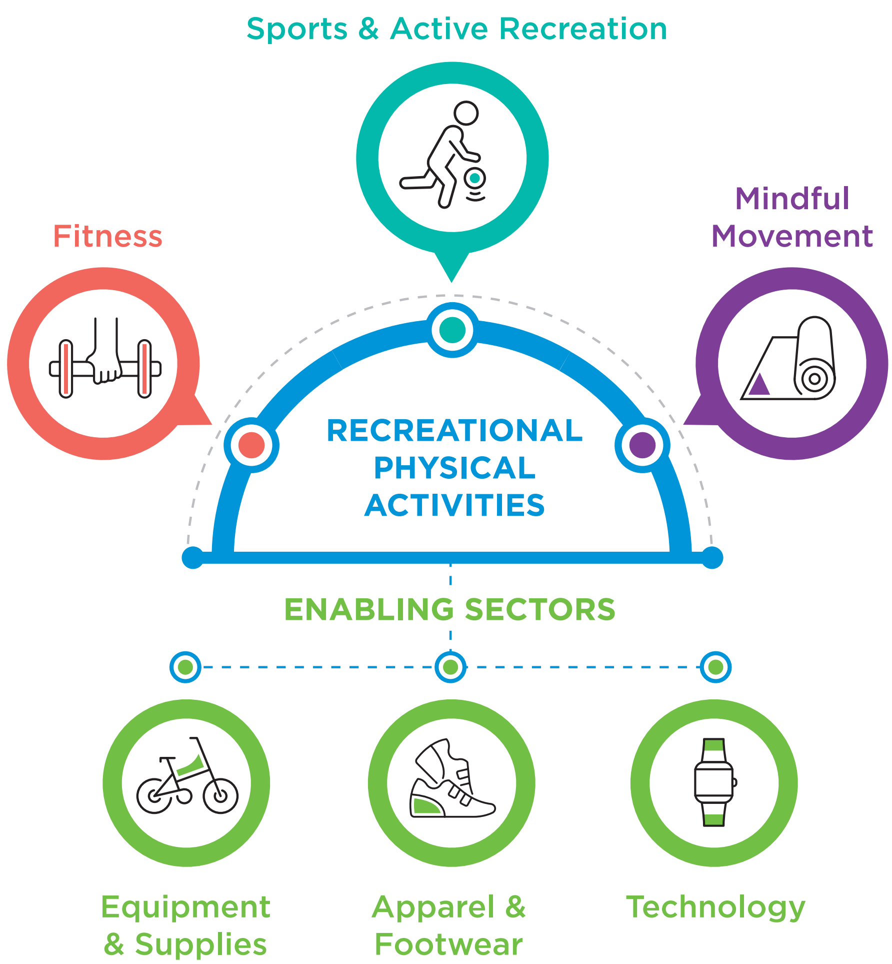
[21] For more information, see: GWI (2018). *Build Well to Live Well: Wellness Lifestyle Real Estate and Communities.* https://globalwellnessinstitute.org/industry-research/wellness-real-estate-communities-research/.

What does this study measure?

The purpose of this study is to measure the size of the **global physical activity market** and its key segments, and to highlight emerging trends, business models, cross-country variations, and innovative public-private partnerships that can help bring physical activity to all.

In this study, the global physical activity market is defined as **consumer spending associated with intentional physical activities performed during leisure and recreation.** The core of the market is the services that allow consumers to participate in three categories of recreational physical activities: **fitness**, **sports and active recreation**, and **mindful movement**. The market also includes several supporting sectors that help to enable and facilitate consumer participation in these activities: **technology**, **equipment and supplies**, and **apparel and footwear**.

Components of the Physical Activity Economy



Source: Global Wellness Institute

Core Market: Recreational Physical Activities

Recreational physical activities are segmented into three categories (as described further below). Many individuals will participate in multiple activities across these three sectors, and so each category is measured separately; GWI then accounts for overlap when we roll together the three categories to measure the total physical activity market.

GWI uses a consumption-based approach for measuring the physical activity market, and for each segment we estimate two key indicators:

- **Participation in recreational physical activities:** The estimated percent of the population that participates in each category of recreational physical activity. In this study, "participation" is generally defined as doing the activity at least once a month or with some regularity. The participation estimates are agnostic of *where or how* people perform the activity. For example, people who do yoga may take a class at a specialized yoga studio, may take a class at a gym or YMCA, may use a streaming or on-demand class, or may simply practice yoga alone at home. For this study, all of these methods would count as "participation in yoga" if they are done with regularity.

- **Consumer spending on recreational physical activities:** The estimated direct, out-of-pocket expenditures by consumers each year in order to participate in each category of recreational physical activity. This figure is limited to expenditures on services for actually doing an activity – i.e., gym or studio memberships, fees for classes and training, sports team or club dues, entry fees for events/competitions/tournaments, and other associated services. Non-service expenditures are measured in separate, supporting categories (as described below). In some instances, fees may be subsidized (such as in facilities/programs run by nonprofits or local governments), and in these instances the study still counts consumer *participation* in the activity although out-of-pocket expenditures would be reduced or possibly zero. Likewise, for some activities there is no service provider or participation fee (for example, running in the park or playing a pickup basketball game with friends), and in these instances the study counts consumer *participation* in the activity although the expenditures are zero.

Sports and active recreation: This category includes a wide range of sports and recreation activities: team sports (e.g., soccer, basketball, volleyball); individual sports (e.g., tennis, swimming, gymnastics); indoor sports (e.g., squash, wrestling, martial arts); outdoor sports (e.g., skiing, rowing, bicycling); as well as a variety of recreational pursuits (e.g., hiking, trail running, kayaking, parasailing, rock climbing, dancing). The common denominator among these is that they all involve movement and physical activity that contributes to good health. *Sports* are typically more structured, are governed by specific rules or forms, and often involve an element of competition; participants are usually motivated by mere enjoyment of the activity (fun and games), athletic achievement, competition, and/or camaraderie and team spirit. *Active recreation* activities are often less structured and formalized, although many do require instruction, mastering special skills, or adhering to specific systems or forms (e.g., different schools of martial arts and dance forms). Consumers may pursue active recreation because they enjoy the activity, working toward specific skills goals, being part of a community, and/or being outdoors. Sports and active recreation attract people of all ages and abilities – children, youth, adults, and seniors.

Fitness: Consumers engage in structured fitness activities with the intention of becoming physically fit or maintaining desired physical conditions, which may encompass cardiovascular health, functional fitness, flexibility and strength, and weight loss or weight management. Fitness activities most often take place at gyms, health clubs, and fitness studios, but can also happen in home-based gyms, outdoor gyms, community centers, schools, hotels, or other venues. These activities are often conducted under the supervision of trainers or are led by teachers in small or group class settings. Fitness activities usually rely on equipment or machines, or they follow a protocol of exercises for conditioning and training. As such, this category includes diverse activities, from indoor cycling/spinning, treadmill running, and weight training, to aerobic dance, Zumba, cardio kickboxing, HIIT, CrossFit, aqua aerobics, and much more. The participants in this market are primarily (but not exclusively) adults. Note that walking, running, jogging, and cycling in a gym, in a class, or using a piece of fitness equipment (treadmill or stationary bike) is included in the fitness category, while doing these activities outside of a gym-, class-, or equipment-based setting is generally counted as part of sports and active recreation.

Mindful movement: This category captures the exercise modalities that combine movement with mental/internal focus, body awareness, and controlled breathing, with the intention to improve strength, balance, flexibility, posture and body alignment, and overall health. Mindful movement includes activities such as yoga, tai chi, qigong, Pilates, stretch, and barre, as well as other less mainstream somatic, bodywork, and energy-based methods such as Gyrotonic and Gyrokinesis, Nia Technique, Feldenkrais Method, and 5Rhythms. While these classes are increasingly offered at gyms and fitness studios as part of a comprehensive fitness class offering, consumers usually turn to them with the intentions of improving mind-body health and mental focus, and for stress-relief and mindfulness, in addition to physical exercise. The participants in this market are primarily (but not exclusively) adults.

Physical Activity Enabling Sectors

In addition to direct expenditures on services, consumers also make related purchases that enable and support their participation in recreational physical activities. This study measures three categories of enabling sectors:

Technology: In recent years, technology has greatly transformed the fitness and physical activity markets, enabling consumers to track their own metrics, monitor performance and progress, access programs and services on demand, and connect with communities. This category includes technology-enabled hardware/devices and software/services that support fitness, sports, and active recreation. Hardware, equipment, and devices include: wearable fitness trackers (e.g., fitness bands such as Fitbit, Garmin, Polar, Huawei Band, Xiaomi Mi Band, and other types of step/movement/cardio trackers, but excluding the broader category of smartwatches, like Apple Watch, which are not exclusively for fitness); smart/sensor-embedded fitness and sports clothing, shoes, and eyewear; and smart/sensor-embedded/networked fitness equipment and sporting goods. Software, apps, and services include: fitness, exercise, and nutrition apps and online services that are used for tracking, analyzing, learning, and sharing activities and achievements (e.g., My Fitness Pal, Samsung Health, Google Fit, Runtastic, Pacer, Yodo Run); streaming and on-demand fitness workout/class services (e.g., Peloton, Mirror, Keep, Beachbody On Demand, Daily Burn, Daily Yoga); and fitness, sports, and recreation intermediary, booking, management, and marketing software, apps, and platforms (e.g., ClassPass, Mindbody, Active Network, Daxko, My PT Hub).

Equipment and supplies: This category includes a wide variety of equipment and supplies used to engage in fitness, sports, and active recreation, including: sporting goods (e.g., balls, rackets, bats, and clubs; bicycles; climbing equipment; ice skates; etc.); protective gear (e.g., helmets, padding, gloves, etc.); as well as fitness/exercise/training equipment and supplies (e.g., treadmills, stationary bikes, other gym equipment, free weights, resistance bands, blocks, mats, etc.). This measurement captures the entire market size for these kinds of equipment and supplies, whether they are sold direct to consumers or to gyms, health clubs, sporting clubs, etc.

Apparel and footwear: This category captures the clothing and footwear used for fitness, sports, and active recreation, from ski pants to yoga leggings, and from running shoes to hiking boots. Since dressing has become more casual over the past few decades, and fitness has become both a daily activity and an aspirational lifestyle in many places, it is increasingly common for people to wear athletic/sports-inspired clothing and athletic shoes as everyday casualwear (i.e., "athleisure"). Therefore, it would be impossible to separate what consumers purchase and wear specifically and exclusively for physical activity, when those same pieces of clothing and shoes are also worn outside of the gym or when people are not exercising.

What This Study DOES NOT Measure

Business Revenues. Due to the nature of physical activities and the rapid expansion of business models and options in this economic landscape, GWI has specifically chosen to estimate market size by measuring consumer spending rather than counting businesses and business revenues. We believe this approach provides a much more accurate estimate of consumer interest and participation as well market size and potential. The proliferation of options and venues for engaging in fitness and exercise activities means that a business-based measurement is no longer a meaningful gauge of how many people are participating in and spending on these activities. For example, people practice yoga in a variety of ways and places (at home, via streaming apps, at gyms, at YMCAs, and at dedicated yoga studios), so counting yoga studios and measuring their revenues would not provide an accurate assessment of the market for yoga. Likewise, many recreational physical activities – such as trail running, walking for exercise, or rock climbing – do not require a service provider or monetary expenditures in order to participate, and so a business-based measurement would also miss this portion of the physical activity market.

Sufficiency/Insufficiency of Physical Activity. While this study measures *participation* in recreational physical activities (i.e., do consumers do these activities with some regularity and do they spend money to participate), it does not measure the intensity of physical activities or whether they are sufficient to meet WHO physical activity guidelines. In fact, the minimum threshold used to define "participation" in this study (at least once a month) is certainly not sufficient to meet WHO guidelines or stay healthy. Various questionnaires and methodologies have been developed by researchers and public health experts to develop regional and global estimates of insufficient physical activity across all domains (recreational, occupational, domestic, transportation), such as the WHO STEPwise approach to surveillance (STEPS).[22] Those kinds of measurements are outside the scope of this study.

GWI's definition and measurement of the physical activity market also *excludes* the following:

- **Participation in physical activities associated with domestic chores (e.g., cleaning, cooking, gardening, taking care of children), transportation (e.g., walking or cycling as a means of transit), and work (e.g., physical activity done as part of a job).** As noted previously, these movements can amount to significant physical activity and are important to maintaining good health, but they are incidental to other parts of daily life and therefore lack the intentional, discretionary element that this study seeks in understanding consumer initiative and consumer choice. Also, these activities do not involve significant direct consumer spending in order to participate in them.
- **Public sector expenditures on fitness, recreation, and sports facilities and infrastructure.** As noted previously, public expenditures are significant in this sector, but it is not possible to estimate them because they occur at multiple levels of government (local, regional, national) and across multiple agencies and budgetary items (transportation

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[22] See: 1) WHO, STEPwise approach to Surveillance (STEPS), http://www.who.int/ncds/surveillance/steps/en/. 2) Riley, L., et al (2016, Jan.). The World Health Organization STEPwise Approach to Noncommunicable Disease Risk-Factor Surveillance: Methods, Challenges, and Opportunities. *American Journal of Public Health* 106(1), 74-78. https://doi.org/10.2105/AJPH.2015.302962.

and infrastructure, parks and recreation, sports, etc.) – no data are available for GWI to make this kind of estimate. In addition, the focus for this and other GWI research is on private spending, which is the best gauge for the rising consumer interest in wellness activities and services.

- **Professional sports and dance.** While this study does include participation in and spending on sports and dance activities from the recreational perspective – optional/intentional participation for enjoyment and exercise – we exclude professional sports and dance. For professionals, these activities become "occupational" rather than "recreational" and are therefore outside the scope of this study. Intensive pre-professional training in sports and dance is also excluded, although for children it can be challenging to draw a line between recreational versus pre-professional training.

- **Spectator sports and dance.** Since this study focuses on *participation* in activities that help people meet WHO physical activity guidelines and stay healthy, we exclude expenditures on viewing sports competitions or dance performances, as well as the extensive media, sponsorships, and other expenditures that are associated with spectator sports.

- **Meditation.** Meditation occupies an important place along a continuum of mind-body health modalities. The fact that meditation is now offered by many comprehensive gyms and exercise studios shows that mind-body health has gained mainstream consumer acceptance. This study does not include meditation because it is focused on physical activity. Mindful movements that incorporate meditative aspects, such as yoga, tai chi, and qigong, are included; we have specifically chosen to use the terminology "mindful movement" to describe this segment of physical activities in order to emphasize the "movement" component and avoid confusion (since many people associate the term "mind-body" with meditation).

  Meditation is an important part of a growing worldwide mental wellness space. Recognizing the benefits of meditation and other mindfulness practices in enhancing holistic health, the rapidly expanding entrepreneurial and business opportunities, and potential impacts for improving public health, the Global Wellness Institute will study mental wellness as the latest emerging wellness industry sector in an upcoming research study.

Research Scope and Methodology

The definitions, conceptual framework, and estimation models for the global economy of physical activity are developed by the authors under the auspices of the Global Wellness Institute (GWI). All data presented in this report are for the year 2018. The analysis and figures are based on extensive primary and secondary research conducted from January 2018 to August 2019, including literature reviews, qualitative and quantitative research, and expert interviews.

Country-level data on physical activity participation rates and expenditures are developed by the authors using our proprietary databases and economic models, cross-referenced with in-house data and research conducted by GWI and the authors for other key wellness industries (e.g., wellness real estate, wellness tourism, workplace wellness, etc.). Key public and private sources consulted include: World Bank, International Monetary Fund, World Health Organization, United Nations, Eurostat, Euromonitor International, Statista, government ministries and statistical agencies, and a wide variety of country-specific and industry-specific organizations, databases, publications, and media sources. Specific resources used to develop different types of data presented in this report are listed below:

- ***For physical activity participation rates, motivations, and barriers:*** Sports/recreation/physical activity population surveys conducted at the country level by government ministries, public statistical agencies, and nonprofit/academic research institutes (over 330 studies across 94 countries, in 17 languages); regional sports/recreation/physical activity data gathered by the European Union/Eurostat (in 28 EU member countries); WHO STEPwise Approach to Surveillance (STEPS) country reports (conducted in 113 countries); International Health, Racquet, & Sportsclub Association (IHRSA) global and regional reports (covering 65 countries); activity-specific participation studies and data from a variety of research institutes, journal articles, private organizations, media, websites, etc. (e.g., yoga studies conducted by *Yoga Journal* or the German Professional Association of Yoga Teachers/BDY).

- ***For physical activity expenditures:*** Spending data were gathered from the same sources listed above, as well as consumer expenditures data from Euromonitor International and from national consumer expenditure/household budget surveys conducted on a regular basis by governmental statistical agencies in 67 countries around the world.

- ***For physical activity enabling sectors (technology, equipment, apparel):*** GWI relied primarily on data from Euromonitor International, Statista, and Crunchbase for these segments, supplemented by numerous industry-specific organizations, publications, websites, and media sources, and GWI's own original research for some technology segments.

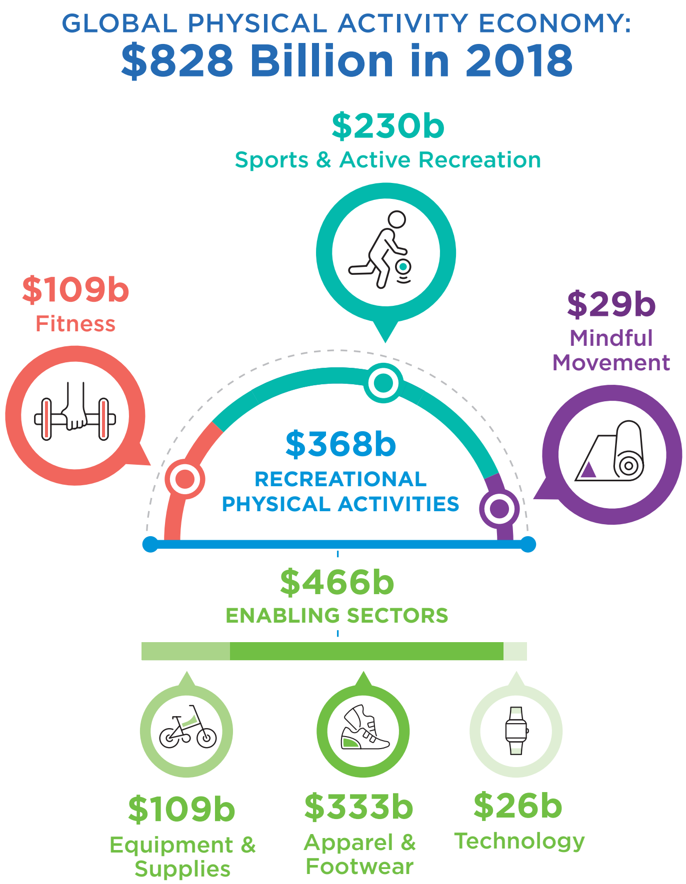
GWI's estimates generally do not directly mirror data found in any of the sources listed above, because we have made adjustments to ensure numbers fit our definitions and methodology, and we have used our own estimation models to fill in data for countries not covered by these sources.

III. THE GLOBAL PHYSICAL ACTIVITY ECONOMY

Physical activity is an $828 billion global market.

Physical activity is a massive global market and a major component of the global wellness economy. The Global Wellness Institute (GWI) estimates that physical activity generated $828.2 billion in economic activity in 2018. Among the ten industry sectors that GWI tracks as part of the global wellness economy, physical activity ranks second in size (after *personal care*, *beauty*, & *anti-aging*, see box below). Physical activity accounted for just under 1% of global GDP in 2018.[23]

Within the $828.2 billion physical activity market, 44% or $367.7 billion represents direct consumer expenditures on participating in a variety of recreational physical activities, including fitness, sports and active recreation, and mindful movement. The remaining 56% or $465.9 billion represents a variety of enabling and supporting sectors, including clothing and footwear; fitness equipment, sporting goods, and related supplies; and fitness- and exercise-related technologies.



Note: Numbers do not sum to total due to overlap in segments.
Source: Global Wellness Institute

[23] Global GDP was estimated by the IMF at $84.7 trillion in 2018. See: IMF, *World Economic Outlook Database*, April 2019 edition, https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx.

From *Fitness & Mind-Body* to *Physical Activity*: GWI's New Definition for this Important Wellness Sector

The Global Wellness Institute's (GWI's) most recent *Global Wellness Economy Monitor* estimated the global wellness economy at $4.2 trillion in 2017.[24] *Fitness & Mind-Body* was one of the ten sectors that comprise the wellness economy and was estimated at $595 billion in 2017. In this report, GWI is expanding the definition of this important sector to incorporate a wider range of physical activities – it now includes not only fitness/gym and mind-body ("mindful movement") activities, but also a variety of other sports and active recreation activities that people engage in as part of being physically active. As such, we have renamed the sector *Physical Activity* and now measure it at $828 billion in 2018. The difference between the two figures is due to the expanded definition; they should not be compared as a time series because they are measuring different things. **If we incorporate the expanded *Physical Activity* measurement into the wellness economy, wellness becomes a $4.5 trillion market.** Future editions of GWI's *Global Wellness Economy Monitor* will replace *Fitness & Mind-Body* with the renamed and expanded *Physical Activity* sector.

GLOBAL WELLNESS ECONOMY: $4.5 Trillion Market

Note: Numbers do not add due to overlap in segments. Dark colored bubbles are the sectors for which GWI conducts in-depth, country-level primary research. Light colored bubbles are sectors for which GWI aggregates global estimates only, drawing from secondary sources.
Source: Global Wellness Institute

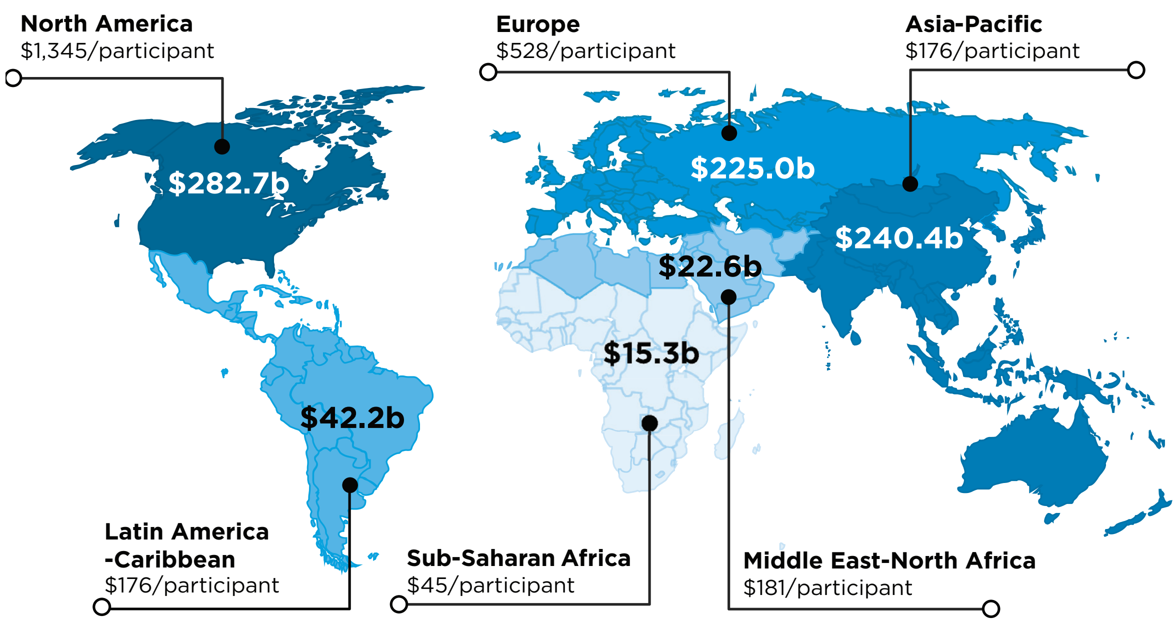
[24] Global Wellness Institute (2018). *Global Wellness Economy Monitor.* https://globalwellnessinstitute.org/industry-research/.

North America is the largest physical activity market (at $282.7 billion), followed closely by Asia-Pacific and Europe. In fact, 90% of the world's spending on physical activity takes place in these three regions.

On a global basis, physical activity spending averages about $306 per participant per year, divided into $136 spent on participating in activities and $172 spent on associated apparel, footwear, equipment, sporting goods, and technology devices and services. Per participant expenditures are very high in North America ($1,345) and Europe ($528) while significantly lower in the rest of the world. This level of expenditure per person may at first seem low in relation to the typical conception of the "fitness" market – for example, the cost of a monthly gym membership or a weekly yoga class. However, it is important to keep in mind that GWI's measurement captures a much broader slice of physical activities and types of participation. A very, very tiny portion of the market is spending $200 per month on an Equinox gym membership, $30 for a SoulCycle class, $2,000 for a Peloton bike, $150 for Nike running shoes, and $100 for Lululemon leggings. A large portion of people around the world participating in recreational physical activities are doing things that require much less or no spending at all – for example, playing soccer in a local league, swimming laps in a public/community pool, going for a run outside, or doing tai chi in a park.

Physical Activity Market by Region, 2018

Expenditures on participation in recreational physical activities and supporting products and services (equipment & supplies, apparel & footwear, technology)



Global: $828.2b Expenditures ($306/participant) • 35% Participation Rate

Note: Numbers may not sum to total due to rounding.
Source: Global Wellness Institute

The United States and China are by far the world's largest country markets for physical activity, together accounting for 45% of global expenditures. The top twenty markets account for 86% of all spending – these are primarily concentrated in North America, Asia-Pacific, and Europe, although Brazil, Mexico, and South Africa also rank among the largest markets. It is interesting to note that among many (but not all) of the largest markets, spending on enabling sectors is larger than spending on recreational physical activity participation – especially in the United States, France, Brazil, India, and South Africa. However, in some countries the opposite is the case (e.g., South Korea, Australia, Netherlands). These differentials are largely driven by how much people spend on apparel and shoes across these countries.

The rate of participation in recreational physical activities varies widely among the top markets. Australia and Taiwan boast the highest participation rates in the world, at 84%, while India is among the lowest, at 15%.

Top Twenty Physical Activity Markets by Market Size, 2018

	Recreational Physical Activities		Enabling Sectors (US$ billions)	TOTAL Physical Activity Market (US$ billions)	Rank in 2018
	Participation Rate*	Market Size* (US$ billions)			
United States	58.8%	$105.0	$162.2	**$264.6**	1
China	48.6%	$53.6	$56.9	**$109.3**	2
Japan	69.6%	$20.8	$23.2	**$43.9**	3
United Kingdom	56.8%	$20.5	$20.6	**$40.9**	4
Germany	56.2%	$20.3	$19.3	**$39.4**	5
France	51.7%	$11.0	$15.4	**$26.3**	6
South Korea	73.7%	$14.2	$9.3	**$23.5**	7
Italy	35.9%	$8.9	$10.5	**$19.3**	8
Canada	48.4%	$9.3	$9.0	**$18.1**	9
Australia	84.1%	$11.4	$5.4	**$16.7**	10
Spain	49.5%	$7.9	$7.8	**$15.6**	11
Brazil	37.7%	$5.9	$8.3	**$14.1**	12
India	15.0%	$3.5	$10.0	**$13.4**	13
Russia	57.8%	$4.9	$7.6	**$12.4**	14
Mexico	44.0%	$4.2	$6.9	**$11.1**	15
Netherlands	65.2%	$6.0	$3.3	**$9.3**	16
Switzerland	71.8%	$5.9	$3.3	**$9.2**	17
South Africa	31.3%	$2.1	$6.1	**$8.2**	18
Taiwan	84.0%	$3.7	$4.1	**$7.7**	19
Sweden	78.0%	$2.8	$3.2	**$5.9**	20

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entryfees, trainers, and related services and methods of participation.*

Note: Figures may not sum to total due to overlap between segments and rounding.

Source: Global Wellness Institute estimates, based upon data from Euromonitor International, Statista, and many other sources

Recreational physical activities, at $368 billion, are the core of the global physical activity market.

Worldwide, GWI estimates that 35% of the population participates in recreational physical activities, spending $367.7 billion out-of-pocket on doing these activities in 2018. Sports and active recreation is by far the largest category of expenditures ($230.1 billion), followed by fitness ($108.6 billion). Mindful movement is the smallest segment of the market, at $29.1 billion. As a region, Asia-Pacific has the largest expenditures due to its high level of spending in the sports and active recreation category. However, on average Asian consumers spend only $85 per participant per year on doing physical activities, while the per participant spending rate is significantly higher in North America ($544 per year) and in Europe ($256 per year).

Recreational Physical Activities by Region, 2018

	Recreational Physical Activities Market (US$ billions)				
	Sports & Active Recreation	Fitness	Mindful Movement	TOTAL Market Size* (US$ billions) *(Per Participant)*	TOTAL Participation Rate*
Asia-Pacific	$83.0	$22.7	$10.9	**$116.6** *($85)*	**33.2%**
North America	$62.4	$40.5	$11.4	**$114.3** *($544)*	**57.8%**
Europe	$69.2	$33.8	$6.3	**$109.2** *($256)*	**46.6%**
Latin America & Caribbean	$9.9	$5.9	$0.3	**$16.0** *($67)*	**36.7%**
Middle East & North Africa	$4.2	$3.3	$0.1	**$7.6** *($61)*	**25.7%**
Sub-Saharan Africa	$1.4	$2.5	$0.03	**$3.9** *($12)*	**31.0%**
Total Recreational Physical Activities Market	**$230.1**	**$108.6**	**$29.1**	**$367.7** ***($136)***	**35.5%**

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Note: Figures may not sum to total due to overlap between segments and rounding.

Source: Global Wellness Institute

A high level of *spending* on recreational physical activities does not always equate to a higher level of *participation* in these activities (and vice versa). For example, as a region Latin America-Caribbean has a higher participation rate than Asia-Pacific, although its per participant spending is quite a bit lower. Similarly, Sub-Saharan Africa has a participation rate that is just slightly lower than Asia-Pacific, although the per person spending in Africa is only $12 (as compared to $85 in Asia).

In wealthier countries, where people have more disposable income, there is a sophisticated and well-developed private market for recreational physical activities, with a seemingly endless range of businesses, facilities, and offerings where consumers can spend their money (e.g., gyms, yoga studios, sports clubs, dance studios, swimming pools, and so on). In lower income countries, fitness and recreation businesses, facilities, and infrastructure are less developed, and so out-of-pocket spending is lower. However, people still participate actively in these activities in a variety of public and free venues (e.g., in public parks and plazas, in free sporting facilities such as neighborhood basketball courts or ball fields, in vacant lots, in the streets, and at home). In Latin America, for example, national surveys conducted in Brazil, Mexico, Argentina, and Chile all indicate that two-thirds to three-quarters of people who participate in sports and recreational physical activities do these activities in public or free facilities that require no payment for access.[25]

Top Twenty Markets for Recreational Physical Activities by Market Size, 2018

	Recreational Physical Activities Participation Rate*	Recreational Physical Activities Market Size* (US$ billions)	Rank in 2018
United States	58.8%	$105.0	1
China	48.6%	$53.6	2
Japan	69.6%	$20.8	3
United Kingdom	56.8%	$20.5	4
Germany	56.2%	$20.3	5
South Korea	73.7%	$14.2	6
Australia	84.1%	$11.4	7
France	51.7%	$11.0	8
Canada	48.4%	$9.3	9
Italy	35.9%	$8.9	10
Spain	49.5%	$7.9	11
Netherlands	65.2%	$6.0	12
Brazil	37.7%	$5.9	13
Switzerland	71.8%	$5.9	14
Russia	57.8%	$4.9	15
Mexico	44.0%	$4.2	16
Taiwan	84.0%	$3.7	17
India	15.0%	$3.5	18
Sweden	78.0%	$2.8	19
Poland	47.2%	$2.4	20

**Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation. Source: Global Wellness Institute*

[25] See: 1) Instituto Brasileiro de Geografia e Estatística (2017). *Práticas de Esporte e Atividade Física 2015*. Rio de Janeiro: IBGE. https://biblioteca.ibge.gov.br/visualizacao/livros/liv100364.pdf. 2) Instituto Nacional de Estadística y Geografía (2018). *Módulo de Práctica Deportiva y Ejercicio Físico (MOPRADEF)*. Mexico City: INEGI. https://www.inegi.org.mx/contenidos/programas/mopradef/doc/resultados_mopradef_nov_2018.pdf. 3) Pasquale, H. (2013). *Encuesta Nacional de Actividad Física y Deportiva (ENAFyD) 2009-2012*. https://docplayer.es/12864162-Encuesta-nacional-de-actividad-fisica-y-deportiva-enafyd-profesor-hugo-pasquale.html. 4) Alcalá (2016). *Encuesta Nacional de Hábitos de Actividad Física y Deportes en la Población de 18 años y más: Informe Final*. http://www.mindep.cl/wp-content/uploads/2016/07/INFORME-FINAL-ENCUESTA-DEPORTES-COMPLETO_.pdf.

