



# Innovative Research Initiatives in Sport Events

*Department of Sport Management*

**UNIVERSITY of FLORIDA**

**Final Report:**

## **THE IMPACT OF COVID-19 on SPORTS CONSUMPTION**

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## Executive Summary

The COVID-19 pandemic brought a disruption to consumers' daily sport consumption. The purpose of this study was to examine the perceptions, attitudes, and behaviors of sport consumers in the U.S. during the COVID-19 era. By using Amazon Mechanical Turk as a recruiting tool, a sample of 382 participants was used for analyses. The following provides some highlights from the research results.

### Demographic results

A total of 382 respondents from across the USA completed the present survey. Most respondents were white (62.8%, n=240), male (62.6%, n=239), under the age of 40 (63.9%, n=244), married/partnered (64.1%, n=245), and possessed an income of \$60,000 or less (55.3%, n=211), with at least a college degree (69.6%, n=266).

### Pre-COVID behavior

Prior to the COVID-19 outbreak, most respondents (74%, n=283) indicated having regularly engaged in moderate physical activity. However, the majority (56%, n=214) also reported that they did not attend sporting events as a spectator.

### Post-COVID influence on daily life

Most respondents (70%, n=267) indicated that COVID-19 started quickly spreading throughout the United States in March of 2020. Additionally, most respondents (73%, n=279) reported that they were currently sheltering in place, but occasionally leaving their homes for necessities. The majority of respondents (63%, n=241) were also working at home at the time of the present study and were living within counties still in the stay at home phase (60%, n=229).

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## Post-COVID behavior towards leisure activities

Respondents indicated that watching television ( $M=3.35/7$ ) in the last seven days prior to the present study, had a higher mean score than doing other leisure activities such as playing video games ( $M=2.45/7$ ), video chatting with friends ( $M=2.23/7$ ), or engaging in outdoor activities ( $M=2.18/7$ ). Additionally, most respondents (64%,  $n=244$ ) indicated that despite the lack of live sports on television, they had not replaced watching sports with other activities.

## Post-COVID behavior towards exercise

In the week prior to the present study, the majority of respondents (64%,  $n=244$ ) indicated having exercised three times or more for at least 30 minutes per session. Additionally, 39% ( $n=149$ ) of respondents indicated that they exercise slightly less or much less now, in comparison to before the COVID-19 outbreak, while 31% ( $n=118$ ) indicated that they now exercise slightly more or much more, and 30% ( $n=115$ ) indicated no change in their exercise frequency.

## Post-COVID emotions

The present survey asked participants about their emotions since the COVID-19 outbreak. The emotions that elicited higher mean scores were feeling alert ( $M=4.00/5$ ), optimistic ( $M=3.18/5$ ), interested ( $M=3.16/5$ ), hopeful ( $M=3.15/5$ ), and determined ( $M=3.00/5$ ).

## Post-COVID risk perceptions

The present survey asked participants to determine the amount to which they agree or disagree with statements assessing their risk perception. Respondents showed higher agreement with the statement with the statement “being afraid of doing something new often makes it more fun” ( $M=2.61/5$ ) while the statement “I like to do things that almost paralyze me with fear” received lower evaluations ( $M=2.05/5$ ).

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## **Attitudes towards physical activity**

Participants of the present study were presented adjectives to describe their attitudes towards engaging in physical activity. Adjectives that respondents felt most aligned with included healthy (M=4.10/5), enjoyable (M=3.30/5), relaxing (M=3.09/5), and easy (M=3.01/5).

## **Attitudes towards watching sports media**

Participants of the present study were presented adjectives to describe their attitudes towards following sports on television or digital media platforms. Adjectives that respondents felt most aligned with included enjoyable (M=3.57/5), good (M=3.52/5), pleasant (M=3.45/5), and exciting (M=3.21/5).

## **Attitudes towards COVID-19**

Participants in the present study were presented statements describing attitudes towards COVID-19. Respondents indicated agreeing most with the statements “I am in support of the physical distancing measures for as long as it is needed to slow or eradicate the virus” (M=4.43/5), and “I am fine with wearing a mask for as long as it takes to have a safe society” (M=4.26/5). Respondents indicated disagreeing most with the statements “I worry that a vaccine for COVID 19 will not be discovered” (M=2.91), and “This virus is causing me stress daily” (M=3.05).

## **Perceived behavioral control on physical exercise**

Respondents of the present survey indicated that they somewhat agreed with the statements “I have the physical strength to exercise 30 minutes 3 times a week for the next three months” (M=4.37/5), “My exercising for at least 30 minutes 3 times a week for the next three months is up to me” (M=4.32/5), and “I am confident I can exercise for at least 30 minutes, 3 times per week in the next three months” (M=4.06/5).

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## Perceived behavioral control on COVID-19

Respondents of the present survey indicated that they somewhat agreed with the statements “I feel I know how to protect myself from the virus” (M=4.36/5) and “I have the necessary personal protective equipment (e.g., face masks) to protect myself in public” (M=4.29/5).

## Subjective norms about exercise

Respondents of the present survey indicated that they agreed most with the statement “most people who are important to me would approve of me exercising for at least 30 minutes 3 times per week for the next three months” (M=4.47/5), followed by “my health providers think I should exercise for at least 30 minutes 3 times per week for the next three months” (M=4.38/5), and “most of my friends exercise for at least 30 minutes 3 times per week” (M=3.55/5).

## Subjective norms about COVID-19

Respondents of the present survey indicated that they agreed most with the statement “my friends and family comply with the physical distancing guidelines” (M=4.45/5), followed by “my friends and family support wearing face masks in public” (M=4.44/5), “my doctors indicate the seriousness of the virus for a person’s health” (M=4.22/5), and finally, “my friends and family are really scared of the virus’ impact on their health” (M=3.85/5).

## Personal goals

Respondents of the present survey indicated that over the next year, their most important personal goals were “to have good quality of life overall” (M=4.36/5), “to be healthy” (M=4.34/5), “to have a happy family life” (M=4.18/5), and “to be financially healthy” (M=4.14/5).

