

# **Optimized Health: Minimizing the Effects of Aging on Physical and Mental Fitness for the Fish and Wildlife Conservation Commission Division of Law Enforcement (FWC/DLE)**

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## ***Abstract***

*Total fitness includes physical fitness, mental health and nutrition and is the foundation for quality and quantity of life. An effective law enforcement fitness and wellness program must include a focus on total fitness to overcome the fitness related challenges that exist in law enforcement. The members of Florida's Fish and Wildlife Conservation Commission Division of Law enforcement responded to an internal survey regarding their health and habits to improve the Division's Fitness and Wellness Program. By removing obstacles, motivating and training employees, a fitness and wellness program can provide the opportunities necessary for all employees to achieve optimal health.*

## **Introduction**

The opportunity for fitness related challenges has always existed in the law enforcement profession. Sitting in a patrol vehicle for hours at a time, eating on the go, shift work, and dealing with high stress situations can all contribute to physical and/or mental health ailments. Despite these potential job hazards, law enforcement officers must continually provide effective customer services while ensuring they are prepared to protect themselves and others from a potential attack. Conservation officers with the Florida Fish and Wildlife Conservation Commission deal with many of the same challenges, but primarily work in the outdoors dealing with environmental conditions such as heat, rain, and mosquitos. They also tend to work in areas with limited accessibility to readily available back up officers in case of an emergency. Their mission of protecting Florida's natural resources and people necessitates a high level of physical and mental competency.

In 2011, the Florida legislature made changes to the Florida Retirement System (FRS) for state employees hired after July 1, 2011. The changes affected vesting, retirement age and years of service required for retirement without penalty. Years to be vested increased from six to eight years. Retirement age went from 55 years to 60 years old with 8 years of Special Risk Class service and retirement years of Special Risk Class service went from 25 years to 30 years. These changes will ultimately increase the retirement age for the average Florida Fish and Wildlife Conservation Commission law enforcement officer by approximately five years.

Many of the effects of aging are commonly known. Skin wrinkles. Hair greys or falls out. But these examples do not directly impact the duties of a law enforcement officer. However, aging can negatively influence a police officer's personal and professional quality of life through diminishing eyesight, hearing loss, slowed metabolism and many

other resulting effects. While we do not completely comprehend how all factors that cause aging influence the process, we do know that genetics, diet, exercise and illness encourage or discourage its progression. Understanding the potential consequences of aging is key to slowing or even preventing these issues altogether.

As the average age of FWC's law enforcement officers increases, there may be both positive and negative impacts on achieving the mission. While being reactive