Global Rankings for Recreational Physical Activity by Participation, 2018

	Participation Rate*	Rank		Participation Rate*	Rank
Australia	84.1%	**1**	Uruguay	45.5%	**38**
Taiwan	84.0%	**2**	Czech Republic	45.3%	**39**
Norway	83.9%	**3**	Lithuania	44.4%	**40**
New Zealand	83.8%	**4**	Costa Rica	44.3%	**41**
Iceland	79.2%	**5**	Mexico	44.0%	**42**
Sweden	78.0%	**6**	Panama	43.6%	**43**
Finland	77.5%	**7**	Trinidad & Tobago	42.5%	**44**
Mongolia	75.0%	**8**	Kuwait	41.8%	**45**
South Korea	73.7%	**9**	Hungary	41.3%	**46**
Denmark	73.5%	**10**	Malaysia	41.1%	**47**
Switzerland	71.8%	**11**	Peru	40.7%	**48**
Japan	69.6%	**12**	Slovakia	40.5%	**49**
Luxembourg	66.0%	**13**	Laos	39.8%	**50**
Netherlands	65.2%	**14**	Malawi	39.6%	**51**
Singapore	64.9%	**15**	Argentina	39.5%	**52**
Ireland	64.1%	**16**	Cuba	39.3%	**53**
Israel	61.5%	**17**	Turkey	39.2%	**54**
Slovenia	60.2%	**18**	Botswana	39.1%	**55**
Belgium	59.1%	**19**	Ecuador	39.1%	**56**
United States	58.8%	**20**	Bahrain	38.5%	**57**
Hong Kong	58.2%	**21**	Qatar	38.5%	**58**
Russia	57.8%	**22**	Brazil	37.7%	**59**
United Kingdom	56.8%	**23**	Latvia	37.3%	**60**
Germany	56.2%	**24**	Angola	36.0%	**61**
France	51.7%	**25**	Italy	35.9%	**62**
Macau	51.1%	**26**	Togo	35.9%	**63**
Austria	50.4%	**27**	Tanzania	35.9%	**64**
Cyprus	49.9%	**28**	Chile	35.7%	**65**
Spain	49.5%	**29**	Vietnam	35.7%	**66**
China	48.6%	**30**	Liberia	34.7%	**67**
Canada	48.4%	**31**	Oman	34.7%	**68**
Lebanon	48.3%	**32**	Portugal	34.6%	**69**
Eswatini	48.1%	**33**	Zambia	34.6%	**70**
Estonia	47.6%	**34**	Uganda	34.3%	**71**
Poland	47.2%	**35**	Indonesia	34.2%	**72**
Zimbabwe	46.7%	**36**	Croatia	33.5%	**73**
Papua New Guinea	46.4%	**37**	Cote d'Ivoire	33.3%	**74**

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*
Source: Global Wellness Institute

	Participation Rate*	Rank
Colombia	33.2%	**75**
Philippines	32.7%	**76**
Tajikistan	32.4%	**77**
Nigeria	32.2%	**78**
Guatemala	31.9%	**79**
Nicaragua	31.8%	**80**
Equatorial Guinea	31.8%	**81**
Namibia	31.6%	**82**
El Salvador	31.5%	**83**
Gabon	31.5%	**84**
Lesotho	31.4%	**85**
Honduras	31.3%	**86**
South Africa	31.3%	**87**
Paraguay	31.3%	**88**
UAE	31.2%	**89**
Greece	31.1%	**90**
Morocco	30.9%	**91**
Kyrgyzstan	30.9%	**92**
Bolivia	30.8%	**93**
Kenya	30.6%	**94**
Romania	30.6%	**95**
Turkmenistan	30.6%	**96**
Uzbekistan	30.0%	**97**
Ghana	29.7%	**98**
Chad	29.4%	**99**
Kazakhstan	29.1%	**100**
Guinea	29.1%	**101**
Gambia	28.7%	**102**
Egypt	28.6%	**103**
Dominican Rep.	28.6%	**104**
Libya	28.5%	**105**
Burundi	28.3%	**106**
Azerbaijan	28.2%	**107**
Jamaica	27.9%	**108**
Benin	27.9%	**109**
Cameroon	27.9%	**110**
Senegal	27.9%	**110**
Thailand	27.8%	**112**

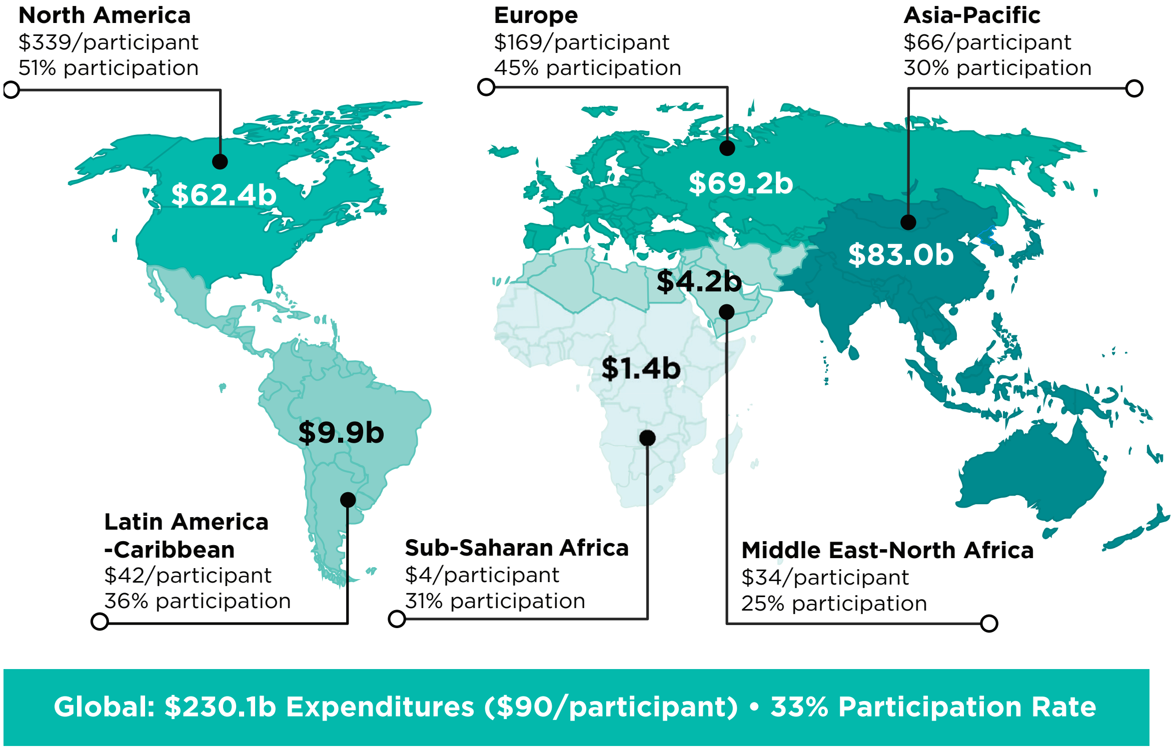
	Participation Rate*	Rank
Congo, Rep.	27.6%	**113**
Madagascar	27.6%	**114**
Guinea-Bissau	27.4%	**115**
Puerto Rico	27.3%	**116**
Tunisia	27.1%	**117**
Armenia	27.0%	**118**
Albania	26.9%	**119**
Algeria	26.9%	**120**
Georgia	26.7%	**121**
Timor-Leste	26.3%	**122**
Macedonia	26.2%	**123**
Serbia	26.1%	**124**
Saudi Arabia	26.1%	**125**
Belarus	25.7%	**126**
Iran	25.5%	**127**
Bosnia-Herzegov.	25.5%	**128**
Burkina Faso	25.4%	**129**
Ukraine	25.3%	**130**
Bangladesh	25.2%	**131**
Ethiopia	25.2%	**132**
Bulgaria	25.0%	**133**
Mali	24.4%	**134**
Jordan	24.3%	**135**
Rwanda	24.2%	**136**
Mauritius	24.1%	**137**
Niger	23.6%	**138**
Eritrea	23.1%	**139**
Mauritania	22.0%	**140**
Cambodia	21.4%	**141**
Myanmar	21.3%	**142**
Moldova	20.3%	**143**
Nepal	20.0%	**144**
Sri Lanka	19.2%	**145**
Sierra Leone	18.9%	**146**
India	15.0%	**147**
Haiti	14.0%	**148**
Pakistan	13.2%	**149**
Mozambique	13.1%	**150**

** Participation rate measures the share of the total population who participate in one or more of the three physical activity categories on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*
Source: Global Wellness Institute

Sports & Active Recreation

Sports and active recreation is by far the most popular way for people to engage in recreational physical activities, with an estimated 33.3% of the world's population participating on a regular basis. Consumers spent about $90 per participant annually on doing sports and active recreation, or $230.1 billion in 2018 (accounting for two-thirds of all recreational physical activity spending).

Sports & Active Recreation Market by Region, 2018



Note: Numbers may not sum to total due to rounding.
Source: Global Wellness Institute

This is the largest category because sports and recreation activities are the most diverse, accessible, affordable, and prevalent across every region and population group, rich or poor, young or old, urban or rural, developed or under-developed. In nearly every country around the world, walking for exercise/recreation is by far the most popular activity (one exception is in some Latin American countries, where playing soccer rates the same or higher than walking). Europe has the highest average participation rates for outdoor recreation activities such as walking, running, cycling, and swimming, while these same activities (as well as dance) are least popular in the Middle East. Latin America and Middle East have the highest average participation rates in soccer.

It is challenging to analyze the popularity of playing various team sports because the types of sports played (and included in survey questions) vary so widely from country to country; soccer is the most "universal" sport and appears in nearly every country's sports participation survey. Almost across the board, participation rates in sports and active recreation activities are lower for women than for men. The exceptions are for a few activities such as dance, and in some countries (such as the Nordic countries), the gap between women and men tends to be less wide.

Sports and active recreation is also the predominant way in which children and youth participate in physical activities. These kinds of activities are critical for introducing children to a lifelong habit of staying active. In fact, out of the 2.5 billion people around the world participating in sports and active recreation, an estimated 1.1 billion are children (under age 18). The share of children participating in sports and active recreation (47%) is higher than the participation rate for adults (27%), because participation tends to taper off as people enter adulthood and face the responsibilities and time constraints of jobs, families, housework, etc. Note that these participation rates measure people doing at least one activity on a regular basis, but many participants in sports and active recreation often do more than one type of activity – so, an adult participant may swim laps and play on a volleyball team, while a child may play soccer and take karate or dance lessons.

The top markets for sports and active recreation spending are primarily wealthier countries that have relatively high participation rates combined with high average spending levels for participants – for example, United States, United Kingdom, Japan, Germany, South Korea, etc. A few of the top markets (notably, Italy, Canada, Spain) have surprisingly lower participation rates but still rank near the top because average spending levels are still very high for those who do participate.

Popular Sports & Active Recreation Activities Among Adults

Popular Sports & Active Recreation Activities	Average Share of Participants Doing Each Activity*
Walking for exercise	40-50%
Running & jogging	15-20%
Cycling	8-12%
Swimming	8-12%
Soccer	12-20%
Martial arts	4-6%
Dance	3-5%

** Categories are not exclusive, so many people will participate in more than one activity in this list (as well as many other types of sports and recreation activities not listed here). Note that this is not intended to be a ranked list, but rather a sample of popular activities across countries.*

Source: Global Wellness Institute estimates, based upon sports and recreation participation surveys across 52 countries

Several less wealthy countries also rank among the top twenty – notably China, Brazil, Mexico, and India – because they have large populations and, therefore, a large number of participants and overall expenditures, despite lower average spending rates. With incremental increases in participation rates and improvements in facilities and infrastructure (i.e., more opportunities for people to spend money on sports and recreation activities), these large emerging markets would rise rapidly in the rankings.

Taiwan ranks highest in the world for its sports and active recreation participation rate (80.7%). A number of other small, wealthy, highly-developed countries – notably, Norway, New Zealand, Iceland, Finland, Denmark, Singapore – also rank at the top for participation rates (60%-79%) and have very high spending levels, but they are simply too small population-wise to reach the top twenty.

Top Twenty Sports & Active Recreation Markets by Market Size, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ billions)	Rank in 2018
United States	51.5%	$57.6	**1**
China	43.5%	$42.3	**2**
United Kingdom	54.1%	$13.5	**3**
Japan	66.5%	$13.3	**4**
Germany	52.6%	$12.9	**5**
South Korea	70.6%	$10.9	**6**
France	49.3%	$7.5	**7**
Australia	77.4%	$6.7	**8**
Italy	33.6%	$5.7	**9**
Canada	41.9%	$4.8	**10**
Spain	45.8%	$4.6	**11**
Switzerland	68.7%	$4.6	**12**
Netherlands	60.6%	$4.0	**13**
Brazil	36.8%	$3.7	**14**
Taiwan	80.7%	$2.8	**15**
Russia	57.2%	$2.6	**16**
Mexico	43.5%	$2.3	**17**
India	12.9%	$1.8	**18**
Sweden	72.8%	$1.7	**19**
Ireland	62.3%	$1.4	**20**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Global Rankings for Sports & Active Recreation by Participation, 2018

	Participation Rate*	Rank
Taiwan	80.7%	**1**
Norway	79.2%	**2**
New Zealand	79.1%	**3**
Australia	77.4%	**4**
Iceland	74.6%	**5**
Mongolia	74.5%	**6**
Finland	73.4%	**7**
Sweden	72.8%	**8**
South Korea	70.6%	**9**
Switzerland	68.7%	**10**
Denmark	67.9%	**11**
Japan	66.5%	**12**
Luxembourg	63.2%	**13**
Ireland	62.3%	**14**
Netherlands	60.6%	**15**
Singapore	60.2%	**16**
Israel	59.3%	**17**
Slovenia	58.8%	**18**
Russia	57.2%	**19**
Belgium	56.9%	**20**
United Kingdom	54.1%	**21**
Hong Kong	54.0%	**22**
Germany	52.6%	**23**
United States	51.5%	**24**
France	49.3%	**25**
Eswatini	48.0%	**26**
Cyprus	47.7%	**27**
Austria	47.5%	**28**
Macau	47.2%	**29**
Lebanon	47.1%	**30**
Zimbabwe	46.6%	**31**
Papua New Guinea	46.3%	**32**
Estonia	46.2%	**33**
Poland	46.0%	**34**
Spain	45.8%	**35**
Uruguay	44.9%	**36**
Costa Rica	43.9%	**37**

	Participation Rate*	Rank
China	43.5%	**38**
Czech Republic	43.5%	**39**
Mexico	43.5%	**40**
Panama	43.3%	**41**
Lithuania	43.1%	**42**
Trinidad & Tobago	42.1%	**43**
Canada	41.9%	**44**
Malaysia	40.3%	**45**
Peru	40.2%	**46**
Hungary	40.0%	**47**
Malawi	39.6%	**48**
Laos	39.4%	**49**
Kuwait	39.2%	**50**
Slovakia	39.2%	**51**
Cuba	39.0%	**52**
Botswana	38.7%	**53**
Turkey	38.7%	**54**
Ecuador	38.5%	**55**
Argentina	38.4%	**56**
Qatar	37.2%	**57**
Brazil	36.8%	**58**
Bahrain	36.5%	**59**
Angola	35.9%	**60**
Latvia	35.9%	**61**
Togo	35.8%	**62**
Tanzania	35.8%	**63**
Vietnam	35.1%	**64**
Liberia	34.7%	**65**
Zambia	34.5%	**66**
Chile	34.5%	**67**
Uganda	34.2%	**68**
Oman	34.0%	**69**
Indonesia	33.7%	**70**
Italy	33.6%	**71**
Cote d'Ivoire	33.2%	**72**
Portugal	32.7%	**73**
Colombia	32.5%	**74**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*

Source: Global Wellness Institute

	Participation Rate*	Rank
Philippines	32.2%	**75**
Croatia	32.2%	**76**
Nigeria	32.1%	**77**
Tajikistan	31.9%	**78**
Guatemala	31.8%	**79**
Nicaragua	31.8%	**80**
El Salvador	31.4%	**81**
Equatorial Guinea	31.4%	**82**
Lesotho	31.3%	**83**
Honduras	31.3%	**84**
Namibia	31.2%	**85**
Gabon	31.1%	**86**
Paraguay	31.0%	**87**
South Africa	30.7%	**88**
Morocco	30.6%	**89**
Bolivia	30.6%	**90**
Kenya	30.5%	**91**
Kyrgyzstan	30.4%	**92**
Turkmenistan	30.1%	**93**
Romania	30.0%	**94**
Ghana	29.6%	**95**
Uzbekistan	29.5%	**96**
Chad	29.3%	**97**
Greece	29.3%	**98**
UAE	29.1%	**99**
Guinea	29.1%	**100**
Gambia	28.7%	**101**
Kazakhstan	28.6%	**102**
Dominican Rep.	28.3%	**103**
Burundi	28.3%	**104**
Libya	28.3%	**105**
Egypt	28.3%	**106**
Benin	27.9%	**107**
Cameroon	27.8%	**108**
Senegal	27.8%	**109**
Azerbaijan	27.7%	**110**
Jamaica	27.6%	**110**
Madagascar	27.5%	**112**

	Participation Rate*	Rank
Congo, Rep.	27.5%	**113**
Guinea-Bissau	27.4%	**114**
Thailand	27.1%	**115**
Puerto Rico	26.9%	**116**
Tunisia	26.7%	**117**
Algeria	26.7%	**118**
Armenia	26.5%	**119**
Albania	26.4%	**120**
Georgia	26.1%	**121**
Timor-Leste	26.1%	**122**
Macedonia	25.6%	**123**
Burkina Faso	25.4%	**124**
Iran	25.3%	**125**
Serbia	25.3%	**126**
Belarus	25.1%	**127**
Ethiopia	25.1%	**128**
Saudi Arabia	24.9%	**129**
Bangladesh	24.9%	**130**
Ukraine	24.7%	**131**
Bosnia-Herzegov.	24.6%	**132**
Mali	24.3%	**133**
Bulgaria	24.3%	**134**
Rwanda	24.2%	**135**
Jordan	24.0%	**136**
Mauritius	23.6%	**137**
Niger	23.6%	**138**
Eritrea	23.0%	**139**
Mauritania	21.9%	**140**
Cambodia	21.0%	**141**
Myanmar	21.0%	**142**
Moldova	19.8%	**143**
Nepal	19.7%	**144**
Sierra Leone	18.8%	**145**
Sri Lanka	18.8%	**146**
Haiti	14.0%	**147**
Mozambique	13.0%	**148**
Pakistan	13.0%	**149**
India	12.9%	**150**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*

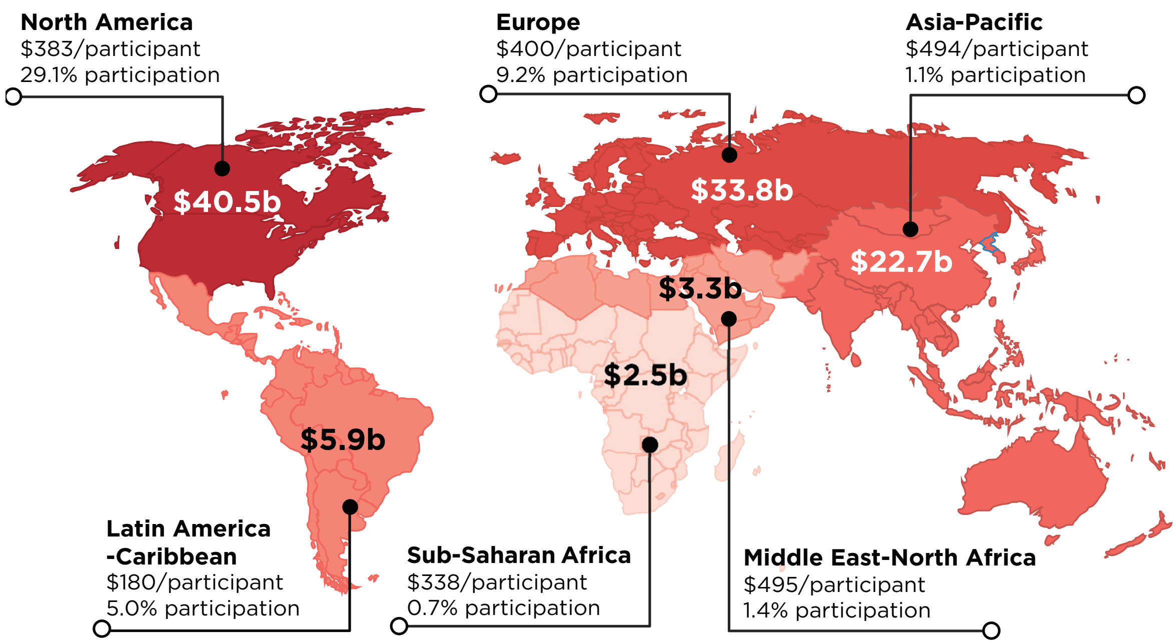
Source: Global Wellness Institute

Fitness

GWI estimates that 3.7% of the world's population are members of gyms, health clubs, and fitness studios and/or participate in structured or independent fitness activities or classes on a regular basis. Participants spent $108.6 billion, or an average of $384 per participant, on doing these activities in 2018. GWI's measurement of fitness participation is much broader than the number of paying members at commercial gyms and health clubs, who only represent a portion of the market. We include membership and participation in a variety of other types of gyms and fitness classes – in public, nonprofit, university, hotel, outdoor, home, and other settings, both free and paid – as elaborated below.

The fitness market is most developed in North America, with $40.5 billion in expenditures and a 29.1% participation rate in 2018. Europe ranks slightly below North America for its expenditures ($33.8 billion) but its participation rate is significantly lower, at 9.2%. Average annual spending per participant is highest in Asia-Pacific ($494) and Middle East-North Africa ($495). This is likely because the fitness market is generally less advanced across those regions, and the existing facilities tend to serve the higher end of the market. Budget/low-frills gym concepts are generally newer and less prevalent outside of major metropolises, and public gyms and subsidized/free fitness classes and programs are also less common (except in a few key countries, such as Australia, New Zealand, Singapore, Japan).

Fitness Market by Region, 2018



Global: $108.6b Expenditures ($384/participant) • 3.7% Participation Rate

Note: Numbers may not sum to total due to rounding.
Source: Global Wellness Institute

The average spending per participant in Latin America-Caribbean is relatively low ($180) as compared to other regions. This is because a number of countries across Latin America have instituted public programs to combat inactivity and obesity, including thousands of free outdoor gyms in parks, as well as large-scale city-/government-sponsored programs of free fitness classes in parks, plazas, and public venues (e.g., in Colombia, Mexico, Brazil, Cuba). Approximately 20% of the fitness participants in Latin America are served by these free/public programs and facilities, which raises the overall participation rate while lowering the average spending rate across the region.

Where People Participate in Fitness Activities, 2018

	# of Facilities or Locations	# of Members or Participants* (millions)	Market Size* ($ billions)
Commercial gyms, health clubs, & fitness studios	257,887	190.0	$83.1
Public, nonprofit, & medical gyms, fitness centers, & programs	26,203	33.8	$16.9
Free outdoor gyms & fitness clas-ses	21,344	8.4	$0
University fitness centers	14,464	13.7	$1.8
Hotel gyms with public access	3,413	2.3	$1.2
Independent/at-home fitness (partly overlaps with above categories)	n/a	103.2	n/a
*Streaming & on-demand fitness services***	*n/a*	*28.8*	*$5.5*

Consumers also access gyms and fitness facilities/classes in a number of other venues – for example, in country clubs, in sports clubs (mainly in Western European countries, such as Germany and Austria), in residential-based facilities (e.g., gyms in apartment and condominium buildings, or in neighborhoods with gyms run by homeowners' associations/HOAs), and in corporate/worksite fitness centers. GWI has not included figures for these categories because no data are available to make estimates. Regardless, it is likely that the participation in fitness activities is slightly higher than the market figures presented here.

** # of members/participants measures the total number of people who are paying members of these types of facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on fitness classes, memberships, entry fees, trainers, and related services and methods of participation. This figure is NOT the same as gym revenues, because it excludes the expenditures on retail, merchandise, food, or other goods/products that are also revenue streams for many gyms. It also does not include expenditures on home fitness equipment, which are measured in a separate category below.*

*** Estimates for streaming/on-demand fitness services shown here are specifically for "fitness" activities and exclude mindful movement activities (e.g., yoga apps).*

Source: Global Wellness Institute estimates

People do fitness activities in a wide range of venues. GWI estimates that about 190 million people are members of private/commercial gyms and fitness facilities, across nearly 258,000 locations in 211 countries. This is what most studies generally consider to be the extent of the "fitness market." However, there are many other ways to participate in fitness, and not all of them require monetary expenditures:

- An additional 33.8 million people utilize public, nonprofit, and public-private gyms and fitness facilities, across more than 26,000 locations, typically with low or subsidized membership fees. These include: 1) government-subsidized (but often privately run) gyms and leisure centers in the United Kingdom, Ireland, Spain, Australia, and New Zealand; 2) public and city-run gyms and community centers in Japan, United States, Canada, Singapore, and the Nordic countries; 3) nonprofit facilities such as YMCAs (which primarily offer fitness facilities in the United States, Canada, United Kingdom, Australia, New Zealand, and Japan but not in every location around the world); and 4) medical fitness centers (gyms integrated with health care providers, targeting populations with medical conditions, predominantly in the United States).
- GWI estimates that there are over 21,000 free outdoor gyms and venues offering government-sponsored/free fitness classes. Outdoor gyms (also known as "parques biosaludables" or "calisthenics parks") are most common across Latin America, Europe, and some parts of Asia (especially in Singapore and larger cities in China and India).
- Approximately 13.7 million people (mostly students and young adults) access gyms and fitness facilities on nearly 14,500 university campuses around the world.
- An estimated 3,400 hotels offer public memberships to their fitness centers, serving about 2.3 million members. These gyms are primarily in high-end urban hotels and especially in developing countries. In lower-income countries, hotel gyms are sometimes the front-runner or only fitness offering targeting wealthy elites and expats, before the entry of standalone commercial gyms.
- GWI estimates that about 103.2 million people work out independently or at home, using treadmills, stationary bikes, weights, other home-based fitness equipment, as well as books, videos, and other technologies. Note that a significant portion of this number overlaps with other categories above, because many gym members also do workouts at home. Among those doing at-home workouts, an estimated 28.8 million subscribe to on-demand and streaming fitness services (via online platforms and mobile apps).

Note that while GWI's estimates for the fitness segment primarily focus on *gym memberships* across different types of facilities, this is not necessarily the best way to assess *participation* in fitness activities (although it is the most common and feasible measurement given availability of data across countries). Paying for a gym membership does not necessarily mean that a person is actually going to the gym frequently or participating in classes. According to IHRSA's 2018 consumer study, over 12% of Americans with health club memberships use them less than once a month.[26] Another recent study in the United States found that 6.3% of Americans who have gym

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[26] IHRSA (2018). *2018 IHRSA Health Club Consumer Report*. https://www.ihrsa.org/publications/the-2018-ihrsa-health-club-consumer-report/.

memberships do not use them at all.[27] In fact, many gyms build their business models around a certain portion of members having low usage rates or not using the gym at all.[28]

The United States is the largest country market for fitness, in terms of both expenditures ($34.4 billion) and participation rate (26.3%). The rest of the top twenty includes many wealthier countries with well-developed gym and fitness markets (United Kingdom, Germany, Japan), as well as some large middle-income countries with emerging and rapidly expanding fitness markets (China, Brazil, Mexico). The countries with the world's highest fitness participation rates (>19%) include the United States, Canada, and Australia, as well as the Nordic countries (Sweden, Iceland, Norway, Denmark) and Netherlands.

Top Twenty Fitness Markets by Market Size, 2018

	Fitness Participation Rate*	**Fitness Market Size*** (US$ billions)	**Rank in 2018**
United States	29.3%	$37.0	**1**
United Kingdom	17.3%	$6.3	**2**
Germany	16.5%	$6.1	**3**
Japan	7.8%	$5.6	**4**
China	0.8%	$5.5	**5**
Australia	24.3%	$3.9	**6**
Canada	26.4%	$3.5	**7**
France	12.0%	$3.1	**8**
Spain	13.8%	$2.7	**9**
Italy	11.0%	$2.7	**10**
South Korea	9.2%	$2.6	**11**
Brazil	6.2%	$2.0	**12**
Mexico	4.3%	$1.8	**13**
South Africa	5.1%	$1.6	**14**
Netherlands	21.7%	$1.6	**15**
Poland	10.0%	$1.2	**16**
Switzerland	16.8%	$1.0	**17**
India	0.3%	$1.0	**18**
Turkey	3.3%	$1.0	**19**
Sweden	29.4%	$1.0	**20**

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

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[27] "Americans spending $1.8 billion on unused gym memberships annually." *Finder.com*. https://www.finder.com/unused-gym-memberships.

[28] See: 1) Swanson, A. (2016, Jan. 5). What your new gym doesn't want you to know. *Washington Post.* https://www.washingtonpost.com/news/wonk/wp/2016/01/05/what-your-new-gym-doesnt-want-you-to-know/. 2) Smith, S.V. (2014, Dec. 30). Why we sign up for gym memberships but never go to the gym. *Planet Money.* https://www.npr.org/sections/money/2014/12/30/373996649/why-we-sign-up-for-gym-memberships-but-don-t-go-to-the-gym. 3) DellaVigna, S. and Malmendier, U. (2006). Paying Not to Go to the Gym. *American Economic Review* 96(3), 694-719. https://doi.org/10.1257/aer.96.3.694.

Global Rankings for Fitness by Participation, 2018

	Participation Rate*	Rank		Participation Rate*	Rank
Sweden	29.4%	**1**	Bahrain	7.8%	**38**
United States	29.3%	**2**	Japan	7.8%	**39**
Iceland	26.6%	**3**	Portugal	7.4%	**40**
Canada	26.4%	**4**	Israel	7.4%	**41**
Norway	26.4%	**5**	Greece	7.1%	**42**
Australia	24.3%	**6**	UAE	6.9%	**43**
Netherlands	21.7%	**7**	Colombia	6.7%	**44**
Denmark	21.6%	**8**	Brazil	6.2%	**45**
Finland	20.9%	**9**	Bosnia-Herzegov.	6.1%	**46**
New Zealand	20.0%	**10**	Serbia	6.0%	**47**
Singapore	19.5%	**11**	Taiwan	5.5%	**48**
Luxembourg	18.1%	**12**	Ecuador	5.2%	**49**
United Kingdom	17.3%	**13**	South Africa	5.1%	**50**
Switzerland	16.8%	**14**	Qatar	4.9%	**51**
Germany	16.5%	**15**	Saudi Arabia	4.4%	**52**
Austria	15.3%	**16**	Mexico	4.3%	**53**
Spain	13.8%	**17**	Bulgaria	4.1%	**54**
Ireland	13.4%	**18**	Mauritius	4.0%	**55**
France	12.0%	**19**	Lebanon	3.7%	**56**
Cyprus	12.0%	**20**	Costa Rica	3.7%	**57**
Slovenia	11.9%	**21**	Georgia	3.7%	**58**
Chile	11.7%	**22**	Puerto Rico	3.6%	**59**
Estonia	11.4%	**23**	Macedonia	3.6%	**60**
Czech Republic	11.4%	**24**	Albania	3.6%	**61**
Latvia	11.1%	**25**	Armenia	3.6%	**62**
Italy	11.0%	**26**	Ukraine	3.5%	**63**
Croatia	10.4%	**27**	Moldova	3.5%	**64**
Argentina	10.3%	**28**	Azerbaijan	3.5%	**65**
Kuwait	10.2%	**29**	Kazakhstan	3.4%	**66**
Slovakia	10.2%	**30**	Belarus	3.4%	**67**
Lithuania	10.1%	**31**	Kyrgyzstan	3.4%	**68**
Poland	10.0%	**32**	Peru	3.4%	**69**
Macau	9.9%	**33**	Uruguay	3.4%	**70**
Hungary	9.9%	**34**	Tajikistan	3.4%	**71**
Hong Kong	9.3%	**35**	Uzbekistan	3.4%	**72**
South Korea	9.2%	**36**	Turkmenistan	3.4%	**73**
Belgium	9.1%	**37**	Romania	3.3%	**74**

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*

Source: Global Wellness Institute

	Participation Rate*	Rank
Turkey	3.3%	**75**
Botswana	3.1%	**76**
Namibia	3.1%	**77**
Equatorial Guinea	3.0%	**78**
Gabon	2.9%	**79**
Russia	2.9%	**80**
Paraguay	2.8%	**81**
Trinidad & Tobago	2.7%	**82**
Panama	2.6%	**83**
Oman	2.5%	**84**
Malaysia	2.2%	**85**
Cuba	2.2%	**86**
Jamaica	2.0%	**87**
Bolivia	2.0%	**88**
Dominican Rep.	1.6%	**89**
Egypt	1.2%	**90**
Jordan	1.1%	**91**
Tunisia	1.1%	**92**
Thailand	0.9%	**93**
Timor-Leste	0.8%	**94**
China	0.8%	**95**
Iran	0.8%	**96**
Guatemala	0.8%	**97**
Morocco	0.8%	**98**
Mongolia	0.7%	**99**
Cambodia	0.7%	**100**
Laos	0.7%	**101**
Indonesia	0.7%	**102**
Philippines	0.7%	**103**
Eswatini	0.7%	**104**
Algeria	0.6%	**105**
Kenya	0.6%	**106**
Papua New Guinea	0.6%	**107**
Senegal	0.6%	**108**
Ghana	0.6%	**109**
Tanzania	0.6%	**110**
Zambia	0.6%	**110**
Libya	0.6%	**112**

	Participation Rate*	Rank
Zimbabwe	0.6%	**113**
Vietnam	0.6%	**114**
Congo, Rep.	0.6%	**115**
Lesotho	0.6%	**116**
Nigeria	0.6%	**117**
Mauritania	0.6%	**118**
Cameroon	0.6%	**119**
Cote d'Ivoire	0.6%	**120**
Angola	0.6%	**121**
El Salvador	0.6%	**122**
Sri Lanka	0.5%	**123**
Nicaragua	0.4%	**124**
Honduras	0.4%	**125**
Gambia	0.3%	**126**
India	0.3%	**127**
Rwanda	0.2%	**128**
Uganda	0.2%	**129**
Madagascar	0.2%	**130**
Nepal	0.2%	**131**
Myanmar	0.2%	**132**
Togo	0.2%	**133**
Benin	0.2%	**134**
Haiti	0.2%	**135**
Liberia	0.2%	**136**
Mozambique	0.2%	**137**
Guinea-Bissau	0.2%	**138**
Burundi	0.2%	**139**
Malawi	0.2%	**140**
Sierra Leone	0.2%	**141**
Ethiopia	0.2%	**142**
Pakistan	0.2%	**143**
Guinea	0.2%	**144**
Bangladesh	0.2%	**145**
Burkina Faso	0.2%	**146**
Eritrea	0.2%	**147**
Mali	0.2%	**148**
Chad	0.2%	**149**
Niger	0.2%	**150**

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*

Source: Global Wellness Institute

Comparing GWI's and IHRSA's Fitness Numbers

The International Health, Racquet, and Sportsclub Association (IHRSA) publishes an annual report on the size and state of the world's health club industry, which includes figures on the number of gyms and health clubs, revenues, and members. IHRSA's data are an important and reliable resource for measuring and tracking the private health club industry, and they served as an important reference point for this report. **However, IHRSA's numbers should not be compared directly with GWI's numbers in this report because they are measuring very different things.**

IHRSA's data is a business establishment-based measurement, capturing the number of gyms and health clubs across 64 countries, the revenues of these businesses, and the size of their membership. IHRSA's data focus primarily on private-sector/commercial health clubs (although public clubs are included for a small number of countries, such as United Kingdom and Spain). IHRSA's estimate for global health club revenues, at $93.97 billion in 2018, includes revenues from services (e.g., membership dues, class fees, fees for personal training, etc.) as well as retail and product sales at gyms (e.g., food and beverage, apparel, etc.).