## Wearable devices

The majority (59%, n=225) of respondents indicated that they did not own a wearable device (e.g., fitbit, apple watch) while 41% did not. However, 87% of the 41% of respondents who owned a wearable device used them to monitor exercise.

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## **Future intentions**

Participants of the present survey were asked to identify how likely they were to engage in activities over the next three months if their state/county reopens businesses with protective measures in place. Respondents indicated that they were most likely to “exercise for at least 30 minutes per day in the next 3 months” (M=4.10/5), followed by “host or attend dinner parties” (M=2.51/5). Respondents were least likely to “travel to attend or participate in sport events” (M=2.15/5), followed by “attend a sport event in a stadium or arena” (M=2.16/5).

## **Future intentions: sport event attendance**

A large percentage (43%, n=164) of respondents indicated that they would attend sport events after a vaccine for COVID-19 has been developed, another 35% (n=134) indicated that they would attend sporting events when the government announces that it is safe to do so.

## **Future intentions: mass sport event participation**

The majority of respondents (59%, n=225) indicated that they would participate in sporting events either when a vaccine for COVID-19 is developed, or when the government announces it is safe to do so. Additionally, 34% (n=130) of the 53% (n=202) of the respondents who indicated having children, indicated they would allow their children to participate in sport events when a vaccine for COVID-19 is developed.

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## Introduction

- The purpose of this study was to explore people's perceptions about the impact of COVID 19 on their life and their physical activity and sport event consumption habits.
- The study explored:
  - The demographic characteristics of the respondents
  - Sport consumption behaviors of respondents prior to the COVID-19 outbreak
  - Sport consumption behaviors of respondents after the COVID-19 outbreak
  - Respondents' future intentions regarding physical activity and sport event participation.

## Method

Data were collected using a web survey through the platform Qualtrics, and participants were recruited from Amazon Mechanical Turk. The target sample was 412 cases. The survey was sent on May 8, 2020 and included a number of items relevant to the purpose of the study and two attention check questions that were spread out throughout the survey. Thirty respondents failed to correctly answer both of these questions and were removed from the data analysis. This process resulted in 382 complete cases for analysis.



# Results

## 1. Demographics

- **Respondents information** The demographic information of the respondents includes gender, age, household income, education, racial/ethnic background, and political affiliation. Most of the respondents were male (62.6%, n=239), aged between 20 and 49 (84.8%, n=324), with an income of more than \$40,000 (64.9%, n=248), with more than a technical degree (90.5%, n=382) (Table 1). The majority of respondents were either Caucasian or Asian (85.3%). Additionally, a total of 150 respondents (39.3%) indicated their party affiliation as democrat, while 125 (32.7%) were republican.

Table 1. Respondents' background information

Variable	Category	Frequency	%
<b>Gender</b>	Male	239	62.6
	Female	143	37.4
	Total	382	100.0
	<b>Age</b> Median=35y (SD=11.35)		
	20-29	95	24.9
	30-39	149	39.0
	40-49	80	20.9
	50-59	35	9.2
	60-69	18	4.7
	70-79	5	1.3
	Total	382	100.0
	Median		35
<b>Income</b>	Less than \$20,000	47	12.3
	\$20,001-\$40,000	87	22.8
	\$40,001-\$60,000	77	20.2
	\$60,001-\$80,000	68	17.8
	\$80,001-\$100,000	46	12.0
	\$100,001 or more	57	14.9
	Total	382	100.0

<b>Education</b>	Less than high school	1	.3
	High school	35	9.2
	Technical college	20	5.2
	Some college	60	15.7
	College degree	195	51.0
	Advanced degree	71	18.6
	Total	382	100.0
<b>Racial/Ethnic background</b>	White	240	62.8
	Asian	86	22.5
	Black	23	6.0
	Hispanic	21	5.5
	Native American	5	1.3
	Other	7	1.8
	Total	100.0	100.0
<b>Political affiliation</b>	Democrat	150	39.3
	Republican	125	32.7
	Independent	98	25.7
	Other	9	2.4
	Total	382	100.0

- Respondents' household information** Respondents were also asked about their marital status, along with the number of adults as well as children under 18y in their household (Table 2). The majority of the respondents were either married or partnered (n=245, 98.4%), while only 1.6% (n=6) were either widowed or indicated 'other'. When asked the number of adults in household, 71.9% (n=257) had one or two, followed by three (n=49, 13.7%), four (n=38, 10.6%), and five or more (n=13, 3.6%). Nearly one-third of the respondents had no child under 18y in the household (n=82, 32.9%), followed by one (n=77, 30.9%), two (n=70, 28.1%), and three or more (n=20, 8.0%).

Table 2. Respondents' household information

Variable	Category	Frequency	%
<b>Marital status</b>			
	Married/partnered	245	64.1
	Single	131	34.3
	Widowed	3	.8
	Other	3	.8
	Total	382	100.0
<b>Number of adults in household</b>			
	1	83	23.2
	2	174	48.7
	3	49	13.7
	4	38	10.6
	5 or more	13	3.6
	Total	357	100.0
<b>Number of children under 18y in household</b>			
	0	82	32.9
	1	77	30.9
	2	70	28.1
	3 or more	20	8.0
	Total	249	100.0

- Residential location** Information regarding residency status based on zip code was collected (Figure 1). Among respondents in the present survey, a total of 186 responses were used to create zip code location mapping and visualization. It appears that the respondents were spread all over the states.