GWI's data is a consumer expenditure-focused measurement, capturing the number of people participating in fitness activities across any location, and the out-of-pocket consumer expenditures on these services. GWI's figures differ from IHRSA's in a number of ways:

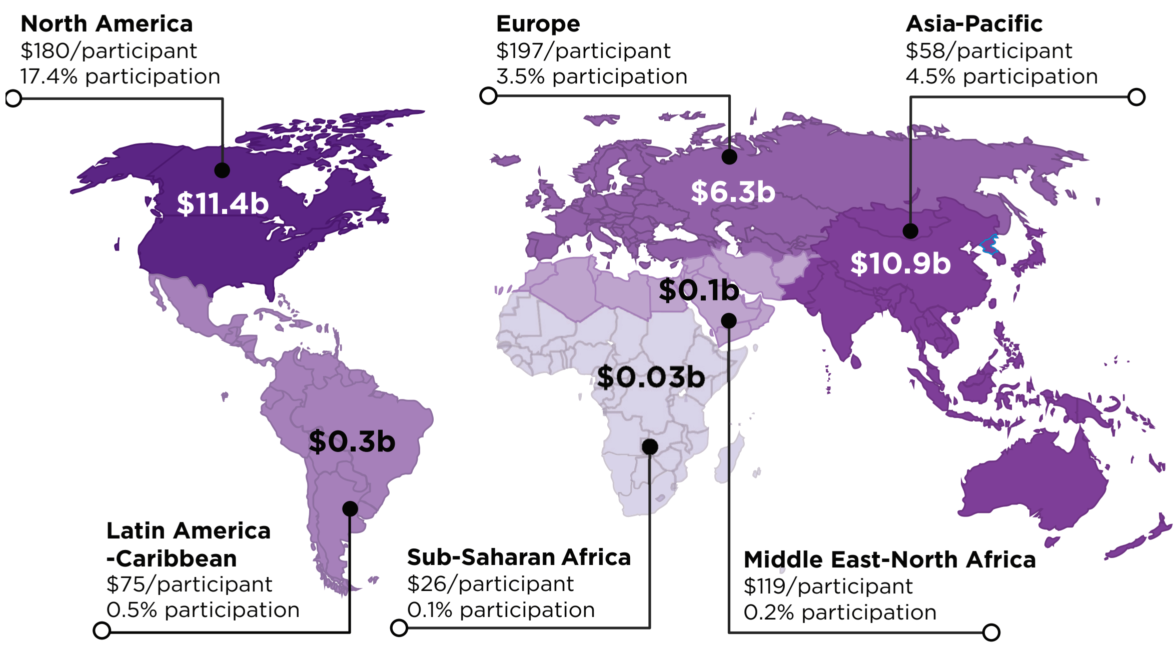
- GWI counts people doing fitness in many other types of venues and establishments beyond those counted by IHRSA, including public and nonprofit gyms, free outdoor gyms and fitness classes, university gyms, hotel gyms, fitness at home, etc.
- For people doing fitness in private-sector/commercial gyms (i.e., the portion of the market measured by IHRSA), GWI makes several adjustments to avoid overlap with our public/nonprofit fitness sub-category and our mindful movement category. Our market size estimates are different because we only count the portion of health club revenues that relate to consumer spending on services such as memberships, class fees, etc. (because retail/product sales are counted separately in our methodology). In addition, we have extended our estimates to include every country in the world (not just the 64 countries covered by IHRSA) as well as all of China (IHRSA only captures the top 10 cities in China).

Mindful Movement

Mindful movement is the smallest category of recreational physical activities, with $29.1 billion in consumer expenditures in 2018. GWI estimates that 3.8% of the world's population participates in mindful movement activities on a regular basis. Yoga is the predominant activity, followed by tai chi and qigong, Pilates, barre, and a range of other niche activities that are less mainstream (e.g., Gyrotonic, Feldenkrais, etc.).

The popularity of mindful movement activities tends to follow the development and sophistication of the fitness sector in countries around the world. North America is by far the largest region for mindful movement, with a 17.4% participation rate and $11.4 billion in spending in 2018. This is largely because the United States has been the epicenter of transforming yoga from a traditional spiritual practice into a mainstream exercise activity in recent decades. Yoga consistently ranks among the most popular exercise trends in the United States, and participants and offerings have expanded from women in prosperous and educated urban areas to a full spectrum of demographics and regions (men, smaller towns, rural areas, etc.).

Mindful Movement Market by Region, 2018



Global: $29.1b Expenditures ($101/participant) • 3.8% Participation Rate

Note: Numbers may not sum to total due to rounding.
Source: Global Wellness Institute

While yoga and other mindful movement practices are now experiencing double-digit growth in other countries around the world, access to formal classes and studios in most countries is still largely concentrated in wealthier urban areas. Asia-Pacific follows North America closely in expenditures ($10.9 billion), although its participation rate for mindful movement is only 4.5%. Europe ranks third with a 3.5% participation rate and $6.3 billion in spending. Participation rates in the rest of the world remain very low (less than 1%).

Breakdown of Mindful Movement Activities, 2018

	Participation Rate*	**# of Participants** (millions)	**Market Size*** (US$ billions)
Yoga	2.2%	164.6m	**$16.9b**
Tai Chi & Qigong	1.2%	94.7m	**$5.4b**
Pilates, Barre, & Other Modalities	0.4%	28.9m	**$6.7b**

**Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

The United States is the world's largest mindful movement market, in terms of both participation rate (17.7%) and expenditures ($10.4b), and it accounts for over one-third of all mindful movement spending worldwide in 2018. Other countries with the highest participation rates for mindful movement include Australia, Canada, Denmark, and New Zealand (all over 10%). Although its participation rate is only 7.1%, China has the largest number of participants in mindful movement in terms of raw numbers (nearly 100 million) due to the widespread traditional practice of tai chi. As the birthplace of yoga, India has an estimated 54 million practitioners of mindful movement modalities (mostly traditional yoga). The remainder of the top twenty markets are wealthier countries with higher participation and spending rates, supported by a more developed sector of studios, gyms, and service providers offering classes and training in various modalities.

Top Twenty Mindful Movement Markets by Market Size, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ billions)	Rank in 2018
United States	17.7%	$10.4	**1**
China	7.1%	$5.8	**2**
Japan	6.3%	$1.9	**3**
Russia	1.4%	$1.3	**4**
Germany	7.7%	$1.2	**5**
Canada	15.3%	$1.0	**6**
Australia	17.1%	$0.9	**7**
United Kingdom	4.2%	$0.7	**8**
India	4.0%	$0.7	**9**
South Korea	5.1%	$0.7	**10**
Spain	9.5%	$0.6	**11**
Italy	4.8%	$0.5	**12**
Netherlands	9.7%	$0.4	**13**
France	4.7%	$0.4	**14**
Taiwan	8.6%	$0.4	**15**
Switzerland	5.8%	$0.2	**16**
Brazil	1.1%	$0.2	**17**
Hong Kong	9.0%	$0.2	**18**
Denmark	13.8%	$0.1	**19**
Sweden	9.2%	$0.1	**20**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Global Rankings for Mindful Movement by Participation, 2018

	Participation Rate*	Rank
United States	17.7%	**1**
Australia	17.1%	**2**
Canada	15.3%	**3**
Denmark	13.8%	**4**
New Zealand	10.7%	**5**
Netherlands	9.7%	**6**
Spain	9.5%	**7**
Sweden	9.2%	**8**
Hong Kong	9.0%	**9**
Taiwan	8.6%	**10**
Finland	8.4%	**11**
Norway	8.2%	**12**
Iceland	7.9%	**13**
Germany	7.7%	**14**
Macau	7.3%	**15**
China	7.1%	**16**
Japan	6.3%	**17**
Switzerland	5.8%	**18**
Austria	5.5%	**19**
South Korea	5.1%	**20**
Belgium	4.9%	**21**
Italy	4.8%	**22**
Portugal	4.8%	**23**
France	4.7%	**24**
Greece	4.4%	**25**
Cyprus	4.2%	**26**
United Kingdom	4.2%	**27**
Luxembourg	4.1%	**28**
India	4.0%	**29**
Singapore	3.0%	**30**
Czech Republic	2.5%	**31**
Thailand	2.0%	**32**
Vietnam	2.0%	**33**
Ireland	2.0%	**34**
Indonesia	1.7%	**35**
Malaysia	1.6%	**36**
UAE	1.5%	**37**

	Participation Rate*	Rank
Russia	1.4%	**38**
Sri Lanka	1.4%	**39**
Israel	1.3%	**40**
Bangladesh	1.2%	**41**
Philippines	1.2%	**42**
Uruguay	1.2%	**43**
Mongolia	1.1%	**44**
Myanmar	1.1%	**45**
Bulgaria	1.1%	**46**
Slovenia	1.1%	**47**
Brazil	1.1%	**48**
Hungary	1.1%	**49**
Latvia	1.1%	**50**
Lithuania	1.1%	**51**
Poland	1.1%	**52**
Croatia	1.1%	**53**
Slovakia	1.1%	**54**
Romania	1.1%	**55**
Estonia	1.1%	**56**
Cambodia	1.1%	**57**
Nepal	1.0%	**58**
Laos	1.0%	**59**
Ukraine	1.0%	**60**
Bosnia-Herzegov.	1.0%	**61**
Serbia	1.0%	**62**
Turkey	0.9%	**63**
Pakistan	0.9%	**64**
Lebanon	0.8%	**65**
Kazakhstan	0.8%	**66**
Belarus	0.7%	**67**
Moldova	0.7%	**68**
Macedonia	0.7%	**69**
Georgia	0.7%	**70**
Albania	0.7%	**71**
Armenia	0.7%	**72**
Azerbaijan	0.7%	**73**
Uzbekistan	0.6%	**74**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*

Source: Global Wellness Institute

	Participation Rate*	Rank
Turkmenistan	0.6%	**75**
Kyrgyzstan	0.6%	**76**
Tajikistan	0.5%	**77**
Chile	0.5%	**78**
Mauritius	0.5%	**79**
Trinidad & Tobago	0.5%	**80**
Botswana	0.4%	**81**
Costa Rica	0.4%	**82**
Argentina	0.4%	**83**
South Africa	0.4%	**84**
Panama	0.4%	**85**
Peru	0.4%	**86**
Namibia	0.4%	**87**
Gabon	0.4%	**88**
Cuba	0.3%	**89**
Papua New Guinea	0.3%	**90**
Puerto Rico	0.3%	**91**
Qatar	0.3%	**92**
Jamaica	0.3%	**93**
Colombia	0.3%	**94**
Equatorial Guinea	0.3%	**95**
Bahrain	0.3%	**96**
Kuwait	0.3%	**97**
Timor-Leste	0.3%	**98**
Oman	0.3%	**99**
Dominican Rep.	0.3%	**100**
Mexico	0.3%	**101**
Ecuador	0.3%	**102**
Saudi Arabia	0.3%	**103**
Iran	0.2%	**104**
Eswatini	0.2%	**105**
Kenya	0.2%	**106**
Tanzania	0.2%	**107**
Tunisia	0.2%	**108**
Zambia	0.2%	**109**
Uganda	0.2%	**110**
Angola	0.2%	**110**
Morocco	0.2%	**112**

	Participation Rate*	Rank
Algeria	0.2%	**113**
Libya	0.1%	**114**
Jordan	0.1%	**115**
Lesotho	0.1%	**116**
Egypt	0.1%	**117**
Ghana	0.1%	**118**
Zimbabwe	0.1%	**119**
Cameroon	0.1%	**120**
Senegal	0.1%	**121**
Congo, Rep.	0.1%	**122**
Cote d'Ivoire	0.1%	**123**
Nigeria	0.1%	**124**
El Salvador	0.1%	**125**
Paraguay	0.1%	**126**
Bolivia	0.1%	**127**
Nicaragua	0.1%	**128**
Honduras	0.1%	**129**
Haiti	0.1%	**130**
Guatemala	0.1%	**131**
Rwanda	0.1%	**132**
Eritrea	0.1%	**133**
Ethiopia	0.1%	**134**
Malawi	0.1%	**135**
Mozambique	0.1%	**136**
Togo	0.1%	**137**
Madagascar	0.1%	**138**
Liberia	0.1%	**139**
Guinea	0.1%	**140**
Sierra Leone	0.1%	**141**
Benin	0.1%	**142**
Burkina Faso	0.1%	**143**
Gambia	0.1%	**144**
Mauritania	0.03%	**145**
Guinea-Bissau	0.03%	**146**
Burundi	0.03%	**147**
Chad	0.02%	**148**
Mali	0.02%	**149**
Niger	0.02%	**150**

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Table excludes most countries with populations less than 1 million and those with major conflicts or humanitarian crises.*

Source: Global Wellness Institute

Worldwide, people participating in mindful movement spent an average of $101 per year in 2018. This spending level may initially seem low, when one considers that the cost of a single yoga or barre class can range from $10-30 in many specialized studios and full-service gyms around the world, and the cost of equipment-based Pilates training is even higher. However, it is important to keep in mind that the rapidly rising popularity of mindful movement practices has been accompanied by a proliferation of ways in which to participate – in addition to the thousands of chain and independent yoga and barre studios, and classes in comprehensive gyms, there are now classes in YMCAs and community centers, streaming apps, books and instructional DVDs, and so on. This is especially the case with yoga – for example:

- Based on data from the most recent *Yoga in America* study, GWI estimates that besides the 12% of American adults who have participated in a group or private yoga class in the last month, an additional 5.5% of adults have practiced yoga only on their own in the last month (with an app, video, or book).[29]
- A *Yoga Journal* study of the market in Japan indicates that 38% of those doing yoga practice it at home or in free/public facilities.[30]
- In China, a recent market study indicates that 31% of yoga class-related expenditures are for online classes. Among those doing yoga, 62% use apps and 51% use online videos, while only 35% do yoga at gyms and 16% at small yoga studios. China's Daily Yoga app has an estimated 30 million users in China alone.[31]
- A recent study in Germany indicated that 54% of those who do yoga practice it at home.[32]
- A study in Russia indicated that 24% of those doing yoga practice it at home or by video.[33]

A significant portion of the growth in yoga practice worldwide is in online, at home, and low-cost methods of participation, which is expanding access and lowering cost barriers to participation. In addition, scientific evidence of the efficacy of yoga for mental and physical wellness has led to its introduction in a variety of settings and populations outside the mainstream (and higher-priced) fitness market, such as in prisons, in programs for former soldiers, and in inner-city schools. (See *Chapter V* for more analysis of these trends in regions around the world.)

[29] GWI analysis of data in: Yoga Journal, Yoga Alliance, and Ipsos Public Affairs (2016). *2016 Yoga in America Study.* https://www.yogajournal.com/page/yogainamericastudy.

[30] See Yoga Journal and Seven & i Publishing (2017). *Japan Yoga Market Survey 2017* (Japanese language). https://www.7andi-pub.co.jp/pdf/2017/20170307_sevenandi_yoga.pdf.

[31] iResearch (2018). *China Yoga Industry Research Report 2018* (Chinese language). https://www.iresearch.com.cn/Detail/report?id=3260&isfree=0.

[32] BDY/GfK (2018). *Yoga in Zahlen (Yoga in Figures)*. https://www.yoga.de/site/assets/files/2433/bdy_yoga_in_zahlen_2018-02-09.pdf.

[33] Zhavoronkova, I. (2015, June 4). Every 50th Russian is engaged in yoga (Russian language). *RBC Business.* https://www.rbc.ru/business/04/06/2015/556f0e109a79477c8f2eb8ad.

Mindful Movement in China and India: Traditional Practice vs. Modern Exercise

As the ancient birthplaces of yoga, tai chi, and qigong, the mindful movement markets in India and China are quite different than those in the rest of the world. The traditional, spiritually-rooted practice of yoga in India looks very different from its modern, Westernized incarnation as a trendy workout. Although yoga data for India are sparse, GWI estimates that over 53 million people in India practice yoga, mostly in its traditional form and with very low expenditures – although Western-style, commercialized, exercise-focused yoga offerings also exist in India's urban areas and tourism-focused establishments, and yoga has seen rapid growth and resurgence in India partly in response to its popularity and media attention in the West.[34] In China, the traditional art of tai chi remains popular – practiced in parks by millions of elderly Chinese – and is now promoted by the government as an important health and cultural practice.[35] Data on tai chi in China are also sparse, but GWI estimates that about 80 million people in China practice tai chi, mostly with very low expenditures. Although less ubiquitous than yoga, tai chi has spread around the world with the Chinese diaspora and is rising in popularity globally among younger participants alongside other mindful, stress-reducing practices and martial arts.

If we remove the traditional practitioners of yoga in India and tai chi in China from GWI's estimates of the mindful movement market – looking more specifically at commercialized, Westernized mindful movement practices – then the global market size would be 154.8 million participants, a 2.0% participation rate, and $25.0 billion in expenditures, or about $161 in spending per participant per year.

[34] See: 1) Tripathi, A. (2016, June 20). Number of yoga practitioners increases by 30% across metros: Assocham survey. *Times of India*. https://timesofindia.indiatimes.com/city/lucknow/Number-of-yoga-practitioners-increases-by-30-across-metros-Assocham-survey/articleshow/52832153.cms. 2) ASSOCHAM (2015, June 19). *Demand for yoga instructors likely to increase by 35%: ASSOCHAM.* http://www.assocham.org/newsdetail.php?id=5030.

[35] Zhang, R. (2019, April 3). China launches new integrated tai chi platform. *China Internet Information Center.* http://www.china.org.cn/sports/2019-04/03/content_74641794.htm.

Enabling sectors account for $466 billion of the physical activity market.

The physical activity enabling sectors include a wide array of goods and services that support or enhance people's participation in recreational physical activities. GWI estimates that the enabling sectors generated $465.9 billion in global economic activity in 2018, or an average of $172 per participant in recreational physical activity. Apparel and footwear is the largest category ($332.7 billion), followed by equipment and supplies ($108.6 billion). Technology is the smallest of the enabling sectors, at $26.3 billion.

North America is the region with the largest market for the enabling sectors ($171.2 billion) and is also largest in two sub-categories – apparel and footwear, and equipment and supplies. Asia-Pacific is the second-largest market overall ($125.5 billion) and leads in the technology segment. In every region, expenditures on the enabling sectors (both overall and per participant) are higher than expenditures on actually participating in recreational physical activities. This is primarily due to the high level of spending on apparel and footwear.

Physical Activity Enabling Sectors by Region, 2018

	Physical Activity Enabling Sectors Market (US$ billions)			
	Technology	**Equipment & Supplies**	**Apparel & Footwear**	**TOTAL Market Size*** **(US$ billions)** ***(Per Participant)***
North America	$8.6	$40.0	$123.1	**$171.2** *($814)*
Asia-Pacific	$10.8	$27.6	$87.5	**$125.5** *($92)*
Europe	$4.8	$35.0	$77.4	**$116.5** *($274)*
Latin America & Caribbean	$1.0	$2.9	$22.3	**$26.2** *($110)*
Middle East & North Africa	$0.4	$2.6	$12.1	**$15.1** *($121)*
Sub-Saharan Africa	$0.7	$0.5	$10.3	**$11.5** *($34)*
Total Physical Activity Enabling Sectors	**$26.3**	**$108.6**	**$332.7**	**$465.9** *($172)*

Note: Figures do not sum to total due to overlap between segments and rounding.

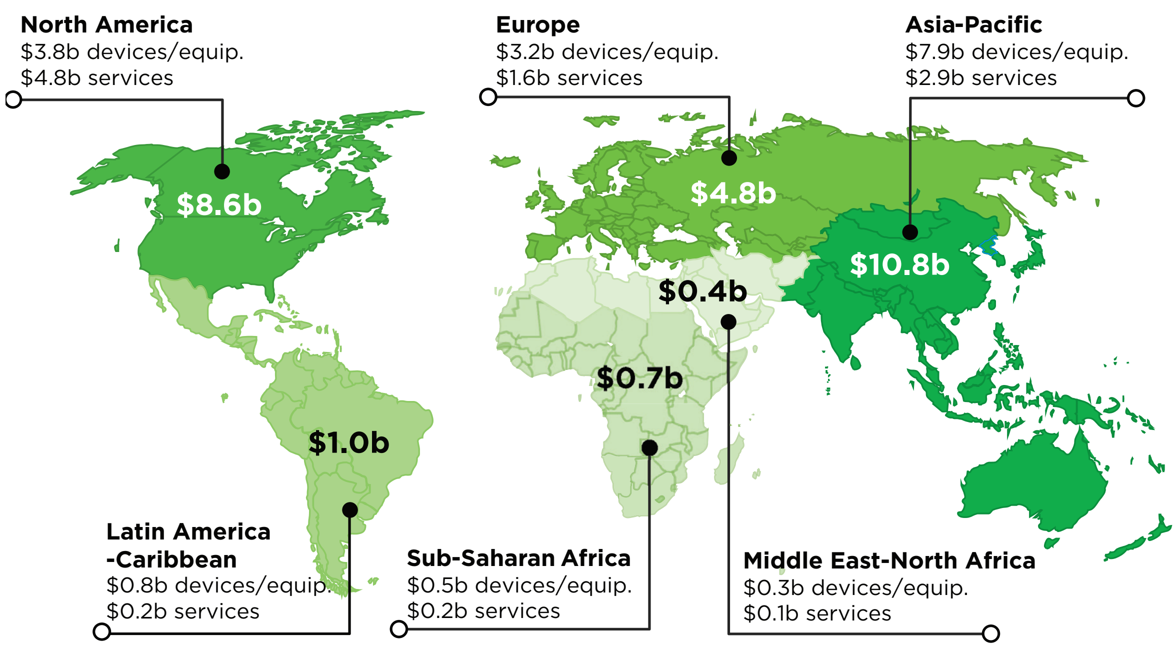
Source: Global Wellness Institute estimates, based upon data from Euromonitor International, Statista, Crunchbase, and other sources

Physical Activity Enabling Sectors: Technology

Technology is now one of the biggest trends driving change in the physical activity economy, bringing new business models and methods of participation, new ways to reach customers, and new kinds of devices and equipment. GWI estimates that technologies related to recreational physical activity represented a $26.3 billion market in 2018. Asia-Pacific is the largest regional market, at $10.8 billion, because it is the world's largest consumer market for fitness wearables and trackers. North America ranks second in size for technology, at $8.6 billion, and it is the largest region for technology services that support physical activity (i.e., streaming services, apps, intermediaries, software, and other platforms).

The United States and China are the dominant countries in the technology sector, accounting for over half the market in 2018. Other countries in the top twenty include some with sophisticated, well-developed fitness and technology markets (e.g., United Kingdom, Germany, France, Japan), as well as a number of countries that simply have large populations and relatively high adoption rates for wearable trackers and fitness apps (e.g., Mexico, Nigeria, Indonesia, Philippines).

Physical Activity Technology Market by Region, 2018



Global: $26.3b Expenditures ($16.5b in Devices/Equip. • $9.9b in Services)

Note: Numbers may not sum to total due to rounding.
Source: Global Wellness Institute

Physical Activity Enabling Sectors: Top Twenty Technology Markets by Market Size, 2018

	Physical Activity Enabling Sectors: Technology Market Size (US$ billions)	Rank in 2018
United States	$8.1	**1**
China	$6.6	**2**
India	$1.8	**3**
United Kingdom	$1.1	**4**
Germany	$0.7	**5**
France	$0.7	**6**
Japan	$0.5	**7**
Canada	$0.5	**8**
Brazil	$0.5	**9**
South Korea	$0.4	**10**
Italy	$0.4	**11**
Australia	$0.3	**12**
Russia	$0.3	**13**
Spain	$0.3	**14**
Mexico	$0.3	**15**
Taiwan	$0.3	**16**
Nigeria	$0.2	**17**
Indonesia	$0.2	**18**
South Africa	$0.2	**19**
Philippines	$0.1	**20**

Source: Global Wellness Institute estimates, based upon data from Statista, Crunchbase, and other sources

The technology landscape encompasses a diverse range of devices/equipment and software/services (as elaborated in the table below) that support people's participation in fitness, sports, active recreation, and mindful movement in many different ways. With promises of making exercise more convenient, fun, affordable, personalized, portable, social, gamified, trackable, efficient, and results-oriented, these technologies are seeing a rapid uptake by consumers all over the world, even in countries that have not previously had well-developed fitness and gym offerings.

Use of fitness wearables, trackers, apps, and games is particularly widespread. A 2016 global survey found that 33% of people in 16 countries currently use an app or wearable device to track or monitor their health and fitness, while an additional 18% have done so in the past (but are not currently tracking).[36] Another study found that the health and fitness app category grew by over 330% in just three years, although growth has slowed in recent years along with the overall apps industry.[37] Fitness apps are wildly popular in China, where an estimated 68.5 million people actively use apps and online platforms to support their fitness and healthy lifestyles.[38] Analysis of fitness and health apps and wearables/trackers in the United States indicates that more women are using these services than men.[39] Fitness apps, fitness games, and streaming/on-demand services are opening access to new types of exercise, often at lower price points, to demographic groups and regional populations who have not previously had access to these options (or could not afford them).

On the other hand, all of these technologies are so new that there is not yet conclusive scientific evidence on what is effective at changing behavior and increasing physical activity, and what is just a gimmick.[40] The rise of fitness and health tracking, monitoring, and connectivity is also giving rise to a host of concerns related to personal security and privacy, stress and anxiety, the impacts of digital versus face-to-face connections, and other issues. While trackers, apps, social media platforms, streaming services, etc. may be adding a level of convenience, motivation, and fun to exercise, it is also important to keep in mind that these technologies are not essential for people to be physically active. Hundreds of thousands of people around the world get enough movement each day with nothing more than a pair of shoes, a simple bicycle, or a ball and an empty field. In many ways, technologies are attempting to fill gaps in our built environments and lifestyles that prevent us from getting enough movement. As long as our environment continues to favor a sedentary lifestyle over movement, and our busy lives keep us from exercising, we will be looking to technology to help reduce those barriers.

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[36] GfK (2016, September). *Health and fitness tracking: Global GfK survey*. https://www.gfk.com/fileadmin/user_upload/website_content/Images/Global_Study/Fitness_tracking/Documents/Global-GfK-survey_Health-Fitness-Monitoring_2016_final.pdf.

[37] Kesiraju, L. and Vogels, T. (2017). Health & Fitness App Users Are Going the Distance with Record-High Engagement. *Flurry Analytics Blog.* https://www.flurry.com/blog/post/165079311062/health-fitness-app-users-are-going-the-distance.

[38] See: 1) Zheng, Y. (2018, Oct. 30). Online fitness platforms grow in popularity among the young. *The Telegraph*. https://www.telegraph.co.uk/china-watch/sport/online-fitness-platforms-in-china/. 2) Xuan, L. (2018, Dec. 14). Fitness industry works up a sweat in internet age. *China Daily.* http://www.chinadaily.com.cn/a/201812/14/WS5c12edf0a310eff303290eea_1.html.

[39] See, for example: 1) Hwong, C. (2018, July 19). Verto Index: Health & Fitness Apps. *Verto Analytics*. https://www.vertoanalytics.com/verto-index-health-fitness/. 2) NPD (2015, Jan. 6). The Demographic Divide: Fitness Trackers and Smartwatches Attracting Very Different Segments of the Market, According to The NPD Group. *NPD Press Release.* https://www.npd.com/wps/portal/npd/us/news/press-releases/2015/the-demographic-divide-fitness-trackers-and-smartwatches-attracting-very-different-segments-of-the-market-according-to-the-npd-group/.

[40] See, for example: 1) Shmerling, R.H. (2017, Oct. 23). Activity trackers: Can they really help you get fit? *Harvard Health Blog.* https://www.health.harvard.edu/blog/activity-trackers-help-you-get-fit-2017102312594. 2) Gonzalez, R. (2017, Dec. 25). Science Says Fitness Trackers Don't Work: Wear One Anyway. *Wired.* https://www.wired.com/story/science-says-fitness-trackers-dont-work-wear-one-anyway/. 3) Young, L. (2018, May 18). There are thousands of health and fitness apps, and not much evidence they work: study. *Global News*. https://globalnews.ca/news/4215969/do-fitness-apps-work/.

Physical Activity Technology Segments, 2018

Segment		Market Size (US$ billions)
Services		
Streaming & On-Demand Services	• Monthly/annual subscription services • Pay-per-use services • Free services (e.g., YouTube)	***$6.1**
Apps	• Tracking & performance • Community & connection • Gamification & rewards • Virtual & augmented reality games	****$2.4**
Software & Platforms	• Intermediaries & booking • Enterprise & customer management	**$1.4**
Devices & Equipment		
Wearables & Trackers	• Fitness bands & trackers • Smart clothing, shoes, & eyewear	*****$14.7**
Smart & Networked Equipment	• Smart gym equipment • Smart sports equipment	**$1.7**
Hybrid		
Exergaming	• Video gaming systems, controllers, & fitness games • Mobile/app-based virtual & augmented reality fitness games	******N/A**

** Includes revenues from paid subscriptions and pay-per-use content via streaming/on-demand exercise services (e.g., Peloton, Beachbody On Demand) but not services that are embedded in physical gym membership fees (e.g., some Pure Barre or YogaWorks studio packages provide free access to on-demand content).*

*** Includes revenues from paid app downloads, upgrades, and in-app purchases, but excludes e-commerce and advertising revenues. Apps that provide paid subscriptions or pay- per-use services with streaming/on-demand exercise classes and workouts are included in the "Streaming & On-Demand Services" category.*

**** Includes devices specifically intended for fitness (e.g., Fitbit), but excludes general smartwatches (e.g., Apple watch).*

***** While exergaming is an important piece of the fitness technology sector, GWI is not able to estimate a market size for this component because it is not possible to separate fitness and exercise-focused equipment and games from the broader market of video gaming systems, controllers, games, eSports, etc. Fitness-focused virtual/augmented reality gaming apps (e.g., Superhero Workout) are already captured in the "Apps" category.*

Source: Global Wellness Institute estimates, based upon data from Statista, Crunchbase, and other sources

The Diverse Landscape of Physical Activity Technologies

Streaming and on-demand services: While at-home and on-demand fitness first emerged in the 1980s (the early years of video technology, the fitness boom, and Jane Fonda VHS tapes), today's technology-driven streaming and on-demand exercise options have become a major disruptor in the industry. GWI estimates that online and app-based streaming/on-demand exercise classes and workouts were a $6.1 billion market globally in 2018 (this represents about 4.4% of global consumer spending on doing fitness and mindful movement activities). The range of options span every category of exercise imaginable (spin, running, boxing, dance cardio, yoga, barre, ballet, and so on). They include: subscription, pay-as-you-go, and free options; live-streamed and on-demand/recorded classes; equipment-linked services (e.g., Peloton, Mirror); gym/studio spin-offs (e.g., Exhale On Demand); celebrity/influencer-based workouts (e.g., AKT On Demand, TA Online Studio); online-only services (e.g., Daily Burn, Keep); and virtual personal training (e.g., Aaptiv Coach). Most streaming/on-demand services are currently U.S.-based, although China and the United Kingdom are also rapidly-growing hubs.