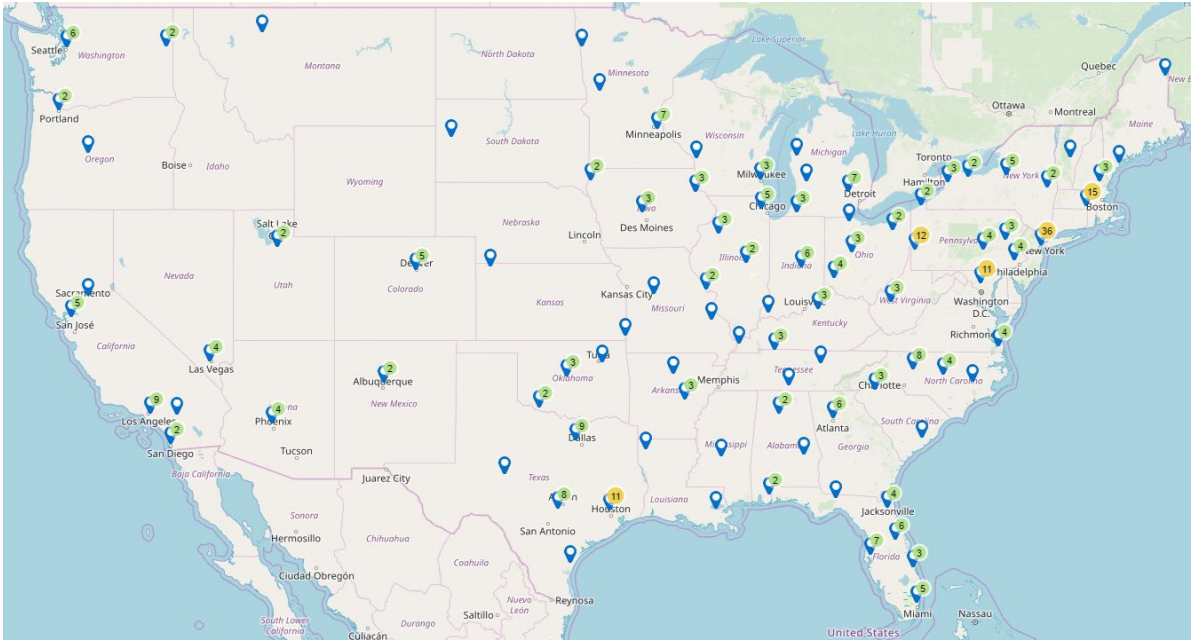


Figure 1. Geographical location of the respondents' permanent residency based on zip codes

## 2. Pre-COVID Behavior

- Watching sports content** Respondents' watching habits on sports-related content before the COVID-19 pandemic were measured on a 5-point scale ranging from 1 (0 hours) to 5 (More than 7 hours) (Table 3). Respondents were likely to watch sports on TV between 1 and 3 hours (37.4%), followed by 0 hour (24.9%), between 3 and 5 hours (19.1%). Less than half of the respondents (43.5%) watched sports on YouTube, followed by 1 to 3 hours (34.8%) and 3 to 5 hours (11.8%). Interestingly, more than half of the respondents were not likely to watch sports either on Facebook, Twitter, Instagram, or listen on radio. Some respondents watched sports on Facebook 1 to 3 hours per week (23.6%), followed by 3 to 5 hours (13.4%).

Table 3. Time spent watching sports-related content during an average week before COVID-19

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
Sports on TV	24.9	37.4	19.1	12.0	6.5	2.75	1.86
Sports on YouTube	43.5	34.8	11.8	7.6	2.4	2.10	1.53
Facebook	52.6	23.6	13.4	7.6	2.9	2.05	1.61
Twitter	54.5	24.9	8.9	9.7	2.1	2.04	1.65
Instagram	58.6	20.2	10.5	8.4	2.4	1.97	1.62
Sports on the Radio	65.2	16.5	9.4	6.0	2.9	1.83	1.55

\*: 1=0 hour, 2= Between 1 and 3 hours, 3= Between 3 and 5 hours, 4= Between 5 and 7 hours, 5= More than 7 hours

- Physical activity and spectating experience** Respondents were asked to indicate their level of moderate physical activity, which is defined as exercise sustained for many minutes without exhaustion or extreme fatigue that increases breathing and heart rate, such that the pulse can be felt with increased warmth and possible sweating. Many of them indicated that they engaged in the activity before COVID-19 (73.8%, n=282), while 26.2% did not (n=100). When asked about their past experience as a spectator, less than half of the respondents said they had attended sport events as a spectator (44.2%, n=169), while 55.8% did not (n=213).

### 3. Post-COVID Behavior

- Leisure activities during COVID-19 era** Respondents' leisure activities during the COVID-19 pandemic were measured on a 5-point scale ranging from 1 (Less than 1 hour) to 5 (More than 7 hours) (Table 4). Respondents were likely to watch TV 2 to 3 hours per day (22.0%), followed by 1 to 2 hours (20.4%) and 3 to 4 hours (16.5%). Less than half of the respondents (41.6%) played video games less than 1 hour a day, while 19.6% indicated 1 to 2 hours and 14.4% indicated 2 to 3 hours. In terms of outdoor activities, 38.7% respondents indicated less than 1 hour per day, while 35.3% indicated 1 to 2 hours. Almost half of the

respondents (47.9%) engaged in video chatting with friends less than 1 hour per day, while 23.8% indicated 1 to 2 hours.

Table 4. Time spent conducting leisure activities in an average day during the COVID-19 pandemic

Variable	Percentage (%)*							Mean	SD
	1	2	3	4	5	6	7		
Watching TV	15.4	20.4	22.0	16.5	9.9	12.6	3.1	4.20	1.94
Playing video games	41.6	19.6	14.4	9.4	8.6	3.7	2.6	3.04	2.05
Engaging in outdoor activities (e.g., walking, hiking)	38.7	35.3	9.4	8.1	3.1	4.5	.8	2.79	1.77
Video chatting with friends	47.9	23.8	7.9	7.6	6.5	3.7	2.6	2.75	2.02

\*: 1=0-1 hours per day, 2=1-2 hours per day, 3=2-3 hours per day, 4=3-4 hours per day, 5=4-5 hours per day, 6=5-6 hours per day, 7= More than 7 hours per day

- Sheltering and working status during COVID-19 era** Respondents were asked about their sheltering status during the COVID-19 pandemic (Figure 2). All 382 responses were collected on May 8, 2020. Many respondents indicated their status as ‘sheltering in place but moving around for necessities’ (68.8%, n=263), followed by ‘sheltering in place without leaving my house’ (24.3%, n=93).

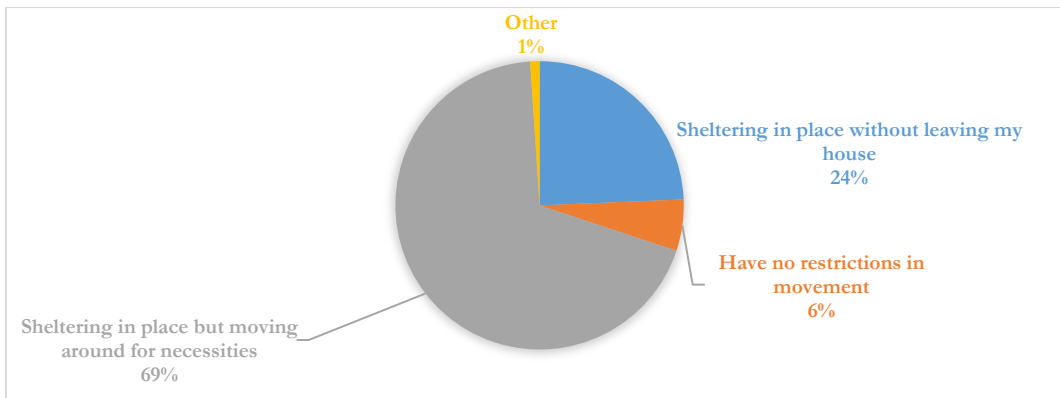


Figure 2. Sheltering status of the respondents

- When asked about their working status, 63.1% of the respondents (n=241) indicated that they are currently employed, followed by those who indicated themselves as an essential worker (17.5%, n=67), and those who were left unemployed due to COVID-19 (12.3%, n=47) (Figure 3).

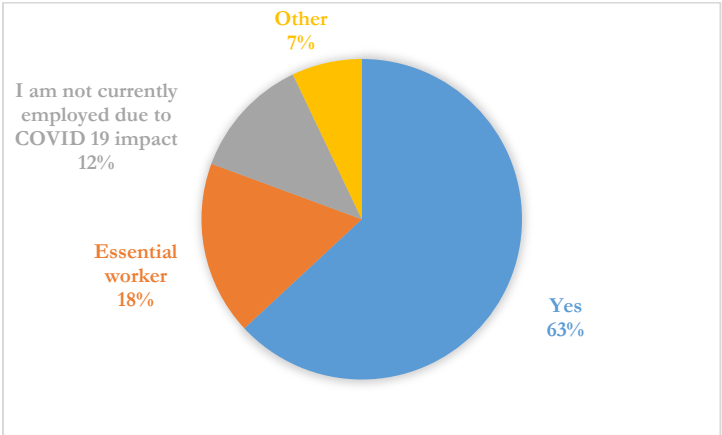


Figure 3. Working status of the respondents

- Exercise behavior during COVID-19 era** When asked about respondents’ exercise behavior during COVID-19 era, 31.7% of them (n=121) indicated that they exercised every day, followed by three times a week (20.4%, n=78), every other day (17.8%, n=68), no exercise (12.6%, n=48), twice a week (9.7%, n=37), and once a week (7.9%, n=30). When asked about how the pandemic changed their exercise frequency, 30.1% (n=115) indicated ‘unchanged’, followed by ‘slightly less’ (22.8%, n=87), ‘slightly more’ (22.3%, n=85), ‘much less’ (15.4%, n=59), and ‘much more’ (9.4%, n=36).

## 4. Emotions and risk perceptions

- Emotions and risk perceptions about COVID-19** When asked about their emotions during the COVID-19 pandemic, respondents indicated a moderate amount or more of feeling alert (M=4.00/5), optimistic (M=3.18/5), interested (M=3.16/5), hopeful (M=3.15/5), and determined (M=3.00/5). Table 5 has all the emotions ranked by mean score.

Table 5. Emotions felt during the COVID-19 pandemic

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
Alert	6.0	8.4	23.8	39.3	22.5	4.00	1.10
Optimistic	10.7	20.9	25.4	25.9	17.0	3.18	1.25
Interested	9.4	19.6	30.9	25.4	14.7	3.16	1.18
Hopeful	13.1	18.8	24.1	28.3	15.7	3.15	1.27
Determined	7.9	16.5	27.2	31.2	17.3	3.00	1.17
Enthusiastic	27.0	25.7	20.7	21.5	5.2	2.52	1.24
Excited	34.3	23.3	22.0	15.2	5.2	2.34	1.24
Distressed	33.2	28.8	18.8	14.7	4.5	2.28	1.20
Scared	39.8	24.1	19.1	10.7	6.3	2.00	1.25
Jittery	44.5	23.8	16.8	9.4	5.5	2.00	1.22
Nervous	32.7	28.0	19.4	15.4	4.5	2.00	1.22
Inspired	22.5	21.5	23.6	23.3	9.2	2.00	1.20
Irritable	38.7	28.0	16.8	13.1	3.4	2.00	1.17
Hostile	59.9	15.4	12.0	8.4	4.2	1.81	1.18
Guilty	66.5	13.1	9.9	8.1	2.4	1.67	1.09
Ashamed	67.0	13.1	10.5	6.8	2.6	1.65	1.08

\*: 1= None at all, 2= A little, 3= A moderate amount, 4= A lot, 5= A great deal

- When asked about their perceptions of risk, respondents indicated that they agree most with the statements “Being afraid of doing something new often makes it more fun” (M=2.61/5), “I consider myself a risk taker” (M=2.51/5), “The greater the risk the more fun the activity” (M=2.45/5), and “I like the feeling that comes with taking physical risks” (M=2.39/5). Finally, they agreed least (M=2.05/5) with the statement “I like to do things that almost paralyze me with fear”. Table 6 presents the details related to risk perceptions.



Table 6. Perceptions of risk among respondents

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
I like the feeling that comes with taking physical risks	33.2	24.9	15.4	22.8	3.7	2.39	1.26
I consider myself a risk taker	32.2	24.1	13.6	20.9	9.2	2.51	1.37
Being afraid of doing something new often makes it more fun	26.4	22.0	22.3	23.0	6.3	2.61	1.27
The greater the risk the more fun the activity	31.4	23.8	19.9	17.8	7.1	2.45	1.29
I like to do things that almost paralyze me with fear	49.0	20.7	12.0	13.1	5.2	2.05	1.27

\*: 1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

## 5. Attitudes

- Attitudes towards physical activity and sports media** Respondents' attitudes towards physical activity and sports media were measured on a 5-point scale ranging from 1 (does not describe my thoughts) to 5 (absolutely describes my thoughts) (Table 8). When asked about their attitudes towards physical activity, healthy (M=4.10/5) was the adjective most identified to describe the thoughts of the respondents, with 40.8% (n=156) of respondents feeling that it absolutely described their thoughts, and 36.6% (n=140) identifying that it mostly described their thoughts. The next most commonly identified adjectives were enjoyable (M=3.30/5), relaxing (M=3.09), and easy (M=3.01). The adjective that least described attitudes toward physical activity was unhealthy (M=1.62).