Apps: The first fitness apps were launched in 2008, soon after the introduction of the iPhone and the Apple App Store. There are now an estimated 250,000-300,000+ fitness and health apps available for download, generating an estimated $2.4 billion in user revenues in 2018 (from downloads, upgrades, and in-app purchases). Most fitness apps focus on tracking, measuring, and analyzing various fitness and health metrics (e.g., tracking workouts, counting steps, monitoring fitness goals, counting calories consumed and burned, etc.). Some of the most popular apps in this category are free for users (e.g., My Fitness Pal, Samsung Health, Pacer), although many are paid or offer a premium/paid upgrade option. Apps are increasingly adding a social and community dimension (e.g., Runtastic, Joyrun), or an element of gamification, competition, and rewards (e.g., Fitocracy, Yodo Run, Nexercise). Some include informational/educational tutorials, while some provide personalized music and playlists for workouts (e.g., RockMyRun, Fit Radio). Some popular apps are connected with wearable devices (e.g., Fitbit, Codoon), and some are connected with major fitness brands (e.g., Nike Run Club, UA Record). (Note that GWI has separated apps that focus primarily on providing streaming/on-demand workouts and classes into a separate category, above.)

Software and platforms: Estimated at $1.4 billion globally in 2018, a wide variety of software and online services and platforms are streamlining management, booking, and customer-facing functions across all types of physical activity-related businesses. The emergence of class finder and booking intermediaries has been a major disruptor for gyms and fitness studios in the last five years – ClassPass is the largest player, although there are many other competitors across different regions, such as Singapore-based GuavaPass (recently acquired by ClassPass), UK-based PayAsUGym, Gympass (focused on the corporate market), India-based FitPass, FitReserve, and others. The other major segment in this sector is booking, scheduling, billing, and back-office management software and systems. Mindbody is the most recognized player in this segment, but there are dozens of other services focusing on different types of businesses, such as gyms (e.g., Virtuagym), sports and active recreation providers and nonprofits (e.g., ACTIVE Network, PerfectMind), yoga studios (e.g., TULA), dance studios (e.g., The Studio Director), martial arts (e.g., Kicksite), personal trainers (e.g., My PT Hub), and so on. The United States is home to the largest number of exercise-related software services and platforms, although other countries that have sizable tech and software industries also have many companies and start-ups (United Kingdom, Canada, India, China).

Wearables and trackers: At $14.7 billion in 2018, wearables represent over half the technology market. This category includes fitness bands (e.g., Fitbit, Garmin, Polar, Huawei Band, Xiaomi Mi Band) and other types of activity trackers that range from simple pedometers to high-tech clip-ons. Other types of sensor-embedded trackers and fitness wearables have emerged in recent years including smart jewelry (e.g., Bellabeat Leaf, Misfit Shine); smart clothing (e.g., Hexoskin, Sensoria fitness socks, Nadi X yoga pants, SUPA Powered sports bra); smart footwear (e.g., UA HOVR shoes, Altra IQ shoes, Digitsoles, Lechal smart insoles); and smart eyewear (e.g., Recon Jet, Vue, Level, Solos AR smart glasses).

Smart and networked equipment: Estimated at $1.7 billion in 2018, exercise/fitness/gym equipment and sporting goods embedded with sensors and networking capabilities are a small but rapidly growing portion of the fitness/sports equipment and supplies market. This category includes sophisticated fitness and gym equipment with connectivity, tracking, streaming, artificial reality, and other high-tech functions (e.g., treadmills, ellipticals, stationary bikes, other cardio/strength training equipment). All types of sporting goods and equipment –balls, bats, tennis racquets, golf clubs, etc. – are also being transformed by sensors and smart functions that track metrics, analyze performance, provide virtual coaching, and much more.

Exergaming: The video gaming industry made its first foray into fitness in the 1980s with early versions of virtual reality exercise systems (e.g., *HighCycle* virtual exercise bike and Atari *Puffer* game-connected bike) and fitness mats connected with gaming systems (e.g., Nintendo Power Pad and Atari *Foot Craz*). While none of these early products were successful, the "exergaming" or "exertainment" industry started to take off with the launch of the *Dance Dance Revolution* game in 1998, the Wii Fit system in 2007, and the advanced Kinect motion detection in 2010 (allowing a person's body to become the game controller). The proliferation of mobile devices and gaming apps in the last decade has brought wildly popular augmented reality exergaming apps like *Zombies, Run!*; *Pokémon GO*; and *Superhero Workout*. Today, every major gaming system offers a wide array of fitness-focused games and connected controllers/equipment, such as Wii Sports, EA Sports Active 2, Nike+ Kinect Training, Just Dance, etc. GWI has not estimated the market size for exergaming because no recent data are available, and it is not possible to separate fitness-focused games and gaming equipment (hardware/controllers) from the overall video gaming, eSports, and related markets. A ten-year-old study by the U.S.-based Games for Health Project found that worldwide sales of health-focused games (e.g., Wii Fit, EA Sports Active, *Dance Dance Revolution*) totaled $2 billion over an 18-month period in 2009.[41]

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[41] Brice, K. (2009, June 26). Health games notch up worldwide sales of over $2 billion – report. *gamesndustry.biz.* https://www.gamesindustry.biz/articles/health-games-notch-up-worldwide-sales-of-over-USD2-billion-report.

Physical Activity Enabling Sectors: Equipment & Supplies

Participants use a wide range of equipment and supplies to engage in fitness, sports, active recreation, and mindful movement, including sporting goods, protective gear, and fitness/exercise/training equipment and supplies. GWI estimates that equipment and supplies related to physical activity was a $108.6 billion market worldwide in 2018. Note that this measurement includes not only direct consumer spending on equipment and supplies, but also sales to health clubs and gyms, sporting clubs, etc. (because these purchases in turn support consumer participation in physical activities).

The equipment and supplies market is driven by the rates of participation in and spending on recreational physical activities. North America, Europe, and Asia-Pacific account for 94% of worldwide spending on equipment and supplies, while the largest countries (United States and China) account for 44% of the market. The largest country markets for equipment and supplies are generally wealthier countries with higher participation rates and high spending on recreational physical activity, as well as some emerging markets with large populations.

Physical Activity Enabling Sectors: Top Twenty Equipment & Supplies Markets by Market Size, 2018

	Physical Activity Enabling Sectors: Equipment & Supplies Market Size (US$ billions)	**Rank in 2018**
United States	$37.5	**1**
China	$10.4	**2**
Japan	$8.8	**3**
United Kingdom	$8.4	**4**
France	$6.3	**5**
Germany	$5.9	**6**
Italy	$2.7	**7**
Canada	$2.5	**8**
Taiwan	$2.2	**9**
South Korea	$1.9	**10**
Spain	$1.6	**11**
Australia	$1.5	**12**
Switzerland	$1.5	**13**
Brazil	$1.1	**14**
Austria	$1.1	**15**
Mexico	$0.9	**16**
Netherlands	$0.9	**17**
Russia	$0.8	**18**
Portugal	$0.8	**19**
Poland	$0.7	**20**

Source: Global Wellness Institute, based upon data from Euromonitor International

Physical Activity Enabling Sectors: Apparel & Footwear

Consumers use many different types of specialized clothing and footwear for participating in fitness, sports, active recreation, and mindful movement – from ski pants to yoga leggings, and from running shoes to hiking boots. Apparel and footwear is estimated by GWI as a $332.7 billion market in 2018 ($198.2 billion for apparel and $134.6 billion for footwear). North America is by far the largest market for apparel and footwear, followed by Asia-Pacific and Europe. These three regions account for 87% of the market, while the United States alone accounts for over one-third of the market.

Due to the nature of the apparel and footwear market, not all of this spending is directly related to physical activity. Since it is increasingly common for people to wear athletic/sports-inspired clothing and athletic shoes as everyday casualwear (i.e., "athleisure"), it is impossible to separate what consumers purchase and wear specifically and exclusively for participating in recreational physical activities, when those same items are also worn outside of the gym or when people are not exercising. For example, many adults and children wear athletic shoes as their daily footwear or as a fashion accessory, even if they do not run or play a sport. The U.S. market is disproportionately large because Americans tend to dress in a very casual style.

Physical Activity Enabling Sectors: Top Twenty Apparel & Footwear Markets by Market Size, 2018

	Physical Activity Enabling Sectors: Apparel & Footwear Market Size (US$ billions)	Rank in 2018
United States	$117.1	1
China	$40.1	2
Japan	$14.0	3
Germany	$12.7	4
United Kingdom	$11.2	5
France	$8.6	6
India	$7.8	7
Italy	$7.5	8
South Korea	$7.0	9
Brazil	$6.7	10
Russia	$6.4	11
Canada	$6.0	12
Spain	$5.9	13
Mexico	$5.8	14
South Africa	$5.6	15
Australia	$3.5	16
Poland	$2.5	17
Sweden	$2.5	18
Chile	$2.4	19
Hong Kong	$2.3	20

Source: Global Wellness Institute, based upon data from Euromonitor International

The physical activity market is expected to enjoy robust growth in the next five years.

Over the last decade, the Global Wellness Institute has observed rapidly rising interest in all kinds of wellness-related behaviors and lifestyles, accompanied by accelerating consumer spending. This growth is evident in the global explosion of fitness, gyms, and health clubs in countries around the world, as well as the rapid proliferation of yoga and other mindful movement modalities. There is no sign that this movement is slowing down, as a wellness-mindset continues to permeate the global consumer consciousness, affecting people's daily routines, decision-making, and spending habits.

Physical Activity Market Growth Projections, 2018-2023

	Projected Market Size (US$ billions)		Projected Average Annual Growth Rate
	2018	**2023**	**2018-2023**
Total Physical Activity Economy	**$828.2**	**$1,139.7**	**6.6%**
By Region			
Asia-Pacific	$240.4	$373.5	9.2%
North America	$282.7	$366.0	5.3%
Europe	$225.0	$287.9	5.1%
Latin America-Caribbean	$42.2	$56.6	6.0%
Middle East-North Africa	$22.6	$33.0	7.8%
Sub-Saharan Africa	$15.3	$22.7	8.2%
By Sector			
Active Recreation & Sports	$230.1	$323.4	7.0%
Fitness	$108.6	$147.9	6.4%
Mindful Movement	$29.1	$52.1	12.4%
Apparel & Footwear	$332.7	$453.1	6.4%
Equipment & Supplies	$108.6	$139.4	5.1%
Technology	$26.3	$39.8	8.6%

Source: Global Wellness Institute estimates, based upon economic and industry sector projections from the IMF, Euromonitor, Statista, and GWI's data and projection model

For the next five years, GWI projects that the physical activity economy will grow by 6.6% annually, significantly faster than global GDP growth (5.1% annually, as projected by the IMF). The physical activity economy is projected to surpass $1.1 trillion, and Asia-Pacific will overtake North America as the largest region by expenditures. Over 40% of the increase in the physical activity market will be in Asia-Pacific region. China and India together are projected to account for nearly one-third of the market growth, while the United States will account for one-quarter of the increase and Europe will account for one-fifth. Around the world, rising concern about obesity and chronic disease and the awareness of their link to inactivity will continue to push governments, nonprofits, medical systems, employers, and consumers to pay more attention to physical activity. In lower- and middle-income countries and regions, demand for exercise opportunities will be fueled by expanding populations and a growing middle class with rising disposable incomes, who are increasingly embracing healthier and more active lifestyles.

Growth in consumer spending on physical activity will not guarantee increasing participation. Public and private sectors must work together to address the physical inactivity crisis.

The irony in these projections is that ever-increasing consumer spending on physical activity is not necessarily the solution to the global crisis of physical inactivity. From a public health perspective, the aim is simply to get more people more active, more often – regardless of whether they spend more money while doing so. The question we must ask is whether the growth in expenditures reflects more wealthy and able-bodied people (who already have a higher propensity for physical activity) spending more money on the latest fitness fads, gadgets, and apparel? Or does it reflect growing participation rates among people who were not previously physically active? In most countries, the growth projections incorporate both, at varying rates.

Does the world actually need more $35 boutique fitness classes, $2,500 high-tech treadmills, $100 fitness wristbands, $90 yoga pants, fitness apps, and virtual reality in order to get more people active? While these innovations can enhance the experience and make exercise more fun and appealing to some people, they also remain out of reach for large swaths of the world's population – especially children, seniors, those with health conditions, and people in disadvantaged and marginalized communities. In fact, we do not have to spend any money at all in order to be physically active and stay healthy, especially when we have access to good parks, recreation, and outdoor amenities, and when we get enough "natural movement" in our daily lives. The world does need more appealing spaces and options for the one-quarter to one-third of adults who are physically inactive (by WHO standards), and for the two-thirds of the population who are not currently participating in recreational physical activities (by GWI's estimates), in order to engage these people in physical activities they enjoy, at price points that are accessible to them. As such, investment in public infrastructure, parks, outdoor gyms, school programs, physical education, etc., is critically important.

GWI firmly believes that government expenditures on fitness and other recreational physical activities are complementary to the private fitness and recreation industries, and not a competitor or substitute. If the aim is to reduce sedentary behavior and expand access to facilities and services that support physical activity, then both public and private efforts are essential. Even as private fitness businesses expand their markets through new models such as budget gyms, microgyms, at-home streaming classes, app-based workouts, and so on, public expenditures will remain critical for reaching underserved regions and populations. In addition, public expenditures on fitness and recreation generate significant upstream and downstream economic activities. For example, people who use government-funded active transit infrastructure (e.g., walking/cycling paths) are likely to spend money on shoes, clothing, and bicycles. Government-subsidized gyms and recreational facilities (even free outdoor gyms in parks) must purchase equipment and supplies from the private sector.

Physical activity and participation rates are so low in countries around the world, there are enormous opportunities to grow the market and reach new customers – and there is a health imperative to do so. Governments, nonprofits, and private enterprises and entrepreneurs all have a major role to play.

IV. CLOSING PHYSICAL ACTIVITY GAPS AND EXPANDING MARKETS

There are many barriers to increasing physical activity participation across the world.

The $828.2 billion global physical activity sector, while enormous, is currently only engaging about one-third of the world's population, with a 35% participation rate in recreational physical activities around the world. In addition, over one-quarter of the world's adults[42] and over 80% of adolescents[43] are not getting sufficient physical activity by any method (via natural movement or recreational activities). The large and growing share of the world's population with insufficient physical activity represents a major ongoing public health challenge. The solution lies in addressing the major barriers to physical activity across all spheres of life – transportation, domestic, and occupational physical activity ("natural movement"), as well as leisure and recreation options. It will require a massive change in our modern lifestyles, along with massive investments in new infrastructure and "bricks and mortar," to address many of today's barriers to natural movement physical activity. Given that reality, the recreational physical activity sector is a critical part of the solution, especially in the near term.

To explore how to engage more people in physical activity, GWI reviewed dozens of national and cross-country surveys and studies that collect information on the motivations for and barriers against participation in physical activities. These studies cover more than 60 countries across all regions of the world (see *Appendix A* for a list of some of the studies reviewed). While these studies employed different methodologies, were conducted in different languages, and varied in the way they framed questions and responses, in aggregate they reveal important findings about physical activity motivations and barriers.

- **Motivations:** When adults were asked why they engage in regular physical activity, by far the most cited reason is for **maintaining good health** (also: "physical wellbeing," "to feel good," "to be fit," and other similar responses). The next most cited reasons are s**tress reduction or relaxation** and for **fun or pleasure**. Other motivations include: being with friends and family; building muscle strength; to look good; weight loss; to be out in nature; and to feel challenged/ fulfilled or for self-improvement. When children and teens were asked why they participate in sports, exercise, or physical activities, they most often say they do so **for fun and to be with friends**, and not for health reasons.
- **Barriers:** For those who do not engage in regular physical activity, the most significant barrier for adults is **lack of time**, followed by **lack of interest** ("not a priority," "too much trouble," "prefer to do something else," etc.) and **physical condition or health-related reasons** (illness, injury, disability, age, pregnancy, etc.). **Lack of motivation or habit** is also a significant barrier for adults; many report that they are too lazy to exercise or they have no habit of doing

[42] Guthold, R. et al (2018, Sept. 4). Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. *The Lancet Global Health* 6, e1077-1086. https://doi.org/10.1016/S2214-109X(18)30357-7.

[43] WHO (2018, Feb. 23). Physical Activity: Key Facts. *WHO Fact Sheet.* https://www.who.int/news-room/fact-sheets/detail/physical-activity. Accessed July 23, 2019.

so. For children and teens, the most frequently mentioned barriers are **lack of time** (due to school work) and **lack of a convenient facility or activity near home**. Other reasons cited by youth include: **not having fun**, and **preferring to do something else** (such as spending time with friends).

It is not a surprise that those who are physically active cite health as their main motivation. It is also not surprising that time constraints are the most significant barrier for those who are inactive, especially in higher-income countries. While most people are aware of the benefits of physical activity, their busy lives – work, school, family obligations – preclude them from being active when it competes with other priorities. More surprising is that physical conditions (e.g., health-related reasons, illness, age, or the perceived inability to engage in physical activity) are frequently mentioned as a barrier, more so than cost/money constraints or access to facilities.

A lack of interest/motivation and lack of access to facilities are cited as barriers more often in low-income countries than wealthier regions. Personal safety and being uncomfortable at a gym are also mentioned as a concern by women and girls in some countries where gender and social norms discourage female participation in sports and outdoor recreation, prevent activities in co-ed settings, or prohibit physical activity for females in general. For example, in one study in Central America, girls reported multiple barriers, such as: lack of access to fields and facilities; lack of equipment; lack of money; lack of parental permission; lack of clothing; and safety. In the same study, boys rarely mentioned these as constraints, and they regarded the lack of time as their most important barrier.[44]

Top Barriers to Physical Activity Worldwide	**Top Motivations for Physical Activity Worldwide**
Adults **1.** Lack of time **2.** Lack of interest **3.** Physical or health conditions **4.** Lack of motivation or habit	**Adults** **1.** Maintaining good health **2.** Stress reduction or relaxation **3.** For fun or pleasure
Youth **1.** Lack of time **2.** Lack of convenient facility or activity near home **3.** Not having fun **4.** Prefer to do something else	**Youth** **1.** For fun, entertainment, or joy of movement **2.** To be with friends **3.** To be fit or healthy

Source: Global Wellness Institute review of over 75 studies and surveys across 60 countries

[44] Rock, K., Valle, C., and Grabman, G. (2013, April 11). Physical inactivity among adolescents in Managua, Nicaragua: a cross-sectional study and legal analysis. *Journal for Sport Development* (1)1, 48-59. https://jsfd.org/2013/04/11/physical-inactivity-among-adolescents-in-managua-nicaragua-a-cross-sectional-study-and-legal-analysis/.

Business innovations and public initiatives can help to overcome barriers and close the physical activity gap.

While substantial barriers exist, it is possible to address them. This section provides examples of innovations, new business models, and public policy initiatives that can help overcome barriers to physical activity, increase participation, and extend the many benefits of movement to more people around the world. Solutions can come from the private sector, government, and nonprofits, and from all of these players working together.

Mitigating time constraints and increasing convenience

Modern life is busy with many priorities – work, school, family responsibilities, social life, hobbies, etc. – and exercise, sports, and recreational physical activity must compete for our scarce leisure time. There are many opportunities for new services and businesses to make physical activity more flexible and convenient, so that consumers can fit it into their busy schedules.

- **Apps and digital services enable workouts on demand.** Videos and programming that enable people to exercise at home are not new. Jack LaLanne taught people to exercise on American television as early as 1951, and Jane Fonda popularized workout videos in the 1980s. In the last 5-10 years, ubiquitous broadband/WiFi services and ownership of mobile devices have brought an explosion in the consumer market for exercise apps and streaming services. The options are increasingly diverse and abundant, from free YouTube videos and mobile apps, to fitness video games (or "exergaming"), to paid monthly subscription services and sophisticated networked equipment. Workouts can be accessed via live-streamed classes or downloadable pre-recorded videos, and through computers, mobile devices, wearables, and gaming systems. They can be done in bite-sized segments, following specific gurus and influencers, at all levels of expertise, and in almost any type of exercise that exists (running, HIIT, weightlifting, yoga, barre, stretch, dance, etc.). These services now enable people to exercise at home or in any other convenient location, at any time of day, any intensity, and any length. They are particularly important in markets where the infrastructure, facilities, and programming for physical recreation are limited. For example, while trendy barre or spin studios may be scarce outside of urban and suburban areas in the United States,[45] anyone can now access these classes via streaming platforms and subscription services. Many businesses are trying to figure out how to position themselves and profit in this increasingly fierce and crowded field. Some bricks and mortar gyms and studios now feel that they have to offer apps and streaming services as part of membership benefits in order to compete. The examples of offerings in this space are diverse and too many to name, including gym/studio spin-offs such as Gold's AMP or Pure Barre On Demand; high-tech and personalized online-only services such as Aaptiv and Pear Sports; celebrity/influencer-based workouts like Ballet Beautiful and Sweat with Kayla; and gaming-based workouts like Wii Fit and EA Sports Active. While the majority of offerings and startups have been based in the United States, services are launching in countries and languages all over the world. China has its own massive Chinese-language industry of apps and streaming services, and it is home to some of the world's largest apps for streaming workouts, such as Keep, Daily Yoga, and Hotbody.[46]

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[45] Florida, R. and Boone, A. (2018, Jan. 2). The Urban Fitness Revolution. *CityLab*. https://www.citylab.com/life/2018/01/the-urban-fitness-revolution/549467/.

[46] Borak, M. (2017, June 12). Top 7 fitness apps in China. *Technode.* https://technode.com/2017/06/12/top-7-fitness-apps-in-china/.

- **New business models and technologies revolutionize the home gym.** At the higher end of the market, new tech-based businesses are offering boutique-quality classes to in-home consumers who buy both networked equipment and a monthly programming subscription. The recent popularity of Peloton confirms there is substantial demand from consumers who want the convenience of exercising at home on sophisticated equipment, without losing the advantages of a live experience, such as instructor interaction, the energy of exercising with a group, and a sense of community. Building on its success, Peloton is expanding internationally (Canada, United Kingdom, Germany) and also into other types of workouts, including treadmill and yoga. One of the latest innovators in the home gym market, Mirror's innovative technology combines LCD display, smart phone technologies, camera, sound systems, and biometric monitoring to bring high-quality, tailored workouts into the homes of consumers, requiring only wall space for the mirror and a small exercise area. Numerous other startups are attempting to build upon Peloton's success in other types of workouts, including rowing (Crew), boxing (FightCamp), weightlifting (Tonal), and even virtual reality fitness gaming (VirZOOM, ICAROS). Meanwhile, successful bricks and mortar gyms and boutique studios are spinning out their own branded equipment-based workouts (Rumble, Equinox, FlyWheel, etc.).

  These kinds of high-tech equipment-based streaming services are still quite new, and still primarily U.S.-based, and so it remains to be seen whether their convenience will draw customers away from gyms/studios, whether they will be used to supplement gym/studio workouts, or whether they will draw in new exercisers who do not patronize gyms/studios. One U.S. survey indicated that 54% of Americans who work out at least once a month are interested in buying an at-home fitness system, but key concerns include lack of space for the equipment (34%) and the high cost (24%).[47] Ultimately, space and cost concerns may narrow the market opportunity for the most sophisticated at-home networked equipment and streaming systems. At the same time, sensors and connectivity are being embedded into a wide range of other exercise equipment and sporting goods (e.g., Move It compact smart workout equipment, Bowflex smart dumbbells, Wilson smart basketballs, connected running shoes and insoles, Wii Fit Plus Balance Board, and so on), providing many other options for consumers to amp up their at-home and independent workouts and benefit from the "Internet of things," but at a much lower price point and with fewer space constraints.

- **The fitness-hospitality nexus enables people to continue their exercise routines during travel.** Travel is often unhealthy and disruptive to exercise routines. The recent rise of wellness travel has revealed many opportunities in the hospitality industry, especially in meeting the needs of secondary wellness travelers – those who want to continue their wellness lifestyles (e.g., exercise, healthy eating, good sleep, etc.) whenever they take a trip. GWI estimates that secondary wellness travelers take over 740 million domestic and international trips each year, spending over $551 billion[48] – and their needs are no longer met by the basic closet-sized gyms typical in 3-star hotels. Major hotel chains (especially at the premium level

[47] Raphael, R. (2018, Oct. 18). Exclusive: Will Americans ditch the gym for the Peloton model? Survey sheds light. *Fast Company.* https://www.fastcompany.com/90253116/exclusive-will-americans-ditch-the-gym-for-the-peloton-model-survey-sheds-light.

[48] GWI defines "secondary wellness travelers" as those who seek to maintain wellness or engage in wellness activities during any kind of travel (e.g., someone who visits a gym, gets a massage, or prioritizes healthy food when they take a trip). See: Global Wellness Institute (2018). *Global Wellness Tourism Economy.* https://globalwellnessinstitute.org/industry-research/global-wellness-tourism-economy/.

but increasingly mid-range as well) are beginning to offer in-room fitness equipment and streaming videos. Some brands are partnering with a diverse array of fitness companies such as Technogym, Reebok, and Peloton to offer equipment and programming that many guests are already accustomed to using at home. Equinox, the luxury fitness brand, entered the travel market in a big way when it opened the high-end Equinox Hotel in New York City's Hudson Yards development in 2019. The company saw an opportunity when its research showed that Equinox members were choosing hotels in proximity to Equinox gyms during travel. Equinox has plans to open more hotels in major U.S. cities, including Seattle, Chicago, Houston, Los Angeles, and Santa Clara.

Another innovative new concept targeting wellness-conscious travelers is the startup London Fitness Tours, which has developed the antidote to slow-paced, crowded guided walking tours. The founders curated a variety of 2-3 hour itineraries that take participants off-the-beaten path to lesser-known parts of London, allowing leisure or business travelers to easily fit in a tourism experience while simultaneously getting a workout. Led by a trained fitness guide, the tours combine power walking and on-the-go exercises (with warm-ups and stretching), with local music, storytelling, and cultural insights and exploration. The pace and intensity can be tailored to the needs of each group (typically less than 8 people).[49] Airports are also paying attention to the wellness and fitness needs of travelers on-the-go. Roam Fitness is launching a chain of airport gyms in the United States (with plans to open 20 locations in the next five years), while many airports around the world now offer 24-hour fitness facilities and swimming pools (for a fee). San Francisco launched the first free-use airport yoga room in 2012, and these are now found in many airports globally, from London to Hong Kong. Sydney airport recently opened a stretch studio in its international terminal. Switzerland's Zurich airport provides rentals of inline skates, bicycles, and Nordic walking poles to encourage travelers to exercise in the conservation area just outside the airport. In the United States, the American Heart Association is partnering with airports to map out guided walking circuits throughout airport terminals.

Making physical activity a daily habit

With the rise of sedentary lifestyles and jobs and the decline of natural movement, we now have to be proactive about physical activity. Adults around the world cite a lack of motivation and habit as one of their key barriers to engaging in exercise and fitness. One way to address this barrier is to re-insert movement back into our routine activities and the places where we spend much of our time – i.e., at work and at school – in order to cultivate a lifelong habit of movement as part of our daily lives.

- **Workplace wellness initiatives incorporate physical activity into work days.** Work is a key reason that adults do not have time for regular physical activity. Yet, physical activity during the workday is more important than ever given our stressful, fast-paced, but increasingly sedentary work lives. A growing number of employers are aware that unhealthy employees can be bad for the bottom line, due to reduced productivity, higher healthcare costs, higher absentee rates, and other costs. Many workplace wellness programs now provide amenities and "perks" that encourage employees be more active, such as employer-subsidized gym

[49] See: https://unexpectedlondon.com/fitness-tours

memberships, corporate gyms, free on-site fitness and yoga classes, free fitness bands, workplace running clubs, and employee fitness challenges. Fitness intermediaries such as Gympass and ClassPass have entered the workplace wellness market, offering member employees a variety of exercise options without any annual or monthly commitment.

While less widespread, some companies are also proactively incorporating movement directly into their employees' work days – for example, conducting walking meetings, providing daily stretching and activity breaks, allowing for exercise during paid work hours, providing flex-time for workers to participate in fitness and outdoor recreation, encouraging casual attire that is conducive for movement, installing banks of treadmill and stationary bike desks, and designing movement-friendly workplaces (e.g., open/attractive stairwells). Employers in Nordic countries are often noted for their progressive policies on physical activity, with support from their governments. For example, most companies in Sweden and Finland subsidize their employees' gym memberships, sporting activities, and active recreation with a tax-free allowance (known as "friskvårdsbidrag" in Sweden, often in the range of $100-$600 or more per year).[50] Many companies actively encourage employees to exercise during the work day, even providing one hour per week of paid work time for working out. In addition, the employee-friendly company cultures, emphasis on work-life balance, and social benefits system in Nordic countries also help support people in maintaining their exercise habits.

- **Fitness for freelancers.** With the rise of the gig economy, freelancing, and remote work, a growing number of workers do not have access to the types of workplace-based fitness and wellness amenities described above. A number of innovative new coworking-fitness hybrid concepts are being developed to serve this population. Some established fitness companies are venturing into the coworking market, creating work spaces co-located with their premium workout facilities. Life Time has opened Life Time Work coworking spaces alongside its fitness centers in four locations across the United States. Equinox started opening coworking spaces in some of its high-end gyms in 2016, and it recently announced a partnership with Industrious to integrate coworking into its facilities nationwide. The Washington, DC-based Flow Yoga Center has created WorkFlow as a coworking space centered around yoga, meditation, and calm. The Brooklyn Boulders rock-climbing gym added a coworking space in 2013, when its founder realized members were working on their laptops at the club.[51] A new startup called WorkStrive is helping gyms across the Washington, DC, area convert their facilities into coworking areas during quieter daytime hours, with members accessing them on a day-pass basis.

  On the flip side, major coworking companies are also adding fitness into their facilities to differentiate themselves in an increasingly competitive marketplace. Coworking giant WeWork has experimented with running fitness classes and popups inside its facilities for a number of years, and it directly entered the fitness market when it opened Rise by We in New York City in 2017 (although the facility is not directly connected with its coworking space and

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[50] See: 1) Bichell, R.E. (2015, July 28). How Finns Make Sports Part of Everyday Life. *NPR Morning Edition*. https://www.npr.org/sections/health-shots/2015/07/28/426748088/how-finns-make-sports-part-of-everyday-life. 2) Bas-Wohlert, C. (2018, Feb. 28). Is mandatory exercise at the office Sweden's latest craze? *The Local*. https://www.thelocal.se/20180228/is-mandatory-exercise-at-the-office-swedens-latest-craze.

[51] See: 1) Volpe, A. (2019, May 23). Gym-Coworking Hybrids Are the Latest Gig Economy Creation. *GQ.* https://www.gq.com/story/gym-coworking-hybrids. 2) Castillo, M. (2018, June 1). Working up a sweat at work sounds gross, but some start-ups are putting their office in the gym. *CNBC*. https://www.cnbc.com/2018/06/08/start-ups-are-making-their-headquarters-the-gym.html.

does not have reciprocal membership privileges). Work It in St. Paul, Minnesota, claims to be the world's first fitness-branded coworking space, offering an array of active workstations (treadmill desks, bicycle desks, etc.), a fitness room, shower facilities, and bike racks. In Shanghai's crowded coworking arena, some companies offer integrated gyms (e.g., Mixpace, We+), and Naked Space is expanding its gyms, yoga rooms, and wellness facilities to attract the upper-end of the market.[52] Many high-end coworking spaces in London include gyms and fitness classes (e.g., City Pavilion, The Office Group, Uncommon), while Plexel members get discounted access to the world-class gym, swimming pool, and velodrome in East London's Olympic Park. London's successful Mortimer House, which opened in 2017, has developed an innovative wellness-themed concept that blends coworking with fitness facilities, meditation, and a social club.

- **Physical education in schools builds lifelong habits.** Gymnastic-style exercises and sports were first integrated into children's school days during the 1800s in the United States and some countries in Europe (Denmark, Germany). Today, physical education (PE) classes in schools are recognized as essential for helping children build awareness, skills, and lifelong habits of physical activity; they also contribute to better mental wellness, social development, academic performance, and school outcomes. According to a global study by UNESCO, 97% of countries have legal or de facto requirements for some provision of PE in schools. But in spite of these official commitments, actual provision of and access to school-based PE is lacking in many places, and in 29% of countries PE is not being delivered in accordance with national requirements or expectations. This gap is due to many factors, including prioritization of academic subjects, financial constraints, a lack of qualified teachers, and inadequate facilities and equipment.[53] For example, 40% of public and private schools in India have no outdoor sports facilities.[54] Even in the United States, the outdoor athletic facilities and playgrounds are considered to be in fair to poor condition in one-quarter to one-third of public schools.[55] In addition, some countries with mandated PE do not allow girls to participate. In many places, the PE curriculum focuses on performance- and competition-based high-skill sports, which can be intimidating for many children and does not necessarily build useful lifestyle skills. In addition, PE requirements are typically lower in secondary schools than primary schools, tapering off just at the age when youth physical activity levels start to decline and become more alarming. For children and teens who do not have access to PE classes at school, the only way to formally learn physical skills would be through private sporting clubs and schools, which are unaffordable for large segments of the population in most countries.

  As governments in many countries start to become alarmed about the crisis of physical inactivity, obesity, and chronic disease, many are putting a new focus on the provision of PE in schools. One region where PE has been in the spotlight is in the Middle East. In 2017, Saudi Arabia lifted its ban on physical education and sports programs for girls in public schools,

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[52] Yoo, E. (2017, Feb. 17). We checked out 8 co-working spaces in Shanghai, so you don't have to. *Technode.* https://technode.com/2017/02/17/shanghai-based-7-co-working-spaces-review/.