Table 8. Attitudes toward physical activity

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
Difficult	35.1	23.6	18.8	18.6	3.9	2.33	1.24
Easy	16.2	18.6	25.9	26.2	13.1	3.01	1.28
Relaxing	14.9	16.5	28.3	25.1	15.2	3.09	1.27
Stressful	46.9	22.3	13.6	12.3	5.0	2.06	1.24
Not enjoyable	46.9	22.3	14.7	12.0	4.2	2.04	1.22
Unhealthy	72.0	9.4	6.8	8.1	3.7	1.62	1.14
Enjoyable	9.7	14.1	27.5	33.5	15.2	3.30	1.18
Healthy	1.8	4.2	16.5	36.6	40.8	4.10	.95

\*: 1=does not describe my thoughts, 2=slightly describes my thoughts, 3=moderately describes my thoughts, 4=mostly describes my thoughts, 5=absolutely describes my thoughts

- When asked about their attitudes toward watching sports media, respondents identified enjoyable (M=3.57/5) as the adjective that most closely described their thoughts, followed by good (M=3.52), pleasant (M=3.45), and exciting (M=3.21). The adjective which least described their thoughts was bad (M=1.76). Table 9 presents all the detailed results.

Table 9. Attitudes toward watching sports media

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
Good	9.7	9.7	22.3	35.9	22.5	3.52	1.22
Pleasant	11.0	11.0	23.9	30.2	23.8	3.45	1.27
Boring	48.7	20.7	8.4	13.6	8.6	2.13	1.37
Exciting	14.0	15.8	25.3	25.3	19.5	3.21	1.31
Not enjoyable	56.2	14.7	10.2	11.5	7.3	1.99	1.34
Bad	64.8	11.8	11.5	6.3	5.5	1.76	1.21
Unpleasant	59.8	13.6	10.0	9.4	7.1	1.90	1.31
Enjoyable	11.0	10.5	17.5	33.0	28.0	3.57	1.30

\*: 1=does not describe my thoughts, 2=slightly describes my thoughts, 3=moderately describes my thoughts, 4=mostly describes my thoughts, 5=absolutely describes my thoughts

- Attitudes toward COVID-19 and the federal governments' response** Respondents' attitudes towards COVID-19 were measured on a 5-point Scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Table 10). The statement which respondents agreed most to regarding their attitudes towards COVID-19 was "I am in support of the physical distancing measures for as long as it is needed to slow or eradicate the virus" (M=4.43/5), with a majority of respondents (63.9%, n=244) strongly agreeing and 21.7% (n=83) somewhat agreeing. The next most agreed with statement was "I am fine with wearing a mask for as long as it takes to have a safe society" (M=4.26/5) with 55.0% (n=210) of respondents strongly agreeing and 29.6% (113) somewhat agreeing, followed by "I am afraid to travel by plane" (M=3.98/5) and "I am afraid of socializing in groups of more than 10 people" (3.98/5). The statement which respondents agreed the least with was "I worry that a vaccine for COVID 19 will not be discovered" (M=2.91/5), which 14.1% (n=54) of respondents strongly agreed with, 25.9% (n=99) somewhat agreed with, 17.8% (n=68) neither agreed nor disagreed with, 21.2% (n=81) somewhat disagreed with, and 20.9% (n=80) strongly disagreed with.

Table 10. Attitudes toward COVID-19

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
I am fine with wearing a mask for as long as it takes to have a	4.5	4.2	6.8	29.6	55.0	4.26	1.06
I am in support of the physical distancing measures for as long	1.8	3.1	9.4	21.7	63.9	4.43	.92
This virus is causing me stress daily	17.0	19.1	18.8	31.7	13.4	3.05	1.31
I miss hanging out with my friends	6.3	6.5	19.4	36.6	31.2	3.80	1.14
I am scared of the impact of the virus on my health	11.3	12.0	18.6	39.8	18.3	3.42	1.24
I have anxiety due to the virus risk for our society	13.9	14.1	15.7	38.7	17.5	3.32	1.30
I worry that a vaccine for COVID 19 will not be	20.9	21.2	17.8	25.9	14.1	2.91	1.37
COVID 19 will be successfully controlled	3.4	9.7	23.8	36.4	26.7	3.73	1.06

USA will win the battle over COVID 19	4.2	8.4	24.9	33.5	29.1	3.75	1.09
I am afraid of eating out	9.9	13.9	14.7	33.8	27.7	3.55	1.30
I am afraid to be in contact with other people who just traveled	7.9	6.8	10.5	36.1	38.7	3.91	1.21
I am afraid of socializing in groups of more than 10 people	6.8	7.3	12.3	28.5	45.0	3.98	1.22
I am afraid to travel by plane	7.9	7.3	9.9	29.1	45.8	3.98	1.25

\*: 1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

- When asked about the Federal Government’s preparations and action plans to protect the US population from COVID-19, the largest portion of respondents (30.4%, n=116) indicated feeling somewhat positive, followed by neither positive nor negative (21.7%, n=83), somewhat negative (20.7%, n=79), extremely negative (17.3%, n=66), and extremely positive (9.9%, n=38). Figure 4 portrays these results.