[53] UNESCO (2014). *World-wide Survey of School Physical Education. Paris: UNESCO.* https://en.unesco.org/inclusivepolicylab/e-teams/quality-physical-education-qpe-policy-project/documents/world-wide-survey-school-physical.

[54] EY (2017, Sept.). *Technology Is Changing the Indian Events and Activation Industry.* https://www.ey.com/Publication/vwLUAssets/ey-experience-next/$FILE/ey-experience-next.pdf.

[55] Alexander, D., and Lewis, L. (2014, March). *Condition of America's Public School Facilities: 2012-2013*. U.S. Department of Education. Washington, DC: National Center for Education Statistics. https://nces.ed.gov/pubs2014/2014022.pdf.

while in 2018 Egypt's president has called for mandated PE in schools (currently Egyptian public schools only pay lip service to PE classes; it is not a priority for schools or parents, and both staffing and facilities are considered to be abysmal). There is extensive research and analysis available on good practices in school-based physical education, which is beyond the scope of this report. In short, an expanded focus on PE in schools for all children, across all regions, may be one of the highest-impact ways to increase physical activity participation over the long term.

- **Movement throughout the school day.** School-based physical education classes alone do not provide a sufficient level of physical activity for children. On average, schools around the world allocate 97-99 minutes per week to physical education,[56] which is far less than then one hour of activity per day recommended for children by the WHO. As time for PE and recess has decreased in schools across many regions, some are experimenting with ways to incorporate movement and play into the classroom and throughout children's school days, and most of these efforts are easily accessible for schools with very limited financial resources. Getting away from the tradition of children sitting quietly at desks, teachers are encouraging more movement around the classroom, developing active and play-based lessons, scheduling movement breaks, and incorporating activity-based equipment and active seating into the classroom (e.g., balance balls, pedal desks, yoga mats, balance boards). In the United States, the Active Schools initiative (launched in 2013 as part of Michelle Obama's *Let's Move!* campaign) is a public-private partnership working with more than 23,000 schools around the country to integrate 60 minutes of movement and play into the day for every K-12 student.[57] Finland's government launched its national Finnish Schools on the Move ("Liikkuva Koulu") initiative in 2010, aiming to build a culture of movement throughout the school day. Today, 90% of municipalities and comprehensive schools are involved in the program, which focuses on efforts such as: non-traditional, movement-based teaching methods; more time during the school day for PE and recess; encouraging active transit to school; and empowering and educating children (e.g., training students to be "recess activators" and encourage active games and play).[58] The Daily Mile initiative, first conceived by a Scottish teacher in 2012, is an initiative that has primary school students take a 15 minute break every school day (outside of formal PE classes) to run or jog outside. The initiative has been lauded for its simplicity and inclusiveness, helping children get exercise and fresh air without any special equipment, funding, or training required of the schools and teachers. More than 9,300 schools across 66 countries now take part in the Daily Mile, involving over 1.9 million children, and research has shown significant health benefits for participants.[59] Some regions in Europe are focusing on encouraging children to use active transit to/from school. For example, Portugal's "CicloExpresso do Oriente" program, launched in 2015, organizes a "bike train" of groups of

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[56] UNESCO (2013).

[57] See: https://www.activeschoolsus.org/

[58] See: 1) *Liikkuva Koulu*, https://liikkuvakoulu.fi/english. 2) Walker, T.D. (2015, Jan. 9). Finnish Schools Are on the Move—and America's Need to Catch Up. *The Atlantic.* https://www.theatlantic.com/education/archive/2015/01/finnish-schools-are-on-the-moveand-americas-need-to-catch-up/384358/. A wide range of other school-based initiatives throughout Europe is available at: WHO Regional Office for Europe (2018). *Promoting Physical Activity in the Education Sector: Current status and success stories from the European Union Member States of the WHO European Region.* http://www.euro.who.int/__data/assets/pdf_file/0006/382335/fs-education-eng.pdf?ua=1.

[59] See: 1) *The Daily Mile,* https://thedailymile.co.uk/. 2) McIvor, J. (2018, May 10). Daily Mile 'significantly improves health.' *BBC News*. https://www.bbc.com/news/uk-scotland-44053387.

students cycling to school, accompanied by a supervising parent.[60] The "walking school bus" concept, first developed in Japan several decades ago, organizes groups of children to walk to school along a set route, with designated "bus stops" and "pick up times" similar to a regular school bus. In the last 20 years, the concept has spread to hundreds of schools across the United Kingdom, Australia, New Zealand, Europe, and North America.

Making physical activity fun and appealing

Many people do not find physical activity to be fun. It is much more difficult to drag ourselves to exercise when it is something we feel we have to do rather than an activity we enjoy and look forward to. Recognizing that consumers are more motivated by fun than by a sense of obligation, businesses and communities have introduced different ways of making physical activity more fun and appealing.

- **Building connections with leaders, teams, tribes, and communities.** People desire connections with other people, especially at a time when we are collectively suffering more loneliness and social isolation than ever. Some industry analysts trace the rise of boutique fitness studios (e.g., SoulCycle, CrossFit, Flywheel, Orangetheory) to a consumer desire for camaraderie, to find a community of like-minded people, to belong to a tribe, and to have a shared identity – all of which motivate people to show up consistently and remain loyal to a specific brand (regardless of the high cost of classes at many of these brands). Fitness brands are increasingly built on charismatic teachers, gurus, and influencers, who can attract and maintain a devoted following in live classes, online classes, and in social media. To make the atmosphere fun and to make the classes feel like a party, some fitness concepts place a heavy emphasis on music (e.g., Y7, Barry's Bootcamp, Zumba). The recent rising popularity of boot camp and small class training serves consumers who are attracted to a smaller, more personal setting where there is individual attention as well as group interaction. The media has likened the tribe-like devotion to popular fitness brands and influencers as becoming a replacement for church and religion among younger generations – while also noting that they can subtly exclude people who do not fit a certain image (young, slim, white).[61]

  At the same time, some faith communities and churches in the United States are tapping into this same desire for community and bringing exercise and fitness options to their followers. For example, the ChurchFIT program was launched at a Nashville, Tennessee mega-church in 2011, introducing a wide variety of fitness classes (yoga, Zumba, kickboxing) to a primarily African American community that has higher-than-average risk factors for chronic disease and is generally less likely to participate in those kinds of activities.[62] Many churches are adding exercise classes to their roster of programming and building state-of-the-art fitness facilities that church members can access for a low fee, seeing these efforts as a way to minister to the

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[60] See: https://cicloexpressodooriente.wordpress.com/

[61] See: 1) Romanoff, Z. (2017, Dec. 4). The Consumerist Church of Fitness Classes. *The Atlantic*. https://www.theatlantic.com/health/archive/2017/12/my-body-is-a-temple/547346/. 2) Burton, T.I. (2018, Sept. 10). "CrossFit is my church:" How fitness classes provide the meaning that religion once did. *Vox.* https://www.vox.com/the-goods/2018/9/10/17801164/crossfit-soulcycle-religion-church-millennials-casper-ter-kuile.

[62] Munson, M. (2018, Nov. 15). One Woman Is Changing Lives By Bringing Health and Fitness to Church. *Woman's Day.* https://www.womansday.com/health-fitness/a25099975/churchfit-fitness-plan-initiative/.

needs of their community while also attracting members.[63] The American Council on Exercise even listed faith-based fitness as a top exercise trend in 2016.[64] In the 1800s, the fist mission of the YMCA organization, one of the pioneers of the modern fitness industry (see *Chapter II*), was to train strong Christian men, linking "physical prowess with strong faith and morality."[65]

Of course, American boutique fitness brands did not invent the concept of tribe and community while exercising. Across the world in Iran, a 700-800 year old exercise tradition known as zurkhaneh ("house of strength"), now closely linked with Sufiism, remains popular throughout the country for its elements of traditional music, chanting, religious ritual, and community as much as for the exercise aspect (see Chapter V for more details). For children and adults everywhere, the main attraction of team sports is often the element of teamwork and camaraderie. The recent growth and success of mass recreation events that have arisen around the world is also connected with this community element – from Bogotá's Ciclovía, to weekly mass outdoor runs in Cairo, to plaza dancing in China (see Chapter V for more details). Global Wellness Day, first launched in 2011, is a worldwide mass participation event that encourages people to get active in their communities and join in other healthy habits. The 2019 event attracted millions of participants across 7,000 locations in more than 150 countries, with free events ranging from a 45k marathon and beach walking to Zumba, yoga, and tai chi classes.[66]

- **Putting the "play" back into youth sports.** Other than independent walking or running, sports are by far the most accessible and affordable form of recreational physical activity in the world. Anyone, anywhere can play sports like soccer, rugby, or cricket with just an empty lot or field and a ball or some simple equipment; they also do not require specialized instruction, as basic skills and rules can easily be learned from other players. Outside of formal physical education in schools, sports are the most important access point for children to learn physical skills and build a lifelong habit and love of being active. In developing countries and lower-income regions, youth sports are typically not a business and do not require any money (outside of training programs for elite athletes) – they are simply a fun, informal activity that children do in their free time. In wealthier regions, and especially across Europe and North America, youth sports are typically more formalized, more expensive, and competitively-focused, and are organized through sporting clubs and leagues (and also in secondary schools in some countries, such as the United States, United Kingdom, and Australia). However, the high-skill, high-pressure, highly-specialized, and highly-competitive trajectory that youth sports have taken in some places, notably the United States, is not the most effective way of keeping large numbers of kids involved and active. One study found that 70% of U.S. children drop out of organized sports by age 13, while the costs of participation and lack of access to facilities can be a major barrier for lower-income and minority children (who have lower sports participation rates than wealthy and white children in the United States). While informal sports play has largely become a thing of the past in many middle- and upper-income communities, research

[63] Beresini, E. (2016, Oct. 3). Thou Shalt Work Out. *Outside Online.* https://www.outsideonline.com/2113621/thou-shalt-workout.

[64] McCall, P. (2015, Dec. 7). 10 Fitness Trends to Look Out For in 2016. *American Council on Exercise.* https://www.acefitness.org/education-and-resources/professional/expert-articles/5762/10-fitness-trends-to-look-out-for-in-2016.

[65] Eschner, K. (2017, Dec. 29). The YMCA First Opened Gyms to Train Stronger Christians. *Smithsonian Magazine.* https://www.smithsonianmag.com/smart-news/ymca-first-opened-gyms-train-stronger-christians-180967665/.

[66] See: https://www.globalwellnessday.org/about/what-is-gwd/

has found that free/unstructured play can produce higher levels of physical activity than organized sports (because children spend less time sitting/waiting to play).[67]

In the United States, the Aspen Institute's Project Play initiative, launched in 2013, is working in communities throughout the country to bring "fun" and free play back to youth sports, reduce attrition rates, and raise sports participation rates among disadvantaged populations. The project has developed eight strategies that can help parents, coaches, and communities to make sports a more accessible and enjoyable experience for all children.[68] Elsewhere in the world, the approach to youth sports that is most often lauded for its effectiveness is the model in the Nordic countries, which approach youth sports as a major public health and welfare concern. In Norway, for example, sports participation rates at all ages (children, teens, adults) are among the highest in the world, and the participation gap between girls and boys is smaller or nonexistent. Many factors account for this, including the high popularity of lifestyle and outdoor sports that can be done at all ages (organized walking, jogging, skiing) over organized team sports, as well as a high level of government investment in sporting facilities throughout the country.[69] Organized sports clubs and teams abide by policies established by the 1987 "Children's Rights in Sport" doctrine, which prohibits high-level competition before ages 11-13, prohibits publishing scores or rankings for younger children, puts high value on children's participation in planning and execution of their sporting activities/training, emphasizes fun and friendship, and keeps costs low.[70] These policies result in more children playing more sports for fun, more free play, overall higher levels of physical activity among youth, and a higher persistence of sports involvement into adulthood.

- **Leveraging technology to make physical activities fun and rewarding.** Physical activity has long involved an element of competition and game, by way of individual and team sports – from running and swimming races, to cricket and soccer matches, to wrestling and karate competitions. The technology sector is tapping into this competitive spirit to motivate exercise and make fitness more fun and rewarding for participants. "Gamification" has become one of the most popular trends and buzzwords in the fitness industry. The latest high-tech fitness equipment (treadmills, stationary bikes, etc.) are incorporating more and more high-tech functions – high-resolution video, large displays, biometric sensors, data tracking, connectivity with apps and wearables, and even virtual reality – in order to maintain participants' interest and motivation in activities that can otherwise be monotonous and boring. Elements of gaming, competition, and rewards are now incorporated into many fitness apps and fitness wearables – from Fitbit's personal progress bars and social challenges, to apps like Nexercise and Yodo Run (in which participants earn workouts points that can be exchanged for gift cards and cash rewards) and Fitocracy (which awards points and social badges via role-playing games and team challenges). Many popular streaming fitness services (e.g., Peloton, Fiit, ClassPass Live) incorporate real-time leaderboards and performance metrics to motivate class participants with elements of friendly competition and beating personal goals.

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[67] Aspen Institute (n.d.). *Project Play: Challenges to Physical Activity.* https://www.aspenprojectplay.org/kids-facts-challenges.

[68] See: https://www.aspenprojectplay.org/ and http://youthreport.projectplay.us/the-8-plays/introduction.

[69] Green, K. (2016). Youth sport in Norway. In K. Green and A. Smith, Eds., *Routledge Handbook of Youth Sport* (72-83). New York: Routledge.

[70] Farrey, T. (2019, April 28). Does Norway Have the Answer to Excess in Youth Sports? *New York Times.* https://www.nytimes.com/2019/04/28/sports/norway-youth-sports-model.html.

The nexus of video gaming and exercise ("exergaming") originated in the 1980s, and then took off with the wildly popular *Dance Dance Revolution* game in the 1990s (see *Chapter III* for more background). Some video gaming systems interface with specialized equipment and controllers, like the Wii Fit Plus Balance Board, and some also connect directly to treadmills, stationary bikes, and ellipticals. The advanced gaming technologies developed in the last decade now allow people's bodies to directly control their video games. This has opened an endless array of options for exercise- and sport-based video games of all kinds – from dance and yoga to boxing and racing – in which participants get a workout while they game. Popular mobile gaming apps like *Pokémon GO*, *Ingress*, and *Zombies, Run!* have added elements of immersive augmented reality and adventure that take game-based exercise outside. Now fitness equipment manufacturers are exploring the use of both gaming and augmented and virtual reality in all kinds of exercise equipment and systems targeting both the home and commercial gym markets. These include sophisticated, high-tech VR systems like the VirZOOM bike and Black Box VR (an immersive VR gym experience), as well as lower-tech floor and wall game systems that can be incorporated into gyms, schools, playgrounds, and public spaces (e.g., NEOS electronic playground gaming systems). Exergaming and health games are now attracting broad attention, even from the medical and research communities, for their potential to leverage the popularity of gaming to encourage exercise and change behaviors, from young children to aging seniors.[71]

- **Dance as exercise.** Dance in all its forms has always been a popular form of recreational physical activity. Ever since the development of jazzercise in 1969, dance has become a major offering in the fitness industry. It has surged in popularity in recent years, with almost every conceivable dance form being adapted for fitness classes (including Zumba, dance fusion, cardio belly dancing, street dance and hip hop, pole dancing, Pound fitness, TAPfit, BollyX, KpopX Fitness, and so on). Dance fitness is now offered widely in comprehensive gyms and specialized studios, as well as online classes and fitness video games, and is sometimes infused with weightlifting and toning routines. Some urban fitness studios (e.g., New York City's Forward_Space and 305 Fitness) have developed dance party workouts that feel more like a wild Friday night at a nightclub than an exercise class. Dance as exercise is especially appealing to women because it is fun, artistic, freeing, expressive, empowering, and can give a sense of community connection. Outside the fitness arena, all forms of artistic dance (ballet, tap, jazz), traditional and folk dance (belly dancing, Irish step dance), and social dance (swing dancing, line dancing, salsa) have been rising in popularity in recent decades, among both children and adults, and studio and class options have expanded in many cities around the world. Popular mindful movement practices, such as Pilates and barre, also have close linkages with dance traditions.

  Beyond the structured dance forms found in fitness classes and studios, more niche forms of spontaneous, social, expressive, ecstatic, transcendental, and meditative dancing have also sprung up around the world (from silent discos to the movement meditation practice 5Rhythms). In China, guangchang wu, or "plaza dancing" has exploded in popularity among middle-aged and senior women. Participants meet in urban plazas, squares, and parks in early mornings and evenings and do synchronized dance routines to deafeningly-loud Chinese

[71] For example, see: Parker, S.G. (2015, Sept. 18). Health Games Research: Advancing Effectiveness of Interactive Games for Health. *Robert Wood Johnson Foundation Program Results Report.* https://www.rwjf.org/en/library/research/2011/03/advancing-the-field-of-health-games.html.

popular music, sometimes with costumes or props. The movement started in the 1990s as a way for retired women to get some exercise and socialize, and there are now an estimated 100 million participants across China. Street and social dancing is popular in Latin America too – for example, on Sundays, parks and plazas across Mexico City host groups of amateur Latin dance aficionados who gather to practice, learn from each other, and socialize. In Buenos Aires, locals gather regularly in plazas and squares to dance the tango. In Brazil, a dance craze known as "passinho" (a mix of breakdance and funk, combined with Brazilian traditional dance moves) is done in the streets throughout the favelas of Rio de Janeiro.

Enabling movement in all physical conditions

The gym, fitness, mindful movement, sport, and other recreation and exercise activities and businesses that exist today mainly serve people who are already active or capable of conducting physical activity. That leaves out a wide swath of population whose physical conditions – related to age, medical conditions, disability, injury, etc. – make it difficult for them to participate in the activities currently available in the market, even though this population needs and would benefit greatly from physical activity.

- **The rise of silver fitness.** Rising life expectancies and chronic disease, unsustainable healthcare costs, and the ample leisure time of the senior population are converging in the need and opportunity for "silver fitness." In Japan, where demographics are rapidly shifting toward seniors, the government passed a law in 2006 to emphasize prevention, independent living, and care of seniors in their homes and communities rather than in expensive nursing facilities. This policy is spurring the development of exercise-focused senior day-care facilities, community-based senior fitness programs and events, and fitness/gym-based nursing homes for people who do have to enter long-term care facilities, as well as increasing the availability of certified trainers in senior fitness and rehabilitation. The over 60 population now makes up a substantial portion of membership at Japan's full-service gyms and fitness clubs, and government data indicate that Japan's seniors spend more on fitness and sports facilities than any other segment of the population.[72] A recent study by Public Health England and ukactive identified seniors as a significant growth driver for the public leisure sector, while revealing that older clients tend to feel more self-conscious when exercising in public and, as a result, work out less often than other age groups. Sensitive to the needs of this growing market, David Lloyd Clubs recently committed to making available a fitness trainer aged 55 or over in every one of its clubs by the end of 2022. In 2018, Australia's first Club W opened as a boutique fitness and wellness lifestyle space, aimed at providing an intimate, social "third place" that serves women over 55, who may not be interested or may be too intimidated to visit a regular gym or engage in fitness. In the United States, YMCAs have made a concerted effort to serve seniors, providing a lot of senior-friendly equipment, classes, and programming, and generally creating a welcoming and inclusive atmosphere for this demographic.

  The private sector is not the only channel to enable physical activity among seniors, many of whom are living on limited incomes. In China, over 600,000 pieces of equipment have been installed in neighborhood parks (e.g., jungle gyms, pull-up bars, ping pong tables, metal bikes, elliptical machines, exercise pavilions, etc.) to facilitate outdoor exercise among the senior

[72] Japan's fitness industry adapts to ageing demographics. *Australasian Leisure Management.* June 28, 2018. https://www.ausleisure.com.au/news/japans-fitness-industry-adapts-to-ageing-demographics/.

population, many of whom do not have the space or equipment at home, nor the means to pay for a fitness club membership. In fact, parks across China are primarily used by seniors, and their design and equipment often target older users rather than youth. This concept of "senior playgrounds" first originated in China in the 1990s, but quickly spread in Asia (Taiwan, Japan), Europe, and North America. In Europe and North America, senior playground facilities tend to be co-located with children's playgrounds (so seniors can exercise while minding their grandchildren) or designed as multigenerational spaces.[73] Exercising in public spaces provides other benefits, such as regular social interactions for seniors who are susceptible to loneliness and social isolation. Seniors may also face transportation constraints, or live in remote areas where exercise facilities are less readily accessible. The United Kingdom also recently launched a country-wide "10 today" radio campaign -– modeled on the popular radio calisthenics in Japan – as an experimental approach to make exercise convenient, accessible, and fun for seniors.

- **Mainstreaming therapeutic and recovery fitness.** Chronic health conditions, illness, and injury can discourage many people of all ages from physical activity; and when they do so, they need to proceed with supervision and care. In the United States, medical fitness centers – typically established by, or in partnership with, hospital systems – have emerged to bridge this gap and provide a continuum of care, from rehabilitation and physical therapy, to physician-supervised exercise, to recovery and prevention. Medical fitness centers, which have grown steadily and exceed 1,400 in 2018, are helping to reach an important demographic that is not well served by the commercial fitness market. According to the Medical Fitness Association, 40-50% of individuals who join a medical fitness center have never been a member of any type of fitness center before; 60-70% of participants in transitional/specialized medical/fitness programs will become full fitness club members. Members of medical fitness centers also tend to be older, averaging 49.3 years old, versus 37 years for traditional multipurpose gyms.[74] As another approach to meet the needs of this population, Florida's Orlando Health is partnering with CrossFit coaches to adapt workouts for patients with spinal cord injuries, with the goal of creating an inclusive, non-intimidating, and safe community where patients can continue their rehabilitation and build their strength in a mainstream gym setting.

- **Prescribing exercise.** The United Kingdom is a leader in prescribing exercise as a part of medical treatment. The United Kingdom's National Health Service has a well-established exercise referral scheme, whereby patients are referred to government-funded public leisure centers to access appropriate exercise and activity programs and can access these services for free. Exercise is Medicine (EIM) – an international initiative originating in the United States (co-launched by the American College of Sports Medicine and the American Medical Association in 2007) – provides a framework for the inclusion of people in any health or physical condition in the delivery and support of physical activity. EIM advocates for physical activity to be included as a standard part of medical treatment and the patient care process, with physicians providing assessments, counselling, a prescription for exercise where appropriate, and a referral to available resources. Having a physician prescribe exercise as part of a treatment plan can give patients a powerful nudge, especially to those who had been prevented by their

[73] Abbit, L. (2015, August 5). Playgrounds for Seniors Coming Your Way. *Senior Planet.* https://seniorplanet.org/playgrounds-for-seniors/.

[74] Evans, D. (2017, April 27). *Analyzing and Achieving Peak Performance of Your Medical Fitness Center.* https://cdn.ymaws.com/members.medicalfitness.org/resource/resmgr/mini_slide_show/regionals/2017_North_East/2017_NE_-_D._Evans.pdf.

health condition from being physically active in the past. However, appropriate resources – including accessible facilities and trained professionals – need to be available to serve their needs. Singapore, part of the EIM global network, has launched Active Health Labs as a collaboration between Sports Singapore and other public health institutions. Active Health Labs conduct assessments and take referrals from physicians in order to prescribe and implement appropriate physical activity for patients, in order to treat, manage, and prevent common chronic health conditions. France is piloting schemes whereby physician prescribed fitness/exercise can be partially reimbursed by social security.

Embedding physical activity in the built environment

As noted in *Chapter I*, the human race used to be more physically active. In the past, we moved more not because we chose to, but because we had to. As natural movement has progressively diminished in our modern lives, many people cannot find the time to replace this movement with intentional, recreational physical activities. And many people choose not to exercise even if they do have the time, because they do not find sports or fitness to be appealing, no matter how much fun, music, technology, gamification, community, and other elements are injected into these activities. Therefore, an important way to engage more people in physical activity is by making movement a default in daily life, through infrastructure, design, and convenient amenities. A burgeoning wellness real estate movement around the world is helping to embed physical activity in the built environment in many different ways.[75]

- **Designing buildings, neighborhoods, and cities to encourage natural movement.** For far too long, the design of neighborhoods, buildings, and cities has been driven by efficiency and convenience. For decades, urban planning and infrastructure have focused on how to get people to their destinations in the quickest way, prioritizing vehicular traffic, and with little regard to how these kinds of built environments diminish physical activities or their consequences on our health and wellbeing. In recent years, movements such as new urbanism, active design, and the sustainability/green movement have advocated for planning and design approaches that encourage natural movement. Active design and active transit features that are becoming more common include: attractive and accessible stairways; walkways and pedestrian paths within and between buildings; access to public transit; creating sidewalks, dedicated bike lanes, and bike parking/storage areas; vibrant streetscapes; and other design and infrastructure features that make human-powered movement the easy, convenient, attractive, and default/preferred way to go from place to place. These features help add natural movement back into daily life and can go a long way in helping people meet the daily requirement of moderate physical activity.[76]

[75] See: Global Wellness Institute (2018). *Build Well to Live Well, Wellness Lifestyle Real Estate and Communities.* https://globalwellnessinstitute.org/industry-research/wellness-real-estate-communities-research/.

[76] For more information on active design, see: Center for Active Design (2010). *Active Design Guidelines: Promoting Physical Activity and Health in Design.* https://centerforactivedesign.org/guidelines/.

- **The rise of wellness real estate.** A recent and rapidly rising movement in the real estate industry is prioritizing people's health and wellness in the design, construction, and operation of all types of buildings and real estate (including residential, commercial/office, medical, hospitality, etc.). The wellness real estate sector is substantial, valued by GWI in 2017 at $134 billion worldwide, and it is expected to grow by 6% annually through 2022.[77] Most wellness-focused real estate projects prioritize walkability and physical activity, with features and amenities such as jogging paths, bike paths, swimming pools, recreation centers, fitness clubs and classes, parks, playgrounds, etc. The more these features are convenient and located within people's neighborhoods and communities, the more likely people will access them regularly to be active. Some neighborhoods sponsor programming, activities, and events that make physical activity an opportunity for socializing and being part of the community. Newer, purpose-built residential communities typically finance these kinds of amenities and activities with homeowners' association dues, so that they are accessible to all residents. For example, Arden, a new residential community in Florida, advertises itself as a "healthy living community," with 20 miles of trails; direct trail access to the Northeast Everglades Natural Area; a central lake for recreation; and every home backing up to a park, greenway, or trail. In Malaysia, Kundang Estates markets an active lifestyle by incorporating 14 acres of interconnected parks, herb gardens, a reflexology path, jogging/biking paths, and a children's garden/adventure park. These kinds of communities are becoming more and more prevalent, especially in competitive real estate markets across the southern/western United States, Australia, United Kingdom, and in many other countries around the world.[78] Premium fitness brands are now starting to enter the wellness real estate market, embedding fitness into luxury urban condos and apartments. One Hill South, an apartment building in Washington, DC, boasts a residents-only Equinox gym with a private personal training studio and an attached full-sized basketball court. High-end fitness brand Life Time has announced a "Life Time Living" concept, with plans to build healthy residences in Las Vegas, Miami, and Dallas, where apartments will be co-located with full-service Life Time Athletic Clubs.

Making physical activity affordable and accessible to everyone

Accessibility to facilities and affordability remain an important barrier to physical activity, especially for people with lower incomes or who live in low-resource communities and regions. Both private businesses and the public sector can play important roles in improving accessibility and lowering cost barriers.

- **The growth of HVLP gyms.** While bare-bones budget gyms have existed for a long time, the more recent emergence of the "high-value, low-price" (HVLP) health club model has brought a paradigm shift that is democratizing the fitness industry, attracting large numbers of new members at monthly fees in the $10-20 range (e.g., Planet Fitness and Crunch Fitness in the United States; PureGym, the Gym Group, and Xercise4Less in the United Kingdom; McFIT Global Group in Germany; Keep Cool in France; SmartFit in Brazil and other Latin American markets; etc.). The rise of these value-based gyms – which often come with a wide variety of equipment, classes, and amenities – has accounted for the bulk of gym facilities

[77] Global Wellness Institute (2018). *Build Well to Live Well, Wellness Lifestyle Real Estate and Communities.* https://globalwellnessinstitute.org/industry-research/wellness-real-estate-communities-research/.

[78] For an extensive list of examples, see GWI's *Build Well to Live Well* report.

and membership growth in recent years, especially in North America and Europe. HVLP gym models are emerging and growing in countries throughout the world, from South Africa to China, and will continue to increase the number of fitness clubs in the market and make them more affordable to consumers who have been priced out of traditional gyms and boutique studios.

- **The importance of small business.** Small business plays a critical role in increasing access to, and the affordability of, facilities and classes that promote physical activity. Many of today's large branded and franchised chains started out as small, independent studios. Yoga, barre, and Zumba studios, or boxing gyms, can be launched with relatively modest investments and can operate in a small footprint, and as such, can be tailored to local needs and price points. While investors and branded chains tend to focus on first-tier and higher-density urban areas, independent entrepreneurs – many of whom began as fitness instructors or fitness enthusiasts – are quick to launch new businesses in their own communities, bringing new fitness offerings to the local clientele when demand arises, especially at lower price points. Indeed, small business dominates the fitness industry in lower-income countries, in second-tier cities of middle-income countries, as well as in suburban and lower-density areas in higher-income countries. Looking beyond fitness, independent, non-branded businesses and local proprietors are especially dominant in most other segments, including Pilates and other mindful movement practices, martial arts studios, dance studios, local sports leagues and clubs, and so on.

- **Safe and comfortable spaces for women and girls.** In some countries, social/religious norms and government regulations can be significant barriers for women to be physically active. Recent policy changes in some countries have opened new access for women to exercise, spurring demand and new businesses (see *Chapter V* for more details). Women across Iran, Saudi Arabia, and Oman have gone from using men's gyms at off-peak (ladies') hours to having their own dedicated gyms and outdoor venues to work out. For example, following law changes in Saudi Arabia, Fitness Time introduced a women-only gym brand to serve this new and rapidly growing market. Women have been flocking to these new facilities, and some companies are converting their existing male-only gyms into women's gyms to meet demand. Iran, Saudi Arabia, Pakistan, and Afghanistan have created women's parks to provide places for women to get outdoor recreation and fresh air in "safe" spaces separated from men.

  Even in Westernized countries, female-only gyms and studios are a popular and growing segment of the fitness market. These gyms are very different from their predecessors several decades ago, which tended to emphasize weight loss, thinness, and beauty. Although female-focused fitness never entirely separates itself from an obsession with weight and appearance, today's women-only boutique studios are positioning themselves as sanctuaries where women can feel safe and comfortable to work out, build community and a sense of empowerment, and access women-centered wellness programming.[79] For example, Canada-based 30 Minute Hit, a female-only boxing fitness club, is planning a significant expansion in the United States. The U.S. brand Curves was one of the early pioneers of women-only fitness franchises in the 1990s; while its locations across the United States have plummeted to less than 400, it remains popular internationally with about 4,000 locations around the world. For example,

[79] See: Cills, H. (2018, July 26). Stronger Than Yesterday: The History of the Women-Only Gym. *Jezebel.* https://jezebel.com/stronger-than-yesterday-the-history-of-the-women-only-1827493595.

in Japan Curves' unintimidating, short, group-focused workouts are widely popular among senior women.

Across the board, the participation rate of women and girls in sports and active recreation is lower than that of men and boys. According to the Women's Sports Foundation, by age 14 girls in the United States drop out of sports at twice the rate of boys.[80] Hundreds of nonprofits and NGOS in countries throughout the world are running programs to address this gap. For example, many NGOs in the Middle East focus on the inclusion of girls and high-risk refugee children in after-school exercise, sports, and recreation, such as Morocco's Project Soar, Jordan's Reclaim Childhood project, and Iraq's Sports for Development initiatives (see *Chapter V* for more details). In the United States, Girls on the Run is a nonprofit after-school program for 8-14 year-old girls that uses running, training for a 5K run, and interactive lessons to teach self-respect and healthy lifestyle habits. First established in 1996, the program has served over 1.6 million girls throughout the country.

- **Governments play a major role in increasing access.** It does not have to cost anything to be physically active, if people can access public infrastructure, parks, green spaces, running and biking paths, and recreational facilities and programs. In many African countries, people living in both rural and urban communities gather before and after work to exercise in parking lots and stadiums, on beaches, in the streets, and even in cemeteries. In China, thousands of older men and women gather daily in public parks to do tai chi and in urban plazas and squares to do "plaza dancing." Governments all around the world are increasingly turning to physical activity as a way to keep their populations healthy and to prevent disease, and they are investing in the necessary infrastructure to support these aims. Many of these efforts take place at the local and municipal level. GWI's research has identified more than 21,000 free outdoor gyms worldwide (also known as "biosaludables," calisthenics parks, and senior playgrounds).[81] These are particularly popular across Latin America, Europe, and some parts of Asia (China, South Korea, India, Singapore), and many are located in developing countries. In China, outdoor gyms target the senior population. In New Delhi, India, members of parliament have used local development funds to install 1,700 open-air gyms in parks throughout the city since 2016, and hundreds more are in development, each costing about US$10,000 to install.[82] Governments across numerous Latin American countries (e.g., Mexico, Chile, Ecuador, Colombia, Brazil) sponsor free and low-cost exercise classes and sports activities in community centers, public parks, plazas, shopping malls, and city streets, serving millions of people each year. City-sponsored Open Streets and mass recreation events (following the model of Bogotá's Ciclovía) are another low-cost and high-impact way for governments to make walking, running, biking, and outdoor recreation accessible to all (see *Chapter V* for more details).

[80] Women's Sports Foundation. *Do You Know the Factors Influencing Girls' Participation in Sports?* https://www.womenssportsfoundation.org/support-us/do-you-know-the-factors-influencing-girls-participation-in-sports/.

[81] A searchable database and map of many outdoor gyms and "calisthenics parks" in countries around the world can be found at: https://calisthenics-parks.com/.

[82] See: 1) Manohar, M. and Singh, P. (2018, Aug.22). New Delhi: Open gyms make fitness a mass exercise. *Times of India.* https://timesofindia.indiatimes.com/city/delhi/open-gyms-make-fitness-a-mass-exercise/articleshow/65507526.cms. 2) Mishra, A. and Chitlangia, R. (2019, Feb. 8). Why open-air gyms topped Delhi MPs' list of development projects. *Hindustan Times.* https://www.hindustantimes.com/delhi-news/why-open-air-gyms-topped-delhi-mps-list-of-development-projects/story-uVwa3VLjcn8de5flfcROxJ.html.

In a few higher-income countries, governments provide subsidized and low-cost fitness centers for their citizens, with varying levels of quality and services. Community centers with basic workout areas, fitness classes, walking tracks, swimming pools, and sports facilities are common in communities across the United States (typically run by municipal parks and recreation departments), and city-run gyms, leisure centers, and sports/recreation centers are also abundant in the Nordic countries, Japan, Singapore, and Hong Kong. In Western European countries, such as Germany and Austria, governments provide subsidies and funding for a massive network of nonprofit sporting clubs (found in nearly every town large or small), which provide competition and training for millions of children and adults across all segments of the population. Fees to join these clubs are very affordable for most people (often just $50-100 per year), and lower-income children can get government support or waivers for the fees. The United Kingdom, Ireland, and Australia use a public-private model in which gyms and leisure centers are subsidized by national and local governments but often operated by private contractors. The facilities and services in these centers can sometimes rival those of higher-end commercial gyms, and the private outsourcing helps keep the quality of facilities high when public budgets are under pressure. In the United Kingdom, public expenditures on these kinds of recreational and sporting facilities and services topped $3.5 billion in 2018/2019,[83] while in Finland municipalities spend over $700 million per year subsidizing fitness and sports facilities and clubs.[84] As more nations implement "national fitness and exercise" and "sport for all" plans, public investments in such infrastructure, programs, and activities will likely increase, expanding accessibility to more people and also competing with fitness businesses operating at the lower end of the market.

[83] HM Treasury (2019, July). *Public Expenditure: Statistical Analyses 2019.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/818399/CCS001_CCS0719570952-001_PESA_ACCESSIBLE.pdf.

[84] Bichell, R.E. (2015, July 28). How Finns Make Sports Part Of Everyday Life. *NPR Morning Edition.* https://www.npr.org/sections/health-shots/2015/07/28/426748088/how-finns-make-sports-part-of-everyday-life.

V. REGIONAL HIGHLIGHTS

Asia-Pacific Highlights (2018)

Top Ten Physical Activity Markets in Asia-Pacific, 2018

	Recreational Physical Activities* (US$ millions)	Enabling Sectors (US$ billions)			Total Market Size (US$ millions)
		Technology	Equipment & Supplies	Apparel & Footwear	
China	$53,560.6	$6,590.0	$10,404.6	$40,115.9	**$109,348.8**
Japan	$20,793.2	$514.9	$8,756.0	$13,981.9	**$43,888.4**
South Korea	$14,246.5	$383.9	$1,933.8	$7,047.1	**$23,463.9**
Australia	$11,448.4	$326.7	$1,543.4	$3,525.1	**$16,730.3**
India	$3,511.6	$1,820.1	$381.9	$7,816.8	**$13,388.1**
Taiwan	$3,691.9	$269.2	$2,206.8	$1,659.4	**$7,730.1**
Hong Kong	$1,404.6	$84.5	$348.4	$2,299.2	**$4,110.1**
New Zealand	$1,720.8	$46.7	$278.7	$997.8	**$3,027.7**
Thailand	$743.7	$72.9	$449.5	$1,646.2	**$2,894.0**
Indonesia	$1,299.9	$179.9	$178.0	$983.7	**$2,611.8**

** Measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation in three types of recreational physical activities (sports & active recreation, fitness, and mindful movement).*

Source: Global Wellness Institute

Top Ten Sports & Active Recreation Markets in Asia-Pacific, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ millions)
China	43.5%	$42,281.6
Japan	66.5%	$13,301.8
South Korea	70.6%	$10,940.5
Australia	77.4%	$6,709.1
Taiwan	80.7%	$2,792.8
India	12.9%	$1,773.8
New Zealand	79.1%	$1,134.0
Hong Kong	54.0%	$787.3
Indonesia	33.7%	$685.6
Singapore	60.2%	$607.2

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Fitness Markets in Asia-Pacific, 2018

	Fitness Participation Rate*	Fittness Market Size* (US$ millions)
Japan	7.8%	$5,554.6
China	0.8%	$5,525.4
Australia	24.3%	$3,871.7
South Korea	9.2%	$2,593.8
India	0.3%	$1,020.4
Indonesia	0.7%	$547.3
Taiwan	5.5%	$522.6
New Zealand	20.0%	$491.7
Hong Kong	9.3%	$461.7
Singapore	19.5%	$429.3

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Mindful Movement Markets in Asia-Pacific, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ millions)
China	7.1%	$5,753.7
Japan	6.3%	$1,936.8
Australia	17.1%	$867.6
India	4.0%	$717.4
South Korea	5.1%	$712.3
Taiwan	8.6%	$376.5
Hong Kong	9.0%	$155.6
New Zealand	10.7%	$95.0
Indonesia	1.7%	$67.0
Thailand	2.0%	$45.3

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Asia-Pacific Developments

Asia-Pacific has one of the largest and most diverse physical activity markets in the world.

- Valued at $240.4 billion, the physical activity market in Asia-Pacific is large, diverse, and dynamic. Buoyed by economic growth, the rising purchasing power of the middle-class, and a growing interest in healthy and active lifestyles, Asia's physical activity economy is fast-growing and increasingly competitive. Consumers in higher-income countries and in the major metropolises keenly follow the latest fitness and recreational trends and offerings – from Europe's running craze to North America's passion for yoga and Pilates, and from spinning and HIIT to martial arts and dance. Meanwhile, Asia's vibrant private sector innovates, imports, improvises, and adapts to meet rising demand with a wide range of business models, including comprehensive luxury gyms, boutique studios, discount gyms, mobile gyms, 24-hour establishments, group exercise, personalized training, aggregators, apps, technology, etc. The growing range of options provides consumers with diverse offerings that include the newest classes, equipment, and technology-enabled services, at every price point. Yoga, Pilates, and other mindful modalities are in high demand, as are sports and recreational activities.

- Not surprisingly, the region is led by China and Japan, which rank second and third globally for the overall size of their physical activity markets. Across the region, physical activity participation varies widely; Australia and New Zealand boast some of the highest participation rates in the world, while South and Southeastern Asian countries lag far behind. As noted earlier, the value of the market is determined by the number of participants and their spending. Importantly, many people in Asia conduct their leisure-time physical activity in public places with little or no spending. For example, exercise in public outdoor gyms is very popular in China, especially among seniors. That is a large reason why the average per participant spending on doing recreational physical activities is $85 in Asia-Pacific, as compared to $544 in North America and $256 in Europe.

Supported by rising consumer demand and government policy, China's physical activity sector is dynamic and fast-growing.

- Estimated at $109.3 billion by GWI, China's physical activity economy ranks second only to the United States. The sector has grown rapidly over the last decade. The proliferation of health clubs and gyms in Tier 1 cities, alongside the widespread adoption of fitness apps and other online options, has captured wide investor and industry attention. Chinese consumers in the top cities can choose from a variety of large and boutique gyms, a broad array of virtual and online options, and a growing number of sports and recreational facilities and spaces, for pursuits that range from CrossFit, spinning, and tennis to boxing, yoga, and tai chi. Although many of the popular physical activity trends originate in the United States and Europe, both domestic and international enterprises quickly adapt to the preferences of Chinese consumers.

- China's physical activity sector is vast, diverse, and vibrant. While the size of China's fitness/gym market is on par with Japan (both estimated at $5.5-5.6 billion by GWI), China's fitness participation rate is only 0.8%, compared with much higher rates (from 5-10%) in the rest of

East Asia, suggesting significant potential for expansion in second tier cities and other urban areas. Traditional martial arts, with more than a thousand years of history, have lost some luster as young people gravitate toward Western-style "combat fitness." Outside of gyms and formal classes, a great number of Chinese exercise in public spaces, both individually and in groups, including in outdoor gyms, informal tai chi groups in parks, group runs, etc. The popularity of "plaza dancing," practiced by an estimated 100 million women (and some men) who are mostly middle-aged and seniors, has attracted investment in related music and online enterprises. China is also a leading market for fitness technologies, and its fitness wearables market is now the largest in the world ($4.6 billion according to GWI estimates).

- China's physical activity sector also benefits from the government's ongoing efforts to raise awareness about the importance of physical activity, combined with public investments in infrastructure and facilities to increase participation and reduce the disparity of access across regions. In 2016, China announced a National Fitness Plan as part of a comprehensive strategy to improve the general health of Chinese people. The plan laid out ambitious goals of having 700 million engaged in exercise at least once a week, and 435 million exercising regularly, through all types of fitness, sports, and active recreation activities, with the involvement of both the public and private sector. In the past few years, China has made substantial investments in public sports and recreational facilities, outdoor gyms and running paths, as well as in sports programs and promotion campaigns. A separate plan aims to build 3,000 martial arts schools. These efforts have greatly increased the awareness and interest of the Chinese public in physical activity, and they have contributed to rising participation in running, walking, hiking, community sports, and fitness training in the past few years.

Australia and New Zealand have highly active populations, sophisticated fitness markets, and well-developed sports and recreation infrastructure.

- Australians and New Zealanders are very physically active, with sports and active recreation participation rates exceeding 75%, and fitness/gym participation rates exceeding 20%. Consequently, these two countries have the most mature and sophisticated fitness markets in the Asia-Pacific region. They are the source of some of the world's best-known and innovative brands, including Les Mills (which opened its first club in Auckland in 1968) and Australia-based F45, a franchise built on its 45-minute high-intensity group exercise workout that has quickly expanded to 1,300 facilities globally in just a few years. Both countries also have highly developed fitness professional markets and well-trained instructors, who are supporting a growing market for small group training and personalized training, often favored by middle-aged and senior fitness participants. Increasing demand to address stress and mental wellness is propelling the growth of the mindful movement sector. Adjacent to the private sector, governments in both countries invest in a robust physical activity infrastructure that supports community sports and active recreation among children and youth, as well as low-cost options at publicly-subsidized gyms and community recreational centers.

The East Asian economies and Singapore have relatively mature physical activity markets marked by intense competition and the latest trends.

- Japan, Hong Kong, Taiwan, South Korea, and Singapore all have highly developed and intensely competitive physical activity markets that cater to their sophisticated consumer base. Consumers on the high-end are often early adopters of the latest North American and European fitness modules, classes, equipment, and technologies. All of these markets have experienced steady growth – from internationally branded luxury gyms to small independent studios – spurred by strong purchasing power, population aging, and rising interest in healthier and more active lifestyles. In addition to a full range of private operators, consumers in Singapore and Japan also have access to a large number of public facilities that offer lower-cost fitness, sports, and recreation activities. In Japan, public facilities account for half of the nation's gyms, and they are supplemented with facilities in schools and universities that are accessible to the public. In South Korea, Hong Kong, and Taiwan, outdoor recreation activities such as running, walking and hiking, and exercising in parks and squares remain popular, despite the growing memberships in gyms and fitness studios, underlying the ongoing importance of public infrastructure.

- Governments in these countries are also active in promoting physical activity through public education campaigns (e.g., South Korea's Program 7330 and Singapore's Active Health program). Steady government investment has been supporting the development, diversification, and upgrading of active recreation infrastructure in all of these markets, especially to serve an aging population. Japan has been at the forefront of these efforts; currently, adults over 50 make up 50% of Japan's gym users, and senior gym memberships are growing. Concern over rising healthcare costs has led the government to intensify its efforts on improving physical activity among seniors, working with communities and the private sector to motivate seniors to be active, and to increase access to facilities and programs. An example is a major national project in Japan that will promote better health among seniors through "fun" walking. Facing similar demographic trends, the Taiwan and South Korean governments are also working to keep their aging citizens physically active (e.g., Exercise for Health, a public-private partnership in Taiwan).

South and Southeast Asian nations have lower levels of physical activity; however, rising incomes and growing health consciousness are stimulating demand.

- Southeast Asian countries, such as Malaysia, Thailand, Philippines, and Indonesia, have smaller physical activity sectors, lower levels of physical activity participation, and the lowest fitness industry penetration rates in the region. Generally, young professional and urban elites in major cities, such as Bangkok, Kuala Lumpur, Jakarta, and Manila, have access to a variety of fitness offerings, including large comprehensive gyms, small independent studios, start-of-the-art equipment, group classes, and personalized training. Across the board, rising obesity and chronic disease related to urbanization and unhealthy lifestyles have been driving demand for fitness. Generally, the urban infrastructure in these countries for an active lifestyle (public parks, jogging trails, bike paths, recreational facilities, etc.) is not well-developed. Outside major cities, the infrastructure for recreational physical activity – both private and public facilities – is even more limited. The vast majority of the population lacks access to sports and recreational facilities and has limited knowledge about the importance of exercise. To the extent that physical activity is supported in schools, the emphasis is often preparing the best athletes for competition rather than encouraging physical activity for all. Several country governments have launched media campaigns (e.g., Fit Malaysia) to encourage physical activity, while also making investments to improve public infrastructure and facilities. The government of the Philippines is especially motivated to improve public awareness, as it is the host of the 2019 Southeast Asian Games. Rising incomes from a growing middle class and emerging government initiatives targeting the health and physical activity of citizens will continue to fuel the growth of the physical activity sector in these markets.

- Despite very low rates of participation, India has a sizable physical activity economy, valued at $13.4 billion, due to its sheer population size. In the top metro areas such as Mumbai, Delhi, and Bangalore, high-income urban professionals and a growing middle class drive the growth of comprehensive gyms and fitness clubs. However, the industry is mostly dominated by small, independent, low-cost fitness clubs that cater to consumers at much lower price points. Overall, the country lacks physical activity infrastructure, especially outdoor active recreation venues in cities. But this is changing. Since 2016, members of parliament have used local development funds to install 1,700 open-air gyms in parks throughout In Delhi (at approximately $10,000 each), and hundreds more are being planned.[85] Similar to India, Pakistan's physical activity sector is small compared to its population size, with very low levels of participation, limited public awareness about the health benefits of exercise, and an undeveloped infrastructure throughout the country. In both markets, female participation in physical activity, especially in sports and active recreation, has been hampered by cultural and religious beliefs; however, attitudes are changing, especially among the urban and educated elites, and women's and girls' participation in recreational physical activity is growing.

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[85] See: 1) Manohar, M. and Singh, P. (2018, Aug.22). New Delhi: Open gyms make fitness a mass exercise. *Times of India.* https://timesofindia.indiatimes.com/city/delhi/open-gyms-make-fitness-a-mass-exercise/articleshow/65507526.cms. 2) Mishra, A. and Chitlangia, R. (2019, Feb. 8). Why open-air gyms topped Delhi MPs' list of development projects. *Hindustan Times.* https://www.hindustantimes.com/delhi-news/why-open-air-gyms-topped-delhi-mps-list-of-development-projects/story-uVwa3VLjcn8de5flfcROxJ.html.

Asia is the source of the most important mindful movement modalities in the world, now widely adopted for their mental and physical health benefits.

- Tai chi is an ancient form of martial arts in China that was codified into a structured exercise by various martial arts schools and later by the Chinese government (Chinese Sports Committee) in the 1950s. Tai chi has long been practiced by the Chinese (including those in Taiwan and Hong Kong) in public places, and is often taught informally when groups gather to exercise in parks or public squares as an early morning ritual. Because the movements are slow, gentle, and deliberate, with a focus on breathing and balance, it is often favored by the elderly. Tai chi has enjoyed a resurgence around the world along with other mindful movement modalities, and it has developed a large following in Asian countries such as Japan and Thailand, and to a lesser extent in Europe and North America. Its various benefits can include: reducing fall risks; improving energy and stamina; increasing flexibility, balance, and agility; decreasing stress, anxiety, and depression; improving mood; improving muscle strength and definition; improving aerobic capacity; etc. As such, tai chi is now often incorporated in the group class offerings at private gyms and public recreational centers around the world, and is sometimes combined with yoga and Pilates movements in exercise classes that target senior populations.
- Similarly, yoga has deep and ancient roots in India and has been practiced as part of the Hindu religion. However, its current and most popularized form was born in the United States, where yoga was coopted into the fitness industry as a flexible (from mild to rigorous) form of exercise that includes a mindful component. The agnostic and often athletic forms of yoga have become a global phenomenon that is generating its own fitness subsector and related fashion, while influencing food, décor, jewelry, and lifestyle. Asian consumers, including a growing number in India, have now fully embraced the Western style of practicing yoga at gyms, boutique studios, community centers, parks, and other outdoor venues, and using online sources. Although still dominated by younger, more educated, and affluent women, men and older exercisers have begun to join in. Young Chinese women from Shanghai to Hong Kong prefer yoga to tai chi. The growth of yoga has outpaced all other fitness activities in Australia. Over the past few years, India has reasserted its dominance as the birthplace of yoga. The Indian government has instituted yoga practice among children and youth at schools, and it proposed an International Day of Yoga (June 21) which was adopted by the United Nations General Assembly in 2014.

Consumer enthusiasm and tech-savviness make Asia the largest market in the world for physical activity technologies.

- Valued at $10.8 billion, the physical activity technology sector in Asia is the largest across all regions, mainly because of its vast market for fitness wearables and trackers. All across Asia-Pacific, consumers are eager and enthusiastic adopters of the latest technologies and gadgets (wearables, virtual reality, new platforms and applications, etc.) that enhance their gym, recreation, or home exercise experiences. Meanwhile, established and emerging technology companies in many Asian countries (e.g., Samsung, Sony, Huawei, Xiaomi, Codoon, Lerbyee, Honor, GOQii ViTAL, Fastrack, etc.) are creating new products and services to enhance consumer experiences, making exercise more exciting, social, and accessible, and linking physical activity to health metrics. China is by far the regional leader, with a $6.6 billion physical activity technology market. Fitness apps are wildly popular in China, where an estimated 68.5 million people actively use apps and online platforms to support their fitness and healthy lifestyles (from walking, running, and fitness to *guangchang wu*, cycling, and yoga).[86] China has its own massive Chinese-language industry of apps and streaming services, and it is home to some of the world's largest apps for streaming workouts, such as Keep, Daily Yoga, and Hotbody.[87]

- On the content side, global trends and fitness innovations are quickly incorporated into new offerings such as online classes, virtual personal coaching, and personalized workouts, while entrepreneurs are developing apps, platforms, and intermediaries to bring new services and offerings to an expanding market. Certain forms of fitness technology, for example online fitness videos in Hong Kong and gamification in South Korea and Australia, have found a highly receptive audience. In Japan, Konami Sports has used its prowess in online gaming to gain success in the fitness technology market; as the creators of *Dance Dance Revolution*, Konami helped launch the exergaming industry in the 1990s. Even in less mature physical activity markets such as Indonesia, Philippines, and Thailand, consumers have rapidly adopted mobile apps, online platforms, and wearables. Social media influencers help to motivate young exercisers and to shape demand across the region. In a way, the dynamic and fast-growing physical activity technology market is helping to fill the void of an inadequate physical infrastructure in many parts of Asia.

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[86] See: 1) Zheng, Y. (2018, Oct. 30). Online fitness platforms grow in popularity among the young. *The Telegraph.* https://www.telegraph.co.uk/china-watch/sport/online-fitness-platforms-in-china/. 2) Xuan, L. (2018, Dec. 14). Fitness industry works up a sweat in internet age. *China Daily.* http://www.chinadaily.com.cn/a/201812/14/WS5c12edf0a310eff303290eea_1.html.

[87] Borak, M. (2017, June 12). Top 7 fitness apps in China. *Technode.* https://technode.com/2017/06/12/top-7-fitness-apps-in-china/.

Europe Highlights (2018)

Top Ten Physical Activity Markets in Europe, 2018

	Recreational Physical Activities* (US$ millions)	Enabling Sectors (US$ billions)			Total Market Size (US$ millions)
		Technology	Equipment & Supplies	Apparel & Footwear	
United King-dom	$20,507.8	$1,087.3	$8,428.2	$11,198.0	**$40,883.8**
Germany	$20,253.4	$728.9	$5,944.2	$12,724.9	**$39,441.1**
France	$11,003.5	$664.0	$6,299.1	$8,606.9	**$26,325.0**
Italy	$8,873.6	$363.4	$2,655.8	$7,499.8	**$19,273.0**
Spain	$7,859.0	$280.7	$1,618.2	$5,949.6	**$15,632.0**
Russia	$4,871.9	$323.5	$832.2	$6,407.1	**$12,374.9**
Netherlands	$6,023.2	$127.3	$858.3	$2,298.6	**$9,269.6**
Switzerland	$5,858.7	$120.7	$1,510.5	$1,720.6	**$9,164.3**
Sweden	$2,770.9	$118.7	$621.9	$2,451.8	**$5,925.5**
Poland	$2,419.6	$127.8	$656.1	$2,507.6	**$5,673.5**

** Measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation in three types of recreational physical activities (sports & active recreation, fitness, and mindful movement).*

Source: Global Wellness Institute

Top Ten Sports & Active Recreation Markets in Europe, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ millions)
United Kingdom	54.1%	$13,475.9
Germany	52.6%	$12,907.1
France	49.3%	$7,521.4
Italy	33.6%	$5,697.9
Spain	45.8%	$4,625.8
Switzerland	68.7%	$4,579.0
Netherlands	60.6%	$4,010.9
Russia	57.2%	$2,600.3
Sweden	72.8%	$1,650.4
Ireland	62.3%	$1,413.8

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Fitness Markets in Europe, 2018

	Fitness Participation Rate*	Fittness Market Size* (US$ millions)
United Kingdom	17.3%	$6,311.1
Germany	16.5%	$6,143.2
France	12.0%	$3,057.0
Spain	13.8%	$2,673.0
Italy	11.0%	$2,656.0
Netherlands	21.7%	$1,577.1
Poland	10.0%	$1,177.9
Switzerland	16.8%	$1,030.0
Turkey	3.3%	$1,014.4
Sweden	29.4%	$1,004.4

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Mindful Movement Markets in Europe, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ millions)
Russia	1.4%	$1,269.6
Germany	7.7%	$1,203.2
United Kingdom	4.2%	$720.9
Spain	9.5%	$560.3
Italy	4.8%	$519.8
Netherlands	9.7%	$435.2
France	4.7%	$425.1
Switzerland	5.8%	$249.8
Denmark	13.8%	$139.1
Sweden	9.2%	$116.2

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Europe Developments

Europe has an active population served by a highly developed and diverse physical activity sector.

- Europe has a highly developed and diverse physical activity sector, valued at $225.0 billion, and with 46.6% of its population participating regularly in some form of recreational physical activity according to GWI research. The Nordic countries, which have a strong tradition of sports and active recreation, have some of the most active populations in the world, with Norway, Iceland, Sweden, Finland, and Denmark all ranking in the global top ten for their participation rates (ranging from 73-84%). Western European nations, led by the United Kingdom, Germany, France, and Italy, have lower rates of participation (36-57%), but rank in the global top ten for physical activity expenditures by virtue of their population size and consumer spending. Countries in Eastern and Southern Europe – including Portugal, Greece, Romania, Ukraine, and Bulgaria – have some of the lowest participation rates in the region (25-35%).

- The European fitness, gym, and health club market is large overall and mature in some countries. Germany, the United Kingdom, France, and Italy are among the world's largest and most sophisticated fitness markets, while the Nordic countries have some of the highest gym membership penetration rates in the world according to IHRSA data. Throughout the region, fitness enthusiasts can choose from a wide range of activities, from the most advanced gym equipment, functional fitness, outdoor fitness, and group training, to dance fitness and online options. Boutique studios are growing throughout Europe, especially in the United Kingdom, Spain, and France. However, the European fitness market remains relatively fragmented, with most markets dominated by their own national brands and leaders, and a few countries, such as Spain and Italy, are served by a large number of smaller enterprises. The United Kingdom is often viewed as the regional leader, where its dynamic and competitive market tests out the latest trends, exercise innovations, and business models (such as the expanding boutique brands from the United States) before they disseminate in the rest of Europe.

The European sector benefits from significant government investment in infrastructure, publicly-funded gyms, and public venues for sports and active recreation.

- The public sector is a very important player in Europe's physical activity market. Much of the recreational physical activities done by the European population take place in public venues or government-subsidized facilities – e.g., swimming pools, gymnasiums, sporting clubs, etc. – where participation often costs little or no money. This is the reason why the average spending per participant on recreational physical activities is only $256 in Europe, as compared to $544 in North America (where the market is dominated by private business), according to GWI estimates. Publicly-owned or subsidized gyms and recreational facilities are especially prevalent in the United Kingdom, Ireland, Spain, Norway, Sweden, Finland, and Denmark. In the United Kingdom, public leisure centers have a mandate of serving youth and seniors, providing access to this population at zero cost or very low fees. Many of the United Kingdom's publicly-subsidized facilities are operated by private contractors, and these facilities often compete directly with private gyms and recreation centers. Outdoor equipment is also an important part of Europe's physical activity infrastructure, and thousands of outdoor gyms can be found in parks throughout Western and Northern Europe. Outdoor gyms and fitness equipment are widely used by seniors, especially in England, Finland, Germany, and Spain. Street/"ghetto" workouts (bodyweight exercises performed at outdoor gyms), long practiced in urban communities in Russia and Eastern Europe, are also spreading to Western and Southern Europe.

- Europeans are enthusiastic participants in sports and active recreation – many countries have participation rates exceeding 50% – and they engage in a wide variety of activities outdoors, in nature, and at public facilities. Walking is a favored activity across Europe, and Nordic walking (walking with specially designed poles) and German volksmarching (organized outdoor walking) have a large following. Nordic residents are known for their love of outdoor pursuits such as skiing and hiking, following their philosophy of "friluftsliv" or "free air life."[88] Cycling is popular in France, Belgium, Finland, Poland, Iceland, and Netherlands, while running is on the rise from Denmark and Spain to the Czech Republic and Russia. Local sports clubs, as the main conduits of sports participation and facilities, often serve as the community hub that reaches all socioeconomic groups. In the "Scandinavian Model," sports clubs and recreation facilities typically receive government funding and are community-led and volunteer-driven. In Sweden, almost 50% of the population is a member of a local sports club. Norway's unique model of youth sports clubs, which emphasize the social aspect rather than competition (see *Chapter IV* for more details), is now being emulated in other countries such as Estonia and Bulgaria. Recently, adult sport club participation has declined in countries such as Switzerland, Finland, and Spain, as consumers migrate to gyms, fitness centers, and other physical activity choices. Nonetheless, sports clubs have endured as a major player in the physical activity sector across the region.

- Most public sector financial support for fitness, sports, and recreation is delivered at the municipal level, where public funding, subsidies, tax incentives, and promotion heavily influence a community's physical activity landscape – e.g., creation of outdoor gyms in cities throughout France; Belgium's "Sport Flanders" encouraging municipalities to provide more public spaces for exercise; United Kingdom's "ParkLives" program, which offers classes and group training in local parks; and infrastructure to promote cycling as both recreation and a means of transportation in Denmark, Finland, Hungary, the Netherlands, France, and Belgium.

Fitness aggregators and low-cost gyms have become influential forces in shaping the fitness market and overall participation levels.

- Across Europe, intermediaries or aggregators targeting both consumer and corporate markets – such as Gympass, Benefit Systems, Hansefit, Urban Sports Club, and ClassPass – have expanded their footprints, providing consumers with the flexibility to access a wide variety of fitness facilities via a flat rate, without membership fees or commitment to specific clubs. Their service offerings extend to swimming pools, racquet courts, and wellness facilities. This

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[88] See: Savage, M. (2017, Dec. 10). Friluftsliv: The Nordic concept of getting outdoors. *BBC.* https://www.bbc.com/worklife/article/20171211-friluftsliv-the-nordic-concept-of-getting-outdoors.

relatively new and rapidly expanding business model is changing the European fitness sector, including in the corporate wellness space, with many employers in Central and Eastern Europe (e.g., Poland, Czech Republic, Bulgaria) giving their employees fitness passes, vouchers, or cards as a workplace wellness benefit. Industry experts have mixed opinions about the impact of intermediaries on the industry.[89] On one hand, intermediaries can expand the market by reaching consumers who have not participated in the commercial fitness market in the past. On the other hand, this model can cannibalize existing fitness club memberships while eroding operator profit margins.

- The rise of low-cost gyms is another trend that has expanded consumer participation in the European fitness market in recent years. The United Kingdom is a leader in home-grown, low-cost operators (e.g., PureGym, Energie Forme, the Gym Group, etc.), which serve a quarter of the country's fitness members. The low-cost segment is also growing rapidly with franchises such as Clever Fit in Germany and Basic Fit in France. With the planned expansion of ambitious international and regional operators such as U.S.-based Anytime Fitness and France-based L'Orange Bleue, the low-cost gym model is expected to continue to extend to new locations and countries.

Mindful movement, already well established in many countries, continues to expand its following to a wider audience across the region.

- Mindful movement, especially yoga and Pilates, has a large following throughout Europe. The largest market by expenditures is Russia, with an estimated 1.5 million yoga practitioners spending an average of $600 per person per year on yoga classes (according to GWI estimates based on data from the Russian *Yoga Journal*). Germany, where yoga is the 5th most popular recreational activity according to one study,[90] ranks second in the region for its mindful movement expenditures. Mindful movement (principally yoga) is widely practiced in Denmark, Netherlands, Spain, Sweden, Finland, and Norway, where participation rates range from 8-14%. In most countries, yoga practitioners are predominantly urban, well-educated women who take classes at high-priced studios, comprehensive gyms, and local community centers. Founded in the United Kingdom, Hotpod Yoga, an innovative hot yoga experience, is the largest European yoga company and has franchises in eight countries. In the more mature markets such as the United Kingdom and France, yoga participation has grown among the general public, and sometimes spreads to unusual venues like the Royal Museum of Fine Arts in Belgium, cathedrals in the United Kingdom, and prisons in Norway. Elsewhere, the number of mindful movement studios and practitioners continue to rise in Poland, Turkey, Kazakhstan, and Ukraine. Governments in several countries have actively supported the spread of yoga; some health insurance plans in Serbia reimburse yoga classes. Recognizing the health benefits of yoga, German health insurance plans have reimbursed yoga classes for over a decade.

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[89] Deloitte and EuropeActive (2019). *European Health & Fitness Market Report 2019.* https://europeactive.blackboxpublishers.com/en/publications/european-health-fitness-market-report-ehfmr-2019-hardcopy/.

[90] Yoga boom in Germany. *Deutschland.de.* June 20, 2016. https://www.deutschland.de/en/topic/life/yoga-boom-in-germany.

Traditional government focus on supporting sports is shifting toward health-enhancing physical activity for all groups.

- European countries have traditionally been strong supporters of sports. A 2018 WHO survey of 28 EU countries found that at all of them had at least one sports-for-all or health-enhancing physical activity (HEPA) action plan, with a total of 148 physical activity promotion policies in place across these countries.[91] A number of countries, such as Turkey, Finland, and Portugal, have "sport for all" goals and policies that are codified by law. Portugal's 2012 national sports-for-all program promotes sports via public/private collaborations. In the last few years, some countries have broadened their focus from promoting sport participation to supporting a wider range of "health-enhancing physical activities" for all segments of the population. The United Kingdom's Sport England focuses on reducing inactivity by offering programs designed to get a wider group of people moving, and it has redefined "sport" to encompass other forms of physical activity (including table tennis, walking and dance) that are eligible for financial support. Governments have leveraged regional collaborations and community programs to improve access and to motivate diverse groups to become more physically active. For example, park exercise programs in Croatia and the Czech Republic have specifically targeted youth, seniors, and the socially marginalized. Sports clubs support "fitness football for women over 55" in Denmark, Norway, Serbia, and Romania. The governments of Sweden and Bosnia provide funding to support refugees' participation in sport and recreation, while Malta and the Netherlands subsidize physical activities for socially disadvantaged youth. In France, Belgium, Ireland, Poland, Slovakia, and Denmark, governments have used initiatives such as cycling allowances, bike reimbursements, tax breaks for employer expenses, and other initiatives to encourage physical activity at work and traveling to/from work. In Belgium for example, the Flemish region uses tax incentives to encourage employer bike allowances and direct reimbursements to biking workers, while the French region's "Bike to Work" program provides interested companies with biking assessments and plans.