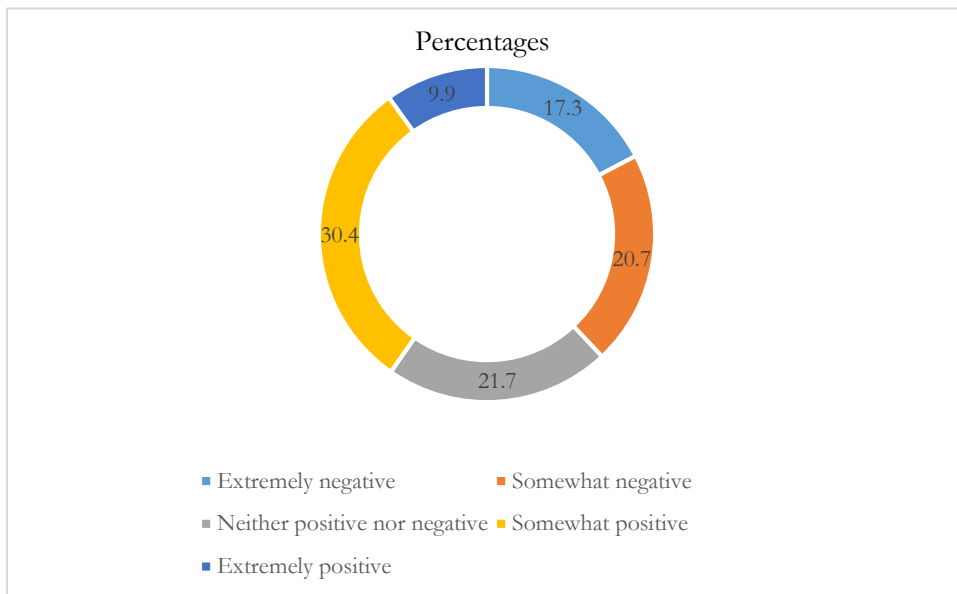


Figure 4. Attitudes toward the Federal Government’s preparations and response to COVID-19

## 6. Perceived Behavioral Control

- Perceived behavioral control over exercise**      Respondents' perceived behavior control was measured on a 5-point Scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Table 11). Respondents most strongly agreed with the statement "I have the physical strength to exercise 30 minutes 3 times a week for the next three months" (M=4.37/5) with the majority of respondents (56.5%, n=216) strongly agreeing and 29.1% (n=111) somewhat agreeing. The next most agreeable statement was "My exercising for at least 30 minutes 3 times a week for the next three months is up to me" (M=4.32/5) which 57.6% (n=220) of respondents strongly agreed with and 24.3% (n=93) of respondents somewhat agreed with. Finally, the statement "I am confident I can exercise for at least 30 minutes, 3 times per week in the next three months" (M=4.06/5) was strongly agreed with by 42.1% (n=161) of respondents and somewhat agreed with by 36.1% (n=138).

Table 11. Perceived behavioral control over exercise

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
I am confident I can exercise for at least 30 minutes, 3 times per week in the next three months	2.9	8.6	10.2	36.1	42.1	4.06	1.06
My exercising for at least 30 minutes 3 times a week for the next three months is up to me	1.8	3.4	12.8	24.3	57.6	4.32	.95
I have the physical strength to exercise 30 minutes 3 times a week for the next three months	1.3	2.4	10.7	29.1	56.5	4.37	.87

\*: 1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

- Perceived behavioral control over COVID-19**      When asked about their perceived behavioral control over COVID-19, the majority of respondents (55.7%, n=213) strongly agreed with the statement "I feel I know how to protect myself from the virus" (M=4.36/5), with another

30.5% (n=117) of respondents somewhat agreeing. Likewise, the majority of respondents (54.8%, n=209) also strongly agreed with the statement “I have the necessary personal protective equipment (e.g., face masks) to protect myself in public” (M=4.29/5), with an additional 30.5% (n=117) of respondents somewhat agreeing. Table 12 shows the details regarding these items.

Table 12. Perceived behavioral control over COVID-19

Variable	Percentage (%) <sup>*</sup>					Mean	SD
	1	2	3	4	5		
I feel I know how to protect myself from the virus	1.5	3.0	9.3	30.5	55.7	4.36	.88
I have the necessary personal protective equipment (e.g., face masks) to protect myself in public	3.4	4.3	7.1	30.5	54.8	4.29	1.00

\*: 1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

## 7. Subjective Norms

- Subjective norms about exercise** Respondents’ subjective norms were measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Table 13). When asked about their subjective norms relative to exercise, the majority (59.4%, n=227) of respondents strongly agreed with the statement “Most people who are important to me would approve of me exercising for at least 30 minutes 3 times per week for the next three months” (M=4.47/5), with another 30.1% (n=115) somewhat agreeing. Additionally, 59.4% (n=227) also strongly agreed with the statement “My health providers think I should exercise for at least 30 minutes 3 times per week for the next three months” (M=4.38/5), with 21.7% (n=83) of respondents indicating that they somewhat agreed, and another 17.0% (n=65) neither agreeing nor disagreeing with the statement. Results were more varied regarding the final statement “Most of my friends exercise for at least 30 minutes 3 times per week” (M=3.55/5), with 22.0% (n=84) of respondents strongly agreeing, 34.6% (n=132) somewhat agreeing, 24.6% (n=94)

neither agreeing nor disagreeing, 13.9% (n=53) somewhat disagreeing, and 5.0% (n=19) strongly disagreeing.

Table 13. Subjective norms about exercise

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
Most people who are important to me would approve of me exercising for at least 30 minutes 3 times per week for the next three months	.5	1.0	8.9	30.1	59.4	4.47	.74
My health providers think I should exercise for at least 30 minutes 3 times per week for the next three months	.8	1.0	17.0	21.7	59.4	4.38	.86
Most of my friends exercise for at least 30 minutes 3 times per week	5.0	13.9	24.6	34.6	22.0	3.55	1.13

\*: 1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

- Subjective norms about COVID-19** When asked about their subjective norms relative to COVID-19, the majority of respondents (60.9%, n=233) strongly agreed with the statement “My friends and family comply with the physical distancing guidelines” (M=4.45/5), with another 27.5% (n=105) somewhat agreeing. The majority (63.5%, n=243) of respondents also strongly agreed with the statement “My friends and family support wearing face masks in public” (M=4.44/5), with another 24.3% (n=92) somewhat agreeing. Additionally, 50.9% (n=194) of respondents strongly agreed with the statement “My doctors indicate the seriousness of the virus for a person’s health” (M=4.22/5) with 27.1% (n=104) of respondents somewhat agreeing, and another 17.3% (n=66) neither agreeing nor disagreeing. Finally, respondents agreed least with the statement “My friends and family are really scared of the virus’ impact on their health” (M=3.85/5), with 33.0% (n=126) of respondents strongly agreeing, 38.7% (n=148) of respondents somewhat agreeing, 13.5% (n=52) of respondents neither agreeing nor disagreeing, 10.0% (n=38) of respondents somewhat disagreeing, and 2.1% (n=8) of respondents strongly disagreeing.