- An important goal in the region is to engage the health sector in promoting physical activity. In general, the prevalence of nationalized health systems and social services in European countries (with a long history of funding a variety of "unconventional" or nonmedical treatments) has given wider latitude for many countries to experiment with integration of exercise and physical activity into healthcare and treatment regimens. There is evidence that counseling on physical activity and prescriptions for physical activity have improved participation rates in countries such as Sweden, Austria, Belgium, Ireland, Finland, France, and Croatia. In Croatia, the government offers free physical activity counseling, while Bulgaria's national health system offers counseling reimbursements. Germany's national health system offers reimbursements for certain group exercise activities (including yoga). The United Kingdom is a leader in prescribing exercise as a part of medical treatment. The United Kingdom's National Health Service has a well-established exercise referral scheme, whereby patients are referred to government-funded public leisure centers to participate in appropriate exercise and activity programs and can access these services for free.

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[91] WHO Regional Office for Europe (2018). *Physical activity factsheets for the 28 European Union Member States of the WHO European Region.* http://www.euro.who.int/en/health-topics/disease-prevention/physical-activity/publications/2018/factsheets-on-health-enhancing-physical-activity-in-the-28-eu-member-states-of-the-who-european-region.

The industry will continue to expand as the economy improves, consumer purchasing power rises, public campaigns drive awareness, and more physical activity options become available.

- The current government focus on physical activity, the adoption of healthier lifestyles, and the rising popularity of exercise – especially in Eastern Europe and parts of Southern Europe – will help to boost demand throughout the region. Although some nations, such as Russia and Italy, have been sluggishly emerging from economic slowdowns, the steadily increasing purchasing power in the region will help to sustain demand. A growing segment of health-conscious senior exercisers and a greater focus on outdoor recreation should also contribute to the industry's growth. Both public and private suppliers of fitness and sports and recreation will continue to reach out to a more diverse and wider range of customers, who will use the latest advances in technology to broaden their exercise choices and venues.

North America Highlights (2018)

Physical Activity Markets in North America, 2018

	Recreational Physical Activities* (US$ millions)	Enabling Sectors (US$ billions)			Total Market Size (US$ millions)
		Technology	Equipment & Supplies	Apparel & Footwear	
United States	$105,008.9	$8,111.1	$37,532.3	$117,052.5	**$264,622.9**
Canada	$9,302.7	$508.3	$2,451.9	$6,039.6	**$18,113.6**

** Measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation in three types of recreational physical activities (sports & active recreation, fitness, and mindful movement).*

Source: Global Wellness Institute

Sports & Active Recreation Markets in North America, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ millions)
United States	51.5%	$57,576.3
Canada	41.9%	$4,774.5

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Fitness Markets in North America, 2018

	Fitness Participation Rate*	Fittness Market Size* (US$ millions)
United States	29.3%	$37,033.2
Canada	26.4%	$3,480.5

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Mindful Movement Markets in North America, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ millions)
United States	17.7%	$10,399.4
Canada	15.3%	$1,047.8

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

North America Developments

In North America, a massive and well-developed physical activity economy exists side-by-side with an increasingly inactive population.

- Valued by GWI at $282.7 billion, the North American physical activity market is massive and well-developed. As the world's largest physical activity economy, the United States ranks number one in all recreational physical activity markets (fitness, mindful movement, and sports and active recreation), as well as in the enabling sectors (technology, equipment and supplies, and apparel and footwear). The fitness market is especially well-developed and diverse across North America, with the high fitness participation rates in Canada (26.4%) and the United States (29.3%) indicating relatively mature markets. Consumers interested in fitness and mindful movement have a dazzling array of options to choose from, as businesses continue to innovate to provide differentiation and new value propositions. In recent years, market growth has been driven by the proliferation of boutique studios and budget gyms, which are quickly extending into smaller cities as well as suburban neighborhoods. The decline in suburban malls has created new spaces and opportunities for the sector; it is becoming common to see gyms and yoga studios taking up spaces vacated by large box stores and smaller retail business in high- to middle-income suburban shopping centers.

- Despite having large physical activity markets in terms of expenditures, about 46% of American adults[92] and 84% of Canadian adults[93] are not getting the recommended amount of physical activity essential to good health, according to government data. Both nations have witnessed a rise in obesity (almost 40% of U.S. adults[94]) along with stagnant or rising inactivity levels among younger age groups. Sports and active recreation participation among children ages 6-12 is declining in both countries.[95] There is no question that there is a huge disparity in physical activity access across different socioeconomic groups. Although the commercial fitness sector is expanding its reach, these businesses are still primarily targeting those who are more able and likely to exercise – the educated, more affluent, younger demographics, and those living in major urban centers and wealthy suburban areas. Generally, fitness participation rates are higher on the east and west coasts in both countries than in the central regions. Recent analysis of the "geography of fitness" by Richard Florida and *CityLab* found that the availability of fitness and recreational facilities across the United States tracks closely with key socioeconomic indicators (e.g., higher incomes, education levels, and "creative class"

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[92] U.S. Centers for Disease Control & Prevention (2019). *Trends in Meeting the 2008 Physical Activity Guidelines, 2008-2017*. https://www.cdc.gov/physicalactivity/data/index.html.

[93] Statistics Canada (2019). *Tracking physical activity levels of Canadians, 2016 and 2017.* https://www150.statcan.gc.ca/n1/daily-quotidien/190417/dq190417g-eng.htm.

[94] U.S. Centers for Disease Control & Prevention (2018, Aug. 13). *Overweight & Obesity: Adult Obesity Facts.* https://www.cdc.gov/obesity/data/adult.html.

[95] See: 1) Aspen Institute Project Play (2018). *State of Play 2018: Trends and Developments.* https://assets.aspeninstitute.org/content/uploads/2018/10/StateofPlay2018_v4WEB_2-FINAL.pdf. 2) Statistics Canada (2014, April 23). *Canadian Social Trends: Kids' Sports.* https://www150.statcan.gc.ca/n1/pub/11-008-x/2008001/article/10573-eng.htm.

and high-tech occupations).[96] While non-profit organizations such as the YMCA and local community facilities are filling some gaps, people living in low-income, rural, minority, native, and other marginalized communities have much less access to physical activity infrastructure. It is critical to address this gap because these communities are at higher risk of physical inactivity and chronic disease.

The United States leads the world in fitness innovations and new business models.

- With a vibrant and entrepreneurial private sector, and backed by deep investment capital, the United States continues to lead the world in innovations for the physical activity sector. Many of these innovations are not so much in the invention of new exercise or fitness regimes, but in creating new value propositions through creative use of technology, savvy marketing and branding, understanding of consumer psychology, and a keen sense of discovering unmet market needs. For example, riding stationery bikes at home or going to spin classes are not new activities. Yet, SoulCycle has become a sensation in recent years – leading the rise of a whole new boutique fitness segment – by providing an extremely high-quality workout, led by charismatic instructors in studios with a specific vibe/ambiance, and most importantly by infusing its participants with the emotion of belonging to a tribe. And for this experience and a special sense of belonging, loyal customers happily shell out $35 for a class. Similarly, Peloton has revolutionized the in-home fitness experience by combining networked equipment with interactive live streaming (or on-demand videos), bringing to life what was previously a solitary and boring exercise, mostly conducted in people's basements in front of their televisions. Peloton's dual revenue stream from selling $2,000 bikes (and accessories) and $39 monthly subscriptions has raised its valuation to multi-billions in just a few years. Likewise, while circuit/interval training has existed for decades, Orangetheory has created a new business model using heart-rate monitoring, big-screen sharing of participant metrics, and intense instructor coaching to help exercisers achieve and sustain the optimal "orange zone." These fitness business innovations have quickly inspired others in the United States and are proliferating to the rest of the world through expansions, franchising, and development of competing businesses and brands.

- Technology is ubiquitous in the physical activity sector, transforming businesses and consumer experiences in multiple ways: fitness trackers, cameras and sensors, networked equipment, augmented and virtual reality, social media, mobile applications, gamification, and so on. In addition to exercise-related software and platforms, the United States also leads in exercise business technologies (e.g., software for onboarding, scheduling, tracking, streaming content, billing, management, etc.). Class finder and booking intermediaries, which first emerged in the United States (ClassPass is the largest player), have become a major disruptor for gyms and fitness studios around the world in the past few years.

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[96] 1) Florida, R. (2019, Jan. 8). Your Fitness Resolution Might Be Easier If You're Rich. *CityLab.* https://www.citylab.com/life/2019/01/fitness-exercise-affluent-class-divides/579592/. 2) Florida, R. (2019, Jan. 10). The Geography of American Gym and Fitness-Center Brands. *CityLab.* https://www.citylab.com/life/2019/01/fitness-studio-gym-density-income-education-resolution/579595/.

- The United States is home to innovative hybrid models creating a nexus between fitness and other sectors, such as: fitness and travel; fitness and workplaces/coworking; fitness and co-living; fitness and medical/health services; etc. Companies such as Reebok and Peloton are partnering with international hotel brands to bring fitness equipment and programming to their guests, many of whom are accustomed to the same products and services at home. Equinox recently entered the hospitality market by opening the high-end Equinox Hotel in the Hudson Yards development in New York City. Life Time has opened Life Time Work coworking spaces alongside its fitness centers in four locations across the United States, and it has recently announced a "Life Time Living" concept to be launched in three U.S. cities. Medical fitness centers have proliferated across the United States, meeting the needs of customers not well-served by commercial gyms, and providing rehabilitation, physical therapy, medically-supervised exercise, and general fitness for disease prevention. Many of these centers are established by hospital systems and health clinics. Fitness enterprises such as Life Time Athletic and GENAVIX Inc. have also entered the medical fitness market by incorporating medical services into their offerings.

- The United States has also played a leading role in the development of innovative real estate, design, and urban planning approaches that encourage physical activity, including the rapid growth of a variety of wellness real estate concepts that embed physical activity infrastructure and amenities right into people's living environments (see *Chapter IV* for more details). New York City's Center for Active Design pioneered the "active design" concept, which is a set of planning, design, and building principles that promote physical activity in people's daily routines.[97] In the last five years, the Center for Active Design has worked with partnering developers (e.g., Vitus Group, Blue Sea Development, Avalon Bay) and public housing authorities to bring active design features into dozens of affordable housing projects across the United States, in cities from Seattle, to Denver, to New York City – reaching lower-income and vulnerable populations that are typically at the highest risk for physical inactivity and chronic disease. In 2017, Fannie Mae (the government sponsored mortgage securitization corporation) introduced a Healthy Housing Rewards™ initiative that provides financial incentives for borrowers who incorporate healthy/active design features into newly constructed or rehabilitated affordable multifamily rental properties, and it is partnering with the Center for Active Design to implement the program.[98]

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[97] For more information on active design, see: Center for Active Design (2010). *Active Design Guidelines: Promoting Physical Activity and Health in Design.* https://centerforactivedesign.org/guidelines/.

[98] For more information, see: https://multifamily.fanniemae.com/financing-options/specialty-financing/healthy-housing-rewards

Mindful movement, led by yoga, has become completely mainstream in North America.

- Estimated by GWI at $11.4 billion, mindful movement generates a significant portion of the North American physical activity economy. The United States is the world's largest market, in terms of both participation rates (17.7%) and expenditures ($10.4 billion), and it accounts for over one-third of all mindful movement spending worldwide in 2018. Canada also has one of the highest participation rates for mindful movement, estimated at 15.3%. Yoga is the most dominant form of mindful movement, while Pilates, barre, and stretch are commanding an increasing following among mostly wealthy urban and suburban females, and tai chi is gaining practitioners among the 50+ population. In the last ten years or so, the United States has been the epicenter of transforming yoga from a fringe practice among a relatively small group of New Age people into a mainstream exercise activity that is offered at comprehensive gyms, small independent studios, franchised facilities, community recreation centers, and via streaming online services and yoga apps. The co-opting of yoga by the fitness industry has transformed both yoga and fitness. With the Westernization and mainstreaming of yoga, most North American consumers no longer associate yoga with a specific spiritual practice but approach it as an exercise system with a mindfulness component. This rising popularity of yoga is also influencing the direction of fitness – evolving from workouts characterized by pounding, pumping, fat burn, and muscle building, toward incorporating more deliberate and mindful modules focused on toning, balance, flexibility, alignment, and breath. Yoga consistently ranks among the most popular exercise trends in the United States, and participants and offerings have expanded from women in prosperous and educated urban areas to a full spectrum of demographics and regions (men, smaller towns, rural areas, etc.). The yoga philosophy of supporting communities has also sparked interest in bringing the practice to underserved areas and groups. For example, through organizations such as Yoga to the People and the Prison Yoga project, yoga practice is reaching people in inner cities, prisons, and schools.

In the absence of a government sponsored national plan, the United States relies on a diverse set of stakeholders to plan, fund, and implement physical activity strategies.

- In the absence of a federal government-sponsored national physical activity strategy, the private sector, nonprofits, community organizations, and state and local governments in the United States have taken the lead in creating strategies that encourage physical activity, and these efforts tend to be fragmented. For example, the 2016 National Physical Activity Plan was developed by a coalition of non-governmental organizations to spur dialogue, provide recommendations, and prod government and local stakeholders into action, including participation from business and industry; community recreation, fitness, and parks; education; faith-based settings; healthcare; mass media; public health; sports; and transportation, and land use and community design.[99] Adoption by states and local communities is voluntary; West Virginia and San Antonio, Texas, subsequently adopted the plan and adapted it to their local contexts. The Personal Health Investment Today (PHIT) initiative is a collaboration of over 100 private companies, NGOs, and other stakeholders, aiming to combat physical inactivity. PHIT

[99] See: https://www.physicalactivityplan.org/index.html

provides grants to over 400 elementary schools for physical education programs, informs the public about the importance of exercise, and hosts its own national fitness month. Recently, it has been working to have the U.S. Congress pass the PHIT Act, which would permit taxpayers to use pre-tax medical spending accounts to offset physical activity expenses.[100] The open-sourced Walk [Your City] campaign encourages grassroots and "guerrilla" efforts to install simple and inexpensive wayfinding signs that improve cities' walkability.[101] The Active Schools initiative (launched in 2013 as part of Michelle Obama's *Let's Move!* campaign) is a public-private partnership working with more than 23,000 schools around the United States to integrate 60 minutes of movement and play into the day for every K-12 student.[102] Dozens of communities across the United States, both large and small, have launched their own local physical activity initiatives, many of which were originated under Michelle Obama's *Let's Move! Cities, Towns, and Counties* campaign.[103]

- Nonprofit organizations and local governments across the United States play a leading role in providing physical activity opportunities and infrastructure, especially to those who are not adequately served by the commercial sector (e.g., youth, seniors, and people in low-resource areas). In many communities, locally-funded and operated public community centers, parks, swimming pools, and sports facilities provide the main venues for sports, fitness, and active recreation among much of the population. According to data from the National Recreation and Park Association, 57% of parks and recreation agencies across the United States provide recreation/gym/fitness centers, while 79% offer fitness classes;[104] GWI estimates that at least 11 million people are served by these offerings. Across the country, more than 2,700 YMCAs provide recreational facilities and sports training, fitness centers, group fitness classes, private lessons, and fitness training for youth, families, adults, and seniors. The organization has continually evolved to reach underserved groups, especially seniors and low-income communities. Many U.S. communities host Open Streets events to encourage walking, biking, and outdoor recreation, following on the model of Seattle's Bicycle Sundays (launched in 1965) and Bogotá's Ciclovía (launched in 1974). As of 2016, an estimated 135 cities across the United States had hosted Open Streets events, although the majority of these occur only once a year.[105]

- In the United States, the health industry is paying more attention to increasing physical activity, especially among high-risk groups. Through refunds and incentive programs, insurance companies have begun to partner with medical providers and employers to get more people to exercise. In 2007, the American Medical Association and the American College of Sports Medicine collaborated to create Exercise is Medicine (EIM), a program that encourages physicians to write prescriptions for exercise.[106] EIM is now a global initiative that receives

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[100] See: http://www.phitamerica.org/

[101] See: https://walkyourcity.org/

[102] See: https://www.activeschoolsus.org/

[103] See: https://www.healthycommunitieshealthyfuture.org/

[104] National Recreation and Park Association (2019). *2019 NRPA Agency Performance Review: Park and Recreation Agency Performance Benchmarks.* https://www.nrpa.org/siteassets/nrpa-agency-performance-review.pdf.

[105] See: 1) Active Living Research (2017). *Open Streets: Trends and Opportunities*. https://activelivingresearch.org/open-streets-trends-and-opportunities. 2) The Street Plans Collaborative and The Alliance for Biking and Walking (2012). *The Open Streets Guide.* https://nacto.org/docs/usdg/smaller_open_streets_guide_final_print_alliance_biking_walking.pdf.

[106] See: https://www.exerciseismedicine.org/

private sector support from fitness companies such as Technogym and Anytime Fitness. Silver Sneakers, a health insurance-based fitness program for seniors, partners with private insurers and Medicare to provide seniors with free access to more than 16,000 fitness facilities across the country.[107] Walk with a Doc was launched in 2005 by a cardiologist, frustrated by the challenges of encouraging behavior change within clinical settings, who invited his patients to go for a walk with him on a Saturday morning. The program has subsequently spread across the country (and across the globe) to over 500 locations, with weekly/biweekly/monthly events where doctors give brief educational talks, lead participants on a walk tailored to their pace, and sometimes provide healthy snacks and blood pressure checks.

In Canada, governments at the national and provincial levels are working to combat growing inactivity.

- Concerned with growing inactivity and its link to rising rates of obesity and chronic disease, Canada has adopted a series of policies and plans aimed at supporting physical activity and encouraging a more active population. These include: Active Canada 20/20, a physical activity strategy (2012); the Canadian Sports Policy (2012), aimed at increasing physical activity through wider sports participation; Framework for Recreation in Canada (2015); Sports for Persons with a Disability (2006); A Policy on Sport for Women and Girls (2009); Sport Canada's Policies on Aboriginal People's Participation in Sport (2005); and others. In order to put these fragmented activities under a unified framework, in 2018 Canada adopted the Common Vision as its comprehensive national physical activity policy. The plan emphasizes physical activity and physical literacy through sports and active recreation and school programs, and it outlines a system that leverages partnerships among government, provincial, local, nonprofit, and private sector partners. The government has pledged to improve the nation's aging physical activity infrastructure, and it implemented a fitness tax credit that applies to expenses related to youth physical activity, including classes and organized sports participation. Provincial governments are also active with their own local initiatives. In Calgary, for example, the provincial government has worked with community organizations and the private sector to create a high-quality recreational facility that offers fitness and sports programs, and also provides financial assistance to members in need. The governments of Quebec and Alberta have replicated New Zealand's national Green Prescription and Europe's publicly-funded physical activity prescription programs, in order to integrate physical activity into the provincial health policy framework.

[107] See: https://www.silversneakers.com/

Latin America-Caribbean Highlights (2018)

Top Ten Physical Activity Markets in Latin America-Caribbean, 2018

	Recreational Physical Activities* (US$ millions)	Enabling Sectors (US$ billions)			Total Market Size (US$ millions)
		Technology	Equipment & Supplies	Apparel & Footwear	
Brazil	$5,896.1	$460.4	$1,108.9	$6,709.5	**$14,123.8**
Mexico	$4,153.5	$276.5	$919.8	$5,755.6	**$11,066.8**
Argentina	$1,621.8	$91.3	$125.6	$1,922.4	**$3,749.4**
Chile	$674.0	$39.3	$189.4	$2,444.5	**$3,339.1**
Colombia	$991.5	$35.2	$155.8	$792.4	**$1,965.5**
Peru	$609.9	$12.6	$77.1	$872.1	**$1,568.6**
Ecuador	$348.9	$11.4	$84.5	$428.4	**$870.0**
Cuba	$222.3	$2.8	$18.7	$365.4	**$608.2**
Dominican Rep.	$186.3	$6.3	$6.1	$330.0	**$527.5**
Costa Rica	$177.8	$6.8	$5.2	$281.8	**$470.7**

** Measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation in three types of recreational physical activities (sports & active recreation, fitness, and mindful movement).*

Source: Global Wellness Institute

Top Ten Sports & Active Recreation Markets in Latin America-Caribbean, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ millions)
Brazil	36.8%	$3,686.2
Mexico	43.5%	$2,282.6
Argentina	38.4%	$937.3
Colombia	32.5%	$592.2
Chile	34.5%	$446.1
Peru	40.2%	$407.1
Ecuador	38.5%	$267.7
Cuba	39.0%	$176.6
Dominican Republic	28.3%	$149.9
Costa Rica	43.9%	$126.9

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Fitness Markets in Latin America-Caribbean, 2018

	Fitness Participation Rate*	Fittness Market Size* (US$ millions)
Brazil	6.2%	$2,039.6
Mexico	4.3%	$1,847.7
Argentina	10.3%	$667.7
Colombia	6.7%	$390.2
Chile	11.7%	$217.0
Peru	3.4%	$196.5
Ecuador	5.2%	$78.3
Paraguay	2.8%	$48.8
Costa Rica	3.7%	$48.7
Cuba	2.2%	$43.2

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Mindful Movement Markets in Latin America-Caribbean, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ millions)
Brazil	1.1%	$170.3
Mexico	0.3%	$23.2
Argentina	0.4%	$16.7
Chile	0.5%	$10.9
Colombia	0.3%	$9.1
Peru	0.4%	$6.3
Uruguay	1.2%	$3.5
Ecuador	0.3%	$3.0
Dominican Republic	0.3%	$2.5
Cuba	0.3%	$2.4

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Latin America-Caribbean Developments

While the region has some of the world's highest rates of physical inactivity, wealthier urban residents are served by many options for fitness, sports, and active recreation.

- According to physical activity data compiled by *The Lancet*, as a region Latin American and the Caribbean has the highest rates of physical inactivity, with 39.1% of the region's population having insufficient physical activity in 2016. Brazil, Argentina, Colombia, Costa Rica, and some Caribbean nations are among the countries with the highest rates of inactivity in the world (>40% inactive based on WHO standards). While higher-income, more educated residents are more likely to be active, overall consumer interest in exercise and fitness has been growing steadily across all segments of the population. According to GWI research, just over one-third (36.7%) of the region's population participates in some kind of recreational physical activity on a regular basis (at least monthly). The region's most populous countries, including Brazil, Mexico, and Colombia, have large fitness markets with a network of regional and international fitness clubs offering the latest equipment and group training options, especially in the largest urban areas. Mirroring the global trend, large, comprehensive gyms have seen slower growth in recent years, while boutique fitness is on the rise in markets ranging from Argentina to Bolivia to Barbados (e.g., Orangetheory, Jazzercise, etc.). Boutique fitness is attracting a growing following in Mexico, Colombia, Peru, Chile, and the Dominican Republic as well, offering individualized and group class in yoga, Pilates, HIIT, boxing, spinning, dance, etc., and building communities of enthusiasts.
- Martial arts have long attracted dedicated practitioners throughout this region. As the home of Capoeira and Brazilian jiu-jitsu, Brazil has exported these modalities to the rest of the world. Judo and Tae Kwon Do have a large following, especially in Cuba, Belize, Chile, and the Dominican Republic, which recently hosted 15 other nations for the Pan-American Tae Kwon Do Championships. With rising interest in mixed martial arts, the region has a burgeoning number of martial arts studios for adults and teens to train for competitions.

Many people prefer to exercise in public places and spend little, driving growth in low-cost options.

- In contrast to the rest of the world, many people in this region prefer to do low-cost or free sports and recreation activities outdoors and in public spaces, such as parks, public squares, community centers, and public streets. As discussed in *Chapter II*, GWI's review of national surveys conducted in Brazil, Mexico, Argentina, Chile, Uruguay, and Ecuador indicates that two-thirds to three-quarters of people who participate in sports and recreational physical activities do these activities in indoor and outdoor public facilities that require no payment for access.[108] GWI also found that the Latin America-Caribbean region has the lowest average spending per participant for fitness ($180 per person per year), in part because of the large number of public programs that have been instituted to combat inactivity and obesity in a number of countries (e.g., free outdoor gyms in parks, large-scale/city-sponsored programs of free fitness classes, etc. – *see more details below*). GWI estimates that approximately 20% of the fitness participants in Latin America are served by these free/public programs and facilities, which raises the overall participation rate while lowering the average spending rate across the region.
- As fitness becomes more mainstream, middle class consumers are also seeking out less pricey options from international chains and high-tech studios. Lower-cost franchises, such as Planet Fitness and regional leader, Brazil's SmartFit, are seeing a rapid rise in demand across the region, including in Mexico, Brazil, El Salvador, Peru, and Chile.

Technology plays a significant role in broadening fitness choices for the mass market.

- Local and regional fitness entrepreneurs across Latin America are offering a growing array of streaming and on-demand exercise classes to a rapidly increasing base of younger, tech-savvy fitness consumers. For example, Mexico-based InstaFit, launched in 2013, now offers over 600 Spanish-language streaming classes to consumers for only 99 pesos (US$5) per month, as well as personalized content, gamification, and a corporate-facing platform. Many start-ups similar to ClassPass have emerged in Uruguay, Argentina, Trinidad, Brazil, Mexico, and Colombia, creating tech platforms and apps that link consumers to an increasing array of fitness classes and options developed by local and regional fitness trainers, leaders, and entrepreneurs. For example, Argentina's Clickypass provides access to over 2,000 fitness enterprises in six nations, including the Dominican Republic. Brazil's Gympass, which provides a similar service to corporate customers and has a network of over 47,000 workout facilities in 14 countries, has attracted a huge amount of investor interest as it rapidly grew into a global business in just 5-6 years. It is now touted as Brazil's latest unicorn, with a valuation of over

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[108] See: 1) Instituto Brasileiro de Geografia e Estatística (2017). *Práticas de Esporte e Atividade Física 2015.* Rio de Janeiro: IBGE. https://biblioteca.ibge.gov.br/visualizacao/livros/liv100364.pdf. 2) Instituto Nacional de Estadística y Geografía (2018). *Módulo de Práctica Deportiva y Ejercicio Físico (MOPRADEF).* Mexico City: INEGI. https://www.inegi.org.mx/contenidos/programas/mopradef/doc/resultados_mopradef_nov_2018.pdf. 3) Pasquale, H. (2013). *Encuesta Nacional de Actividad Física y Deportiva (ENAFyD) 2009-2012.* https://docplayer.es/12864162-Encuesta-nacional-de-actividad-fisica-y-deportiva-enafyd-profesor-hugo-pasquale.html. 4) Alcalá (2016). *Encuesta Nacional de Hábitos de Actividad Física y Deportes en la Población de 18 años y más: Informe Final.* http://www.mindep.cl/wp-content/uploads/2016/07/INFORME-FINAL-ENCUESTA-DEPORTES-COMPLETO_.pdf.

$1 billion.[109] However, one key challenge for the expansion of tech-based fitness options has been the low rate of financial inclusion across Latin America (only about 59% of men and 52% of women have a traditional bank account), although digital banking platforms and mobile payment services are quickly closing this gap.[110] Access to investment capital has also been a major barrier for tech-based startups, although that situation has started to change in the last year.[111]

Mindful movement is growing in popularity and reaching more people – including marginalized populations – through public and community programs.

- Mindful movement – especially yoga and Pilates – has experienced rising popularity throughout the region. GWI estimates that the countries in the region with the highest rates of participation in mindful movement include Uruguay (1.2%), Brazil (1.1%), and Chile (0.5%). Both boutique studios and large gyms are increasing their class offerings, and multiple countries now host yoga festivals; in Chile for example, large yoga festivals can draw as many as 20,000 practitioners. Recognizing the health benefits of yoga, governments in several countries are supporting its democratization. For example, Colombia, Chile, Venezuela, and El Salvador have mass participation programs that offer large group yoga classes in public squares and parks. Other countries, such as Brazil and Cuba, have proposed including yoga in their national health plans. Yoga associations are also working to bring the practice and its health benefits to marginalized groups. In Chile, Yoga a Lucka aims to bring low-cost classes to the whole country; in Uruguay, an innovative prison program and a pilot program for primary schools have introduced yoga to new groups and practitioners.

Many governments treat physical activity as an important right and support public infrastructure and programs to increase access and participation.

- Colombia, Bolivia, and the Dominican Republic all treat physical activity as a constitutional right, and many other countries across the region consider equal access to physical activity an important part of societal welfare. Faced with rising rates of obesity, most countries in this region have developed national plans for improving physical activity participation, albeit with mixed results. Continued impediments include the lack of available facilities, concern for safety, lack of income and time, and a poor public understanding of the health benefits of exercise. To reach larger segments of the population, governments in Mexico, Chile, Peru, Panama, and Bolivia have invested in developing public sports and recreational facilities, educating the public about the benefits of exercise, and making public venues open for physical activity. Several national programs, such as Chile's "Quiero Mi Barrio" and Brazil's "Agita São Paulo," have helped to increase the amount of green space in urban areas for physical activity, creating outdoor gyms ("biosaludables"), walking/running trails, and cycling routes. Over 20 countries

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[109] Moura, F. (2019, June 12). SoftBank Leads $300 Million Investment in Brazil's Gympass. *Bloomberg.* https://www.bloomberg.com/news/articles/2019-06-12/softbank-leads-300-million-investment-in-brazil-s-gympass.

[110] IDB (2018). *Fintech Latin America 2018: Growth and Consolidation.* http://dx.doi.org/10.18235/0001377.

[111] Azevedo, M.A. (2019, April 29). Latin America Has 'Arrived' Among Global VCs. *Crunchbase News.* https://news.crunchbase.com/news/latin-america-has-arrived-among-global-vcs/.

in the region participate in Challenge Day – a mass participant event that increases public awareness. In 2019, over 3,000 cities across the region participated in this event, in which cities compete to get the largest share of their population exercising throughout the day.

- Several nations, via "sports for life" and "sports for development" initiatives, support community programs to provide free or low-cost exercise opportunities for large segments of their populations. Mexico, Chile, Ecuador, Colombia, and Brazil have offered widespread free and low-cost classes to increase physical activity participation for several years. Paraguay and Belize recently launched programs that offer free sports and exercise classes/activities in public parks, plazas, shopping malls, and streets. Colombia offers low cost classes (averaging US$0.80 per class) for all age groups in Zumba, Pilates, yoga, and martial arts, held in community centers and outdoor public venues. Free daily classes are also available in Panama, Cuba, Colombia, Argentina, and Uruguay in public venues at certain times during the year. Meanwhile, the government of Ecuador has invested over US$1.5 million to offer dance fitness and aerobics classes throughout the country. Successful community-based programs, such as Jamaica Moves, Montevideo Moves, Cuba's For Life, and Honduras Active, have boosted interest and participation in exercise, and are being replicated in other countries in the region including Mexico, Colombia, and several Caribbean nations.

- Creating public spaces for physical activity, especially in urban centers, has proven to have tremendous impact in engaging urban dwellers to be more active. The most well-known program is Bogotá, Colombia's Ciclovía, now recognized as the world's largest and most successful mass recreation event. First launched in 1974, and expanded in the 1990s and 2000s under Mayor Enrique Peñalosa, Ciclovía opens up city streets, squares, and parks on Sundays and holidays to various physical activities such as cycling, running, dance, and yoga classes.[112] It offers a democratic and accessible way for residents of all ages and backgrounds to be active in their city, making it safe and fun to do so, while experiencing a sense of civic participation and pride. Ciclovía has since spawned dozens of similar programs in more than 15 countries regionwide (as well as globally), including Trinidad and Tobago's Streets for Wellness, increasing awareness and opportunities for physical activity among the general public.

Governments are engaging business and nonprofits to help specific groups, including the elderly, youth, and workers, to become more physically active.

- To reduce childhood obesity and sedentary behavior, governments across Latin America and the Caribbean are promoting physical activity among students through a host of government- and NGO-sponsored community programs, infrastructure projects, and mandatory physical education requirements. Sport-for-development programs that focus on youth and childhood physical activity have reached tens of thousands of marginalized children in the region. Chile, Cuba, and Panama have also implemented programs that target aging populations.

[112] See: 1) Dixon, L. (2018, Oct. 2). How Bogotá's Cycling Superhighway Shaped a Generation. *CityLab.* https://www.citylab.com/transportation/2018/10/how-bogotas-cycling-superhighway-shaped-a-generation/571900/. 2) Barclay, E. (2017, July 30). Bogotá closes its roads every Sunday. Now everyone wants to do it. *Vox.* https://www.vox.com/2016/10/9/13017282/bogota-ciclovia-open-streets. IHRSA (2019). 201 IHRSA Global Report, the state of the health club industry.

For example, Chile's "More Self-Sufficient Seniors" program uses group activities in local community centers to improve physical fitness, while Panama's "Physical Activity for Older Adults" project provides free aerobics, swimming, and tai chi classes to seniors. Colombia, Costa Rica, Mexico (via its "Active Attitude" program), and Jamaica (via the Ministry of Health's "Jamaica Moves" program) use a variety of programs to promote exercise during the workday, providing training assistance and activity guidelines to workers. Chile supports workforce initiatives, such as walking breaks and outdoor exercise paths, that have been implemented at over 200 workplaces. In Bermuda, the government partners with local gyms to promote lunchtime workouts.

- Many governments have engaged international and national NGOs and businesses to develop and maintain sports and recreation facilities, offer community fitness classes, educate the public, and provide lower cost access to gyms and fitness centers. For example, Colombia's government agencies jointly developed programs (such as the successful "Muévete Bogatá" and "Bogatá Más Activa" initiatives) to provide free fitness classes and recreational activities in parks, squares, and public facilities throughout Bogatá. The Peru Institute of Sport's "Sport Truck" has engaged thousands of people in underserved areas, including prisons and rural towns, in physical activities. Argentina's "Our Field" program is collaborating with colleges and universities to provide free sports and recreational activities nationwide. The Physical Activity Network in Uruguay (RAFU), formed in 2010, is a network of public and private partners that promotes physical activity through research, education, and support for national and regional programs such as the development of sports infrastructure. Under its National Program of Physical Culture and Sport, Mexico engages local sports clubs to promote physical activity and has built urban gyms to reach underserved groups. Through its Physical Activity Task Force, Barbados collaborates with businesses to develop safe spaces for exercise, while Turks and Caicos' government initiative will create green fitness parks. As part of its "Choose Health Living System," Chile offers tax breaks to businesses that make donations to sport and recreational activities, and it provides subsidies to housing developments that create outdoor sport and recreation areas via its "Quiero Mi Barrio" program.