Table 14 presents these results in detail.

Table 14. Subjective norms about COVID-19

Variable	Percentage (%) <sup>*</sup>					Mean	SD
	1	2	3	4	5		
My doctors indicate the seriousness of the virus for a person's health	2.1	2.7	17.3	27.1	50.9	4.22	.97
My friends and family are really scared of the virus' impact on their health	4.9	10.0	13.5	38.7	33.0	3.85	1.13
My friends and family comply with the physical distancing guidelines	.9	3.0	7.7	27.5	60.9	4.45	.83
My friends and family support wearing face masks in public	2.4	2.7	7.0	24.3	63.5	4.44	.92

\*: 1=Strongly disagree, 2=Somewhat disagree, 3=Neither agree or disagree, 4=Somewhat agree, 5=Strongly agree

## 8. Personal Goals

- Personal goals over the next year** The importance of respondents' personal goals were measured on a 5-point scale ranging from 1 (not at all important) to 5 (extremely important) (Table 15). The goal identified by respondents to be the most important was "To have good quality of life overall" (M=4.36/5), with 48.7% (n=186) of respondents indicating that this was an extremely important goal to them, and another 39.5% (n=151) indicating that it was very important. The next most important goals to respondents were "To be healthy" (M=4.34/5), "To have a happy family life" (M=4.18/5), and "To be financially healthy" (M=4.14/5). The goal that was least important to respondents was "To have a rich social life" (M=3.11/5).



Table 15. Personal goals over the next year

Variable	Percentage (%)*					Mean	SD
	1	2	3	4	5		
To be healthy	.8	2.6	8.4	38.5	49.7	4.34	.80
To have a rich social life	9.9	17.0	38.5	21.5	13.1	3.11	1.14
To have a happy family life	1.3	5.2	13.9	33.5	46.1	4.18	.95
To be financially healthy	.3	2.9	17.8	40.3	38.7	4.14	.83
To be useful to society	3.7	12.6	27.5	33.5	22.8	3.59	1.08
To work toward higher athletic capabilities	13.6	17.5	25.9	27.5	15.4	3.14	1.26
To help out my family members	1.3	5.8	16.5	40.6	35.9	4.04	.93
To have good quality of life overall	.3	.5	11.0	39.5	48.7	4.36	.72

\*: 1= Not at all important, 2= Slightly important, 3= Moderately important, 4= Very important, 5= Extremely important

## 9. Future Intentions

- Future intentions to engage in activities over the next 3 months**      The likelihood for respondents to engage in activities over the next 3 months was measured on a 5-point scale ranging from 1 (extremely unlikely) to 5 (likely) (Table 16). The most commonly identified activity was to “exercise for at least 30 minutes per day in the next 3 months” (M=4.10/5), with 46.9% (n=179) of respondents having high likelihood with this intention, and 30.4% (n=116) were somewhat likely. Activities that respondents felt the least comfortable engaging in over the next three months included “Travel to attend or participate in sport events” (M=2.15/5), “Attend a sport event in a stadium or arena” (M=2.16/5), and “Participate actively in mass sport events (e.g., running, walking)” (M=2.22/5).

Table 16. Likelihood to engage in sport related activities in the next 3 months

Variable	Percentage (%) <sup>*</sup>					Mean	SD
	1	2	3	4	5		
Attend a sport event in a stadium or arena	49.0	14.9	12.0	19.1	5.0	2.16	1.34
Participate actively in mass sport events (e.g., running, walking)	48.4	14.9	12.8	14.1	9.7	2.22	1.42
Go to the gym	41.4	14.7	12.0	19.6	12.3	2.47	1.49
Host or attend dinner parties	34.6	17.5	18.1	22.0	7.9	2.51	1.36
Go to sports bars	45.8	15.7	14.7	16.5	7.3	2.24	1.37
Travel to attend or participate in sport events	49.7	16.2	11.3	14.9	7.9	2.15	1.38
Exercise for at least 30 minutes per day in the next 3 months	3.9	6.0	12.8	30.4	46.9	4.10	1.09

\*: 1= extremely unlikely, 2=Somewhat unlikely, 3=Neither likely nor unlikely, 4=Somewhat likely, 5= extremely likely

- Future intentions to engage in sport events**

When asked how soon they would be willing to attend live sport events, 42.7% (n=163) indicated that they would feel comfortable doing so when a vaccine for COVID-19 is developed; 34.8% (n=133) indicated that they would feel comfortable attending live sport events when it is announced by the government it is safe to do so. A smaller percentage (12.0%, n=46) indicated feeling comfortable to attend live sport events as soon as possible. Figure 5 has these details.

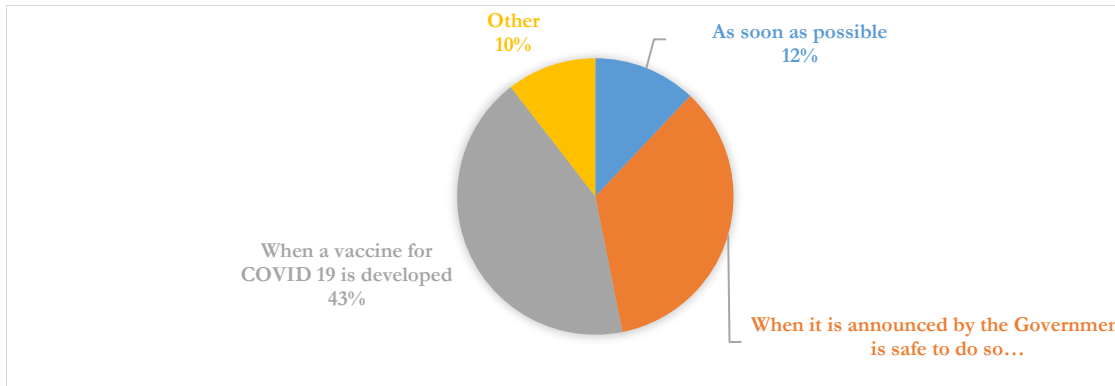


Figure 5. Intention to attend live sport events

- When asked how soon they would be willing to participate in sporting events (i.e., 5km, triathlon, recreational sport leagues, etc.), 30.1% (n=115) indicated feeling comfortable doing so when a vaccine for COVID-19 is developed; 29.6% (n=113) indicated that they do not typically participate in these activities anyway, 29.1% (n=111) indicated feeling comfortable to engage in these activities when the government announces that it is safe to do so, and 10.5% (n=40) indicated feeling comfortable to participate in sport events as soon as possible.

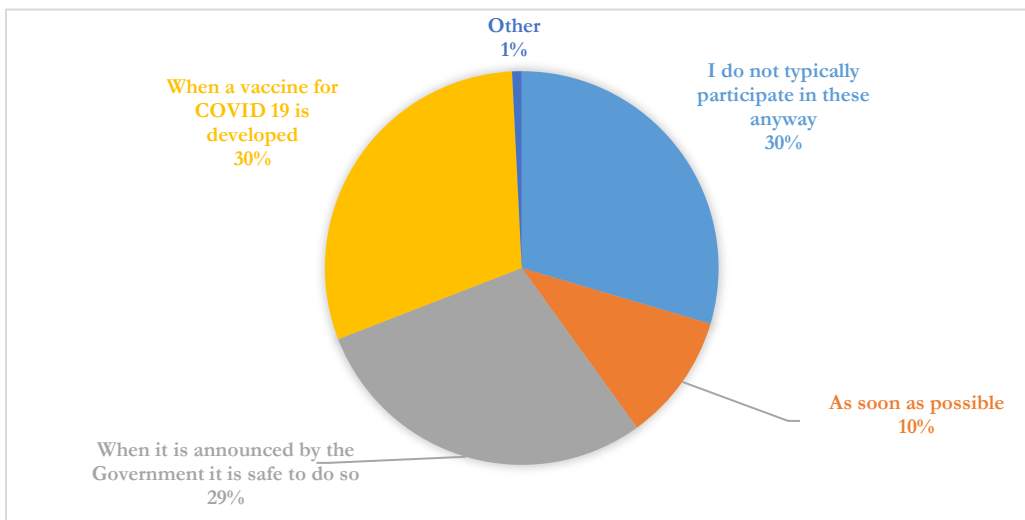


Figure 6. Intentions to participate in active sporting events

- Finally, respondents were asked if they had children, and if so, when they would feel comfortable allowing their children to participate in sporting events involving 10 or more children. Slightly more than one third of respondents (37.2%, n=142) of respondents did not have children, while 27.2% (n=104) indicated that they would allow their children to participate in sporting events when a vaccine for COVID-19 is developed. Another 22.3% (n=85) indicated feeling safe to allow their children to participate in sporting events when the government announces that it is safe to do so. Additionally, 9.4% (n=36) indicated that they would allow their children to participate in sporting events as soon as possible.

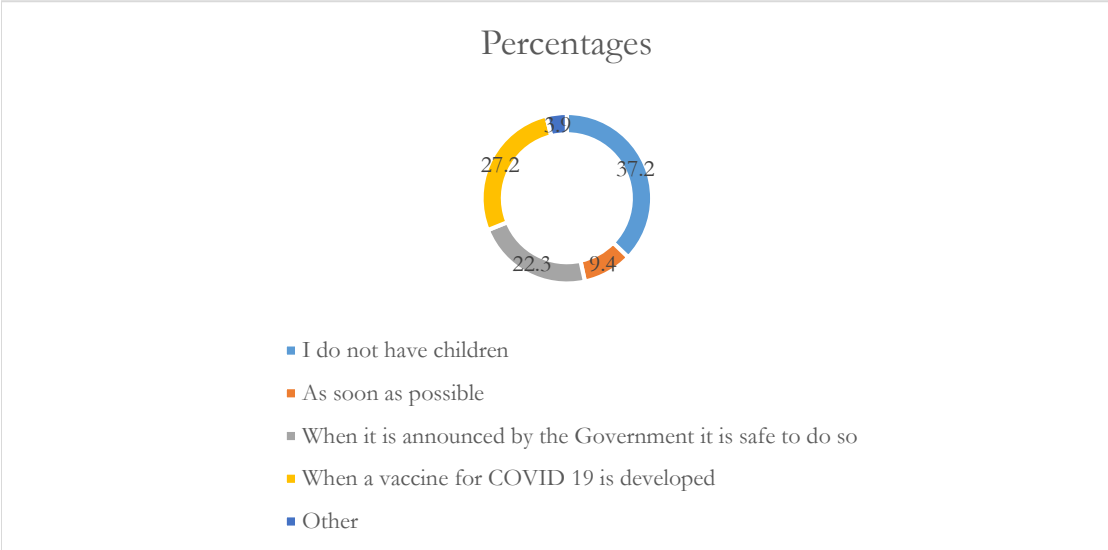


Figure 7. Intention to allow children to participate in sport events

## 9. Wearable Devices

- Ownership and use of wearable devices** Of the 382 participants in the present study, 41.4% (n=158) indicated owning a wearable device (e.g., fitbit, apple watch). Of those who own wearable device, 87.3% (n=138) indicated using their wearable device to monitor exercise while 12.7% (n=20) indicated no.

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## Conclusion

The data from this project show a variety of behaviors related to sports and some hesitation for activities related to attending live sport events but certainly a higher inclination for exercise related activities. There are a lot of variables to consider in the decision making process to re-engage the sport consumer such as their emotional states and the introduction of vaccines in the people's lives.

If you need more information about the study you can contact Dr. Kaplanidou at [kkaplanidou@ufl.edu](mailto:kkaplanidou@ufl.edu)