Despite uncertainties in some countries, overall participation in the physical activity sector will expand with rising disposable incomes and increasing awareness of the benefits of exercise.

- An expanding middle class that attaches greater value to exercise will continue to fuel demand for physical activity in this region, especially in countries such as Chile, Colombia, Peru, Uruguay, Jamaica, and Ecuador. Recognizing the potential for youth fitness, businesses in Mexico and Colombia are aggressively rolling out fitness options for families and youth. Demand for affordable fitness and boutique classes will continue to grow. In some markets such as the Dominican Republic, the industry is already extending into shopping malls and smaller communities to increase access for consumers. However, economic and political challenges may dim near-term prospects in markets such as Venezuela, Nicaragua, Cuba, and Puerto Rico.

Middle East-North Africa Highlights (2018)

Top Ten Physical Activity Markets in Middle East-North Africa, 2018

	Recreational Physical Activities* (US$ millions)	Enabling Sectors (US$ billions)			Total Market Size (US$ millions)
		Technology	Equipment & Supplies	Apparel & Footwear	
Saudi Arabia	$1,921.3	$84.6	$596.6	$1,002.1	**$3,584.7**
Iran	$859.5	$52.2	$183.9	$2,154.7	**$3,242.6**
Israel	$1,458.9	$48.4	$519.5	$944.9	**$2,959.0**
UAE	$701.1	$20.1	$126.0	$1,794.4	**$2,636.8**
Egypt	$738.3	$84.1	$647.2	$273.5	**$1,722.4**
Algeria	$447.2	$35.5	$145.4	$839.1	**$1,461.2**
Iraq	$88.6	$11.8	$29.3	$1,079.5	**$1,205.8**
Qatar	$98.0	$8.4	$99.5	$868.4	**$1,072.0**
Kuwait	$287.0	$7.3	$25.6	$670.9	**$989.5**
Morocco	$297.6	$22.9	$38.9	$554.2	**$911.0**

** Measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation in three types of recreational physical activities (sports & active recreation, fitness, and mindful movement).*

Source: Global Wellness Institute

Top Ten Sports & Active Recreation Markets in Middle East-North Africa, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ millions)
Israel	59.3%	$1,056.2
Saudi Arabia	24.9%	$974.1
Iran	25.3%	$529.8
Egypt	28.3%	$380.0
Algeria	26.7%	$323.5
United Arab Emirates	29.1%	$286.6
Morocco	30.6%	$202.0
Jordan	24.0%	$74.1
Tunisia	26.7%	$72.3
Lebanon	47.1%	$68.6

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Fitness Markets in Middle East-North Africa, 2018

	Fitness Participation Rate*	Fittness Market Size* (US$ millions)
Saudi Arabia	4.4%	$926.3
United Arab Emirates	6.9%	$387.7
Israel	7.4%	$361.2
Egypt	1.2%	$354.4
Iran	0.8%	$319.7
Kuwait	10.2%	$230.6
Lebanon	3.7%	$122.7
Algeria	0.6%	$119.5
Morocco	0.8%	$93.5
Bahrain	7.8%	$66.5

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Mindful Movement Markets in Middle East-North Africa, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ millions)
Israel	1.3%	$41.5
United Arab Emirates	1.5%	$26.8
Saudi Arabia	0.3%	$20.9
Iran	0.2%	$9.9
Algeria	0.2%	$4.2
Egypt	0.1%	$3.9
Lebanon	0.8%	$3.1
Morocco	0.2%	$2.2
Tunisia	0.2%	$1.0
Jordan	0.1%	$0.8

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Middle East-North Africa Developments

While current participation rates are low, consumers in the region are becoming more interested in physical activity of all types.

- Participation in recreational physical activities is low in the Middle East and North Africa. In fact, Middle East-North Africa has the lowest regional average participation rate in the world (25.7%), with about 20-40% of the population participating regularly (at least once a month) in most countries according to GWI's estimates. The region also ranks the lowest for its overall participation rates in the mindful movement (0.2%) and sports and active recreation (25%) segments. According to IHRSA, penetration rates for membership in commercial/private gyms and health clubs are also very low (below 6% in most markets);[113] and the higher membership rates in a few countries are largely driven by demand from wealthy expatriates (e.g., Kuwait). The overall low level of participation is alarming, given rising rates of obesity across the region, especially in countries such as Egypt, Saudi Arabia, and Morocco. According to GWI's research, nonprofit, publicly-funded, and free fitness facilities and programs are minimal to nonexistent across the region, although government focus on and investment in exercise, sports, and recreation is starting to change in some countries (e.g., UAE, Saudi Arabia).

- Nonetheless, consumer awareness of the importance of exercise and fitness is growing, especially among the younger population, driving diversity and growth in the fitness market across the region. Saudi Arabia now has modern gyms and fitness centers throughout the country, and the number of private/commercial gyms has risen by 250% from 2013 to 2018 (according to IHRSA data). Lebanon and Morocco have smaller fitness markets, but a growing number of franchise gyms and smaller fitness enterprises offer their members state-of-the-art equipment and the latest fitness classes. CrossFit communities have cropped up in several countries, with Kuwait holding one of the latest CrossFit competitions. In addition, many dedicated sports fans have taken to participating in sport clubs, while others are exploring new biking and jogging trails. Israel's sports and recreation infrastructure supports a growing number of outdoor recreation enthusiasts, who prefer walking, running, and swimming. The Israeli Sports for All Association, founded in 1981, has worked successfully to improve participation in these activities through festivals, Sport for All Days, and family friendly sports activities at local parks and public facilities. Egypt has experienced a grassroots "fitness revolution" since the Arab Spring, as young people look for an outlet for their energy as well as avenues for empowerment and improving their wellbeing. In recent years, there has been a huge increase in gym options as well as a visible rise in outdoor recreational activities in the streets and in public spaces (running, cycling, rowing, etc.). The number of private/commercial gyms in Egypt grew by 80% in just five years according to IHRSA data, and these range from international franchises like CrossFit to local budget-priced brands.

- Mass recreation events, supported by both the public and private sector, have also increased the visibility, participation, and popularity of recreational physical activities in recent years. In Egypt, for example, a growing number of cycling, swimming, and running clubs have emerged in recent years, and thousands of city residents now participate in weekend bike rides. Two

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[113] IHRSA (2019). *201 IHRSA Global Report, the state of the health club industry.*

running clubs (Maadi Runners, founded in 1999, and Cairo Runners, founded in 2012) have been a major force driving the emergence of a running culture and the rising popularity of outdoor exercise in Cairo, Egypt. Both groups sponsor free mass running events in various Cairo neighborhoods on Fridays, with participation averaging 2,500 runners and sometimes attracting 8,000 or more – in spite of Cairo being one of the most crowed, polluted, and inhospitable cities for running in the world. When Cairo Runners organized Cairo's first half-marathon in 2014, it attracted more than 4,000 registrants.[114]

Once dominated by the wealthy and expatriates, the physical activity market is becoming more diverse and accessible.

- For a long time, access to fitness and exercise options in this region was largely limited to wealthy consumers and expatriate communities, who could follow the latest trends, classes, and state-of-the-art equipment at expensive internationally-branded gyms, boutique fitness clubs, and other sports facilities, especially in the region's biggest urban markets. Average revenues per member for private/commercial fitness clubs in the UAE and Saudi Arabia are among the most expensive in the world according to IHRSA data.

- More recently, a wide array of modern gyms, sports facilities, and dance and martial arts studios has emerged throughout the region to serve a rapidly rising number of local, younger, and less affluent exercisers and fitness enthusiasts. In the UAE and Saudi Arabia, the growing interest in fitness among the middle class has also led to a more diverse market, and the rise of lower-cost alternatives, such as GymNation, MetroFitt, and Snap Fitness, is starting to disrupt the industry in the same way they have in North America and Europe. In Cairo, Egypt, public gyms offering $1 sessions are extremely popular and fill up quickly. Street workout clubs and makeshift gyms on rooftops and in abandoned buildings have also become popular, spreading to multiple Egyptian cities and provinces.

- Iran's fitness sector is an interesting study in contrasts. The country has a sizable and fast-growing segment of international caliber gyms, fitness centers, and yoga studios catering to a growing class of wealthy young urban professionals. Alongside these is a large sector of traditional gymnasiums called zurkhaneh ("house of strength"). For men only, the zurkhanehs offer an exercise system that combines calisthenics, strength training, martial arts, and wrestling, with roots going back 700-800 years, and now closely linked with Shiism and religious ritual. Participants manipulate traditional equipment modelled on medieval weapons (clubs, bows, shields) in an octagonal pit, with traditional percussive music and chanting. About 500-1,000 zurkhaneh exist around Iran according to various sources; some are owned by the Ministry of Cultural Heritage, while others operate with small donations from members. The zurkhaneh tradition has been credited for Iran's strength on the world stage in the modern sports of wrestling, weightlifting, and Tae Kwon Do.[115] While zurkhaneh tends to be popular

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[114] See: 1) Nordland, R. (2016, Aug. 23). Egyptians Take to the Streets Again, Now in Workout Gear. *New York Times.* https://www.nytimes.com/2016/08/24/world/middleeast/egypt-exercise-fitness-revolution.html. 2) The Growing Running Scene in Cairo, Egypt. *Runner's World*. Sept. 19, 2014. https://www.runnersworld.com/news/a20815906/the-growing-running-scene-in-cairo-egypt/.

[115] See: 1) Randolph, E. (2018, March 26). Iran's 'houses of strength', between the ancient and the modern. *Borneo Bulletin*. https://borneobulletin.com.bn/irans-houses-of-strength-between-the-ancient-and-the-modern/. 2) Fisher, M. (2012, Aug. 9). The Ancient Roots of Iran's Wrestling and Weightlifting Olympic Dominance. *The Atlantic.* https://www.theatlantic.com/international/archive/2012/08/the-ancient-roots-of-irans-wrestling-and-weightlifting-olympic-dominance/260919/. 3) Khan, I. (2012, June 12). Ancient Iranian power sport gets boost. *Al Jazeera.* https://www.aljazeera.com/news/middleeast/2012/06/201261244724851974.html.

with older generations, some sources indicate that it is seeing a resurgence in interest, and the appeal lies in their aspects of community, tribe, ritual, and music – perhaps not that far removed from the appeal of modern boutique studio concepts like CrossFit or SoulCycle.

While a wide gender gap exists, changing social norms and government policies are creating significant growth opportunities in the female market.

- Women in the Middle East and North Africa have traditionally faced more obstacles to participating in physical activity – from societal pressures against them exercising in public, to legal and religious policies prohibiting mixed gender facilities/classes and certain types of exercise/movement. The gender gap in male-female participation is wide in countries stretching from Israel and Jordan to Kuwait and Saudi Arabia, and from to Egypt and Tunisia, exceeding three to one in some nations; this gender gap also extends to the youth population. However, as governments recognize the inactivity crisis and its ramifications, especially among women, they are implementing policy changes to support greater female participation in physical activity. In most countries across the region, women's access to fitness and recreation is coming in the form of the lifting of laws prohibiting physical activities and the development of segregated, women-only facilities. Women across Iran, Saudi Arabia, and Oman have gone from using men's gyms at off-peak (ladies') hours to having their own dedicated gyms and outdoor venues to exercise. In 2017, Saudi Arabia started granting licenses for boutique women-only gyms for the first time (although these must be specifically for fitness, and women-only competitive sports facilities are still not allowed). Women have been flocking to these new facilities, and some companies are converting their existing male-only gyms into women's gyms to meet demand.

- In addition to gyms, a number of countries around the region are developing women-only parks and outdoor recreation spaces. Qatar, spurred on by a study that found only 15 percent of women over 15 regularly exercised, has introduced policies to increase women's participation in sports and recreation. One of Qatar's major sports and recreation parks, Aspire Zone, offers women-only classes. Iran (along with Saudi Arabia, Pakistan, and Afghanistan) has recently created women's parks throughout the country, providing places for women to get outdoor recreation and fresh air in "safe" spaces where they can remove their headscarves. Iran's parks have also received widespread criticism, however, because they were designed by men, are largely located in secluded suburban locations that can be difficult to access, and perpetuate the segregation and second-class status of women.[116]

- Women's demand for more access to indoor and outdoor fitness venues is driving changes across the region, fueling the growth of women-only fitness brands such as UAE's In Shape and Jordan's SheFighter, as well as larger chains such as Saudi Arabia's Fitness Time and UAE's Fitness First. Increasingly, women and girls in the region are taking up the latest fitness and exercise trends, such as CrossFit and martial arts (e.g., self-defense in Jordan, Tae Kwon Do in Saudi Arabia) and even going on group runs on public streets. With the surging popularity of fitness and outdoor recreation in Egypt, it is becoming increasingly common to see women

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[116] Van der Zee, R. (2017, Aug. 9). We hate the headscarf': can women find freedom in Tehran's female-only parks? *The Guardian*. https://www.theguardian.com/cities/2017/aug/09/women-only-parks-tehran-iran-segregated-outside-spaces.

running or biking in the streets, or attending co-ed fitness classes. Some international and regional tech entrepreneurs see a major opportunity to develop fitness apps and on-demand workouts targeting women in Middle East markets, although the Arabic-language lifestyle apps market is still underdeveloped and the content needs to be adapted to be culturally acceptable in more conservative countries. Saudi-based MsFit launched a personal training app targeting women in 2017, and Egypt's ElCoach launched a personalized Arabic-language fitness training app in 2018, initially targeting the Egyptian and Saudi markets. Nonetheless, women across the region still have significant barriers to contend with, such as local laws banning Zumba in Iran; strict rules around fitness class offerings in Saudi Arabia; and widespread cost barriers for women with limited economic means.

Mindful movement modalities are rising in popularity and acceptance.

- Despite controversies over the potential contradictions between yoga and Islamic principles, yoga is now offered at upscale fitness clubs and studios throughout the region, including Saudi Arabia, Israel, UAE, and Jordan, and its popularity has grown recently in Morocco. According to GWI's estimates, the countries with the highest participation rates in mindful movement are those with higher average incomes and a more liberal social culture, including UAE (1.5%), Israel (1.3%), and Lebanon (0.8%). Dubai hosts an annual two-day Yoga festival that attracts over 15,000 participants. In Syria, where war has devastated many regions, yoga is in demand and classes are available in major cities. Increasingly, mindful movement is being recognized by the region's governments as an important sector and exercise practice. After banning it for decades, Saudi Arabia officially recognized yoga as a "sport" in 2017, as part of the government's liberalization efforts. In just a couple of years, a new industry of yoga studios has sprung up in cities throughout the country, even in Mecca and Medina. In Iran, Pilates studios can be found in major cities, and the national Pilates Association operates under the umbrella of the national sports authority. The rising popularity of yoga has also brought a rediscovery of "Kemetic Yoga," an ancient style of African yoga originating in Pharaonic Egypt, which some claim has linkages with the origins of Indian yoga. Although still a niche practice, advocates now sponsor Kemetic yoga retreats and teacher training sessions in Luxor, Egypt.

Government policies and investments are increasing access to sports and recreational facilities and encouraging wider participation.

- A number of nations across the region have started "sport for all" programs and have launched initiatives to increase public awareness of the importance of physical activity and to promote exercise participation. Several countries – including the UAE, Saudi Arabia, Oman, and Qatar – have outlined official national goals and policies to encourage physical activity, sometimes including investments in new sports fields, playgrounds, and recreational centers (e.g., the mega park in Riyadh, Saudi Arabia, and high-end sports facilities to attract and retain expatriates in the UAE and Kuwait). UAE has developed many new cycling paths to encourage recreational cycling. Saudi Arabia's Vision 2030 national development plan advocates for healthy lifestyles, including widespread and regular participation in sports and active recreation, and has led to changes affecting women's participation in fitness (as described above), as well a new fund to invest in amateur sports clubs and programs. Egypt has increased support for local sports clubs and sporting facilities, while Israel's program focuses on family activities at public parks, playgrounds, nature sites, and forests. The UAE, Israel, and Bahrain have national sports days. Qatar has a national "Active Qatar" campaign that provides detailed information/instructions on physical activity. Oman has launched a community-based initiative – the Nizwa healthy lifestyles project – which includes a "move for health" component.

- Several countries with large youth populations, including Kuwait, Egypt, and Saudi Arabia, are encouraging younger generations to embrace sports and other forms of physical activity. Improving youth sports participation is part of Saudi Arabia's Vision 2030 plan, and the government has allocated funding to construct sports and recreational facilities in schools and in local youth and sports clubs. Alongside other liberalization measures for women's fitness, Saudi Arabia started allowing physical education and sports programs for girls in public schools in 2017. In Kuwait, where 37% of the population is under the age of 15, the Public Authority for Youth and the Public Authority for Sports support programs that raise youth participation and promote inclusion, including media campaigns to raise awareness and providing more sporting facilities. Concerned with the country's rising obesity epidemic, Egypt's president has called for mandated physical education in schools; most Egyptian children only have access to sports training in private clubs (and only if their families can afford it), while sporting facilities in public schools are minimal. UAE and Qatar have emphasized youth participation in physical activity programs and organized sports clubs. Some countries such as Lebanon, where a recent study estimated that fewer than 5% of youth participate in organized sports, still grapple with how to improve access and increase participation. Other countries, such as Morocco, provide strong support for high-level sports training and competition, while investing very little in infrastructure and funding for amateur youth sports, sporting clubs, and "sports for all" by comparison.

The government, non-profit, and private sectors are partnering to increase physical activity in marginalized communities.

- The Dubai Fitness Challenge is a public-private initiative that engages residents to commit to 30 minutes of daily exercise by providing free sporting events and exercise classes. First launched in 2017, this month-long mass event has been highly successful, engaging almost a million residents. The Israeli Manufacturers Association partnered with the Israel Sport-For-All Association to offer sports activities at workplaces throughout the country. In Egypt, a sporting event company pioneered an initiative that creates inclusive events at local schools and private enterprises in the community to increase female and youth participation in sports and active recreation. The municipal government of Tehran, Iran, has partnered with a start-up bicycle company to implement a city-wide bicycle sharing program. Mars Middle East Inc. collaborated with NGOs and public entities to create an educational physical activity program for children in several nations across the region.

- NGO-supported youth sports and fitness initiatives have been successful in several nations across the region. For example, Morocco's Project Soar has engaged hundreds of Moroccan girls in after-school sports clubs. Jordan's Reclaim Childhood project supports at-risk local and refugee girls to participate in after-school sports programming and summer camps, while Iraq's Sports for Development initiatives have touched more than 60,000 youth in refugee camps and youth centers in the war-torn nation. Jordan has engaged non-governmental entities to implement its US$11 million plan to develop youth sports and recreational infrastructure, and it has seen a remarkable increase in sports participation among local and refugee youth populations.

Sub-Saharan Africa Highlights (2018)

Top Ten Physical Activity Markets in Sub-Saharan Africa, 2018

	Recreational Physical Activities* (US$ millions)	Enabling Sectors (US$ billions)			Total Market Size (US$ millions)
		Technology	Equipment & Supplies	Apparel & Footwear	
South Africa	$2,106.1	$179.4	$299.4	$5,616.1	**$8,165.1**
Nigeria	$549.9	$187.0	$70.5	$207.7	**$983.6**
Angola	$155.0	$9.5	$11.9	$493.1	**$667.3**
Kenya	$133.0	$28.6	$9.6	$406.9	**$574.8**
Ethiopia	$41.2	$33.6	$7.1	$387.7	**$466.3**
Ghana	$109.9	$24.6	$8.8	$302.9	**$443.0**
Tanzania	$95.5	$20.2	$4.1	$289.8	**$405.9**
Cote d'Ivoire	$57.6	$21.4	$7.5	$199.5	**$283.8**
DR Congo	$23.1	$26.7	$5.9	$220.3	**$274.1**
Cameroon	$47.1	$16.5	$11.6	$175.9	**$248.8**

** Measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation in three types of recreational physical activities (sports & active recreation, fitness, and mindful movement).*

Source: Global Wellness Institute

Top Ten Sports & Active Recreation Markets in Sub-Saharan Africa, 2018

	Sports & Active Recreation Participation Rate*	Sports & Active Recreation Market Size* (US$ millions)
South Africa	30.7%	$466.6
Nigeria	32.1%	$303.6
Angola	35.9%	$96.1
Kenya	30.5%	$79.3
Ghana	29.6%	$70.1
Tanzania	35.8%	$56.7
Cote d'Ivoire	33.2%	$32.5
Zimbabwe	46.6%	$32.1
Botswana	38.7%	$27.6
Zambia	34.5%	$24.7

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Fitness Markets in Sub-Saharan Africa, 2018

	Fitness Participation Rate*	Fittness Market Size* (US$ millions)
South Africa	5.1%	$1,622.3
Nigeria	0.6%	$241.9
Angola	0.6%	$57.7
Kenya	0.6%	$52.4
Botswana	3.1%	$48.6
Mauritius	4.0%	$43.1
Namibia	3.1%	$42.7
Gabon	2.9%	$40.1
Ghana	0.6%	$38.7
Tanzania	0.6%	$38.0

** Participation rate measures the share of the total population who are paying members of various types of gym/health club/ fitness facilities and/or who access or utilize their services/classes/facilities on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Top Ten Mindful Movement Markets in Sub-Saharan Africa, 2018

	Mindful Movement Participation Rate*	Mindful Movement Market Size* (US$ millions)
South Africa	0.4%	$17.1
Nigeria	0.1%	$4.5
Kenya	0.2%	$1.3
Angola	0.2%	$1.2
Ghana	0.1%	$1.1
Botswana	0.4%	$0.8
Tanzania	0.2%	$0.7
Mauritius	0.5%	$0.6
Namibia	0.4%	$0.5
Gabon	0.4%	$0.4

** Participation rate measures the share of the total population who participate in this physical activity category on a regular basis (at least monthly). Market size measures consumer expenditures on classes, memberships, entry fees, trainers, and related services and methods of participation.*

Source: Global Wellness Institute

Sub-Saharan Africa Developments

Many people across Africa are physically active and participate in sports and active recreation for free, even in areas where infrastructure is lacking and the fitness market is undeveloped.

- While Sub-Saharan Africa has the lowest level of physical activity *spending* in the world, according to GWI estimates ($15.3 billion in 2018, or an average of $45 per participant per year), its rate of *participation* in recreational physical activities is estimated at 31% (exceeding that of the Middle East-North Africa region). The participation rate exceeds spending levels across the continent because a large swath of the population in many countries participates informally in sports and outdoor recreation activities that can be done for free and with minimal facilities (popular sports include running, soccer, rugby, cricket, wrestling, basketball, etc.). GWI's data on participation rates across Africa are based primarily on WHO STEPS surveys, which show relatively high adult participation rates in recreational physical activity across many countries – including Botswana (33.6%), Togo (28.6%), Tanzania (28.1%), Zambia (26.7%), and Uganda (26.3%) – and participation rates for youth are typically higher than those of adults. In fact, when looking just at the raw number of participants, the size of the recreational physical activity market in Africa (338 million participants) exceeds that of both Latin America-Caribbean (239 million) and Middle East-North Africa (125 million).

- The level of development across many African countries means that a higher portion of the population typically gets physical activity via natural movement (transportation, domestic chores, manual labor jobs) than in wealthier parts of the world. As noted in *Chapter II* for example, Uganda has the lowest rate of physical inactivity in the world according to recent data from *The Lancet*, with only 5.5% of adults physically inactive according to WHO standards. This is not because everyone is going to the gym, but because people walk to work, do manual jobs, grow their own food, and have to stay active to survive.[117] In fact, the WHO STEPS survey for Uganda shows that only 26.3% of adults participate in recreational physical activity, but 87.7% get physical activity from transportation and 90.5% from their work.[118] Other African countries with populations that have very high levels of overall physical activity (>80% getting sufficient physical activity) but low levels of participation in recreational activities (<20% by GWI estimates) include Benin, Central African Republic, Guinea, Madagascar, Mozambique, Rwanda, Sierra Leone, and Togo. These are also among the poorest countries in the world, all with a GDP per capita of under US$1,000 per year.

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[117] Brueck, H. (2019, Apr. 23). Finland and Uganda are the world's fittest countries — here's what they do to stay in shape. *Business Insider.* https://www.businessinsider.com/worlds-fittest-countries-reeal-how-to-stay-in-shape-2019-4?utm_source=hearst&utm_medium=referral&utm_content=allverticals. Cites physical activity data from: Guthold, R. et al (2018, Sept. 4). Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. *The Lancet Global Health* 6, e1077-1086. https://doi.org/10.1016/S2214-109X(18)30357-7.

[118] WHO (2014). *Non-Communicable Disease Risk Factor Baseline Survey: Uganda 2014 Report.* https://www.who.int/ncds/surveillance/steps/Uganda_2014_STEPS_Report.pdf.

The region's physical activity market is shaped by its skewed distribution of income and wealth, with a small urban elite participating enthusiastically in a variety of commercial exercise offerings.

- There is a high correlation between wealth and exercise opportunities in Sub-Saharan Africa. Generally, people who live in higher-income countries (e.g., South Africa, Botswana, Namibia, Mauritius, Seychelles) and in major cities participate and spend more actively in the commercial fitness sector, where they are served by large brand-name fitness clubs, state-of-the-art equipment, boutique studios, and a wide variety of sports and recreation facilities. The share of the population that engages in recreational physical activities is much smaller in rural and lower-income countries such as Ethiopia, Tanzania, and Niger, which offer limited options and few facilities, and these populations generally have less leisure time and disposable income for recreational pursuits.
- South Africa leads the continent for consumer expenditures across all physical activity sectors. Its well-developed sports and active recreation infrastructure provides wider opportunities for participants to spend money on these pursuits. With the largest number and membership of gyms and health clubs in the region, South Africa's fitness market dwarfs those in other African nations. Outside of South Africa, the fitness market is small in most countries, as higher-end fitness club memberships can start at more than US$1,000 per year, exceeding the per capita income in many nations.

The growing middle class is starting to tap into the formal fitness market.

- Despite monetary, cultural, and accessibility constraints, the fitness sector is expanding rapidly in a number of African countries – including Kenya, Nigeria, Uganda, and Ghana – aided by economic growth, political stability, keen consumer interest in Western trends, and a growing middle class that demands more options to combat their increasingly sedentary lifestyle. In Zimbabwe and Nigeria, industry leaders are describing exercise as a nationwide craze. In markets stretching from Namibia to Rwanda, boutique classes and low-cost gyms are proliferating in urban areas and offering price points that cater to middle class consumers. In Rwanda, for example, monthly memberships at smaller public health clubs and private fitness centers can range from US$1-$5.

Technology and entrepreneurship are creating new businesses and fitness choices.

- As young exercise enthusiasts embrace the latest technologies, entrepreneurs in Kenya, Nigeria, and South Africa have found a new market both online and among less affluent customers. Google Fit has a growing number of East African users; Kenyans have adopted Samsung's smart watches; and African fitness apps are emerging. For South Africa's nearly nine million Internet users, online workouts present a highly accessible low-cost alternative to traditional gyms. A growing number of African fitness celebrities, such as Jane Mukami (author of Fit Kenyan Girl) and Esther Dindi ("Doctor Fitness"), have been able to introduce their programs and routines to a wide audience, among them corporations and clients who are ready to pay for training sessions and consultations. Some of Nigeria's fitness stars have as many as 200,000 Instagram followers. Internet influencers enjoy a wide following, and many entrepreneurs – such as Bunmi George, founder of "ShredderGang" – have successfully launched fitness enterprises using social media platforms.

There are growth opportunities in many sports and active recreation segments, from mass outdoor exercise and women's-only enterprises, to martial arts and dance.

- While some Africans choose large gyms offering the latest classes from the United States and Europe, others prefer outdoor recreation. Before and after work, people living in both rural and urban communities gather to exercise in parking lots and stadiums, on beaches, and even on main roads and in cemeteries. Mass participation activities such as jogging and fitness walking are gaining popularity. In many countries, groups of up to 500 people train together in public spaces; park runs in South Africa attract over 45,000 every weekend; and runners throughout the region have created training areas in forests. Women's sports and fitness trends, fueled in part by women's-only enterprises, have grown substantially in markets such as Nigeria, Uganda, and Kenya (e.g., Fit Clique in Uganda). Many women feel unwelcome in co-ed venues, so the number of women's only gyms has risen.

- Dance has been a part of African culture and communal traditions, and it continues to be a popular form of group exercise class, especially African dance fitness, "Afrobics," and Zumba. In several countries, including Uganda, Senegal, Namibia, Somalia, and Zimbabwe, martial arts studios and practitioners have benefitted from close relationships with schools in China and Japan. Since 2013, China has provided opportunities for athletes from several African countries to study traditional kung fu in China. In 2018, Cameroon hosted 500 practitioners in the first African Festival of Martial Arts, with assistance from China. In Malawi, the Japanese Embassy will host a karate tournament designed to select Malawian athletes to represent their country in the 2020 Olympics.

Mindful movement is emerging as an important healing modality and community movement.

- Mindful movement has been a part of upscale gyms and studios in Africa for several years, and many yoga and Pilates studios already exist in the major cities of South Africa, Uganda, and Kenya. Others markets, such as Ethiopia, Zimbabwe, and Somalia, are seeing rising consumer interest in yoga. In Lagos, Nigeria, green living and yoga have been promoted in a citywide festival. Importantly, several regional initiatives have played a unique role in democratizing mindful movement and employing it to heal communities and mitigate youth unemployment. For example, "Yoga for Wellness" in Tanzania and "Yego Yoga" in Rwanda help bring yoga to communities at little or no cost. In Somalia, community yoga classes seek to heal the spirits and emotional wounds of young former soldiers. Over the last decade, the highly successful Africa Yoga Project has trained young people as yoga instructors, giving them gainful employment while encouraging them to make yoga more accessible through free and discounted community classes. To date, the project, which originated in Kenya, has trained over 300 yoga teachers and reached thousands of practitioners in over 15 African nations, including Namibia and Mali.

Alarmed by the rise of sedentary lifestyle and chronic disease, many governments have instituted national fitness plans and are engaging the private sector to increase participation in physical activity.

- Across Africa, industrialization and urbanization are bringing significant lifestyle changes and reducing opportunities for natural movement. Alarmed by the rising incidence of chronic disease, many nations have instituted national fitness plans. In Zimbabwe, the National Fitness and Wellness Programme focuses on a wide range of exercise, fitness, sports, and recreation goals. South Africa's highly ambitious plan targets 50% participation in sports and active recreation by 2030. Countries such as Kenya, Senegal, Tanzania, and Ghana strive to create a more equitable environment by building and enhancing sports and recreation facilities nationwide. Mauritius is working to meet its physical activity goals by funding group classes, fitness facilities, and outdoor gyms at community centers across the country. Ethiopia's Physical Activity Network is using social media, including Twitter and Facebook, to help implement the government's plan. Following Nigeria's successful example, Rwanda is supporting "sport for all" and mass participation events to promote peace and healing. South Africa, Tanzania, Zambia, and Gabon have created physical fitness weeks, months, or days. Rwanda's campaigns include a monthly car-free day and the government leading by example (e.g., setting Friday afternoons for government employees to participate in some form of physical activity).
- Collaborations among stakeholders are critical to increase participation in physical activity in Africa. Zambia, Rwanda, Zimbabwe, and Seychelles all encourage the private sector to become involved in planning, funding, and implementing their national fitness agendas. From health care companies in Rwanda and South Africa, to food companies in Nigeria, corporate stakeholders are increasingly involved in national and community fitness initiatives. During car free days and National Health Week, healthcare organizations in Rwanda often offer

free diagnoses and advice on combatting non-communicable disease. One of South Africa's largest health insurers, Discovery Health, has a subsidy and reward program for members who use gyms. In Namibia, African Wealth Group, a healthcare organization operating pharmacies and medical practices, has entered the fitness market in an effort to bring a healthier lifestyle to low-income communities. NGOs and other organizations like the National Basketball Association (NBA) in Africa and the Africa Yoga Project's partnership with Lululemon are seeking to promote lifestyle change through exercise. Zambia's "Sport in Action" initiative has been recognized internationally for its success in promoting community health and wellbeing, through its program partnering with local soccer clubs to provide youth with reliably safe places to exercise.

Driven by demographic and consumer lifestyle trends, the physical activity market is poised for growth.

- In the near future, the physical activity sector will continue to expand throughout the region. As a growing African middle-class with rising disposable incomes embraces a healthy and more active lifestyle, the demand for exercise opportunities will increase. Uganda, Kenya, Ghana, and Nigeria are especially well-positioned for growth, building on the demand of their youth populations, rapid urbanization, and healthy economic growth. National and multinational fitness businesses will expand to less affluent areas outside of the major cities and offer more economical options. Planet Fitness and Virgin Active, already active in South Africa and several other countries, are planning regional expansions, while Garmin, assessing the African market as ripe for wearable tech, has expansion plans in Kenya, Nigeria, and Uganda.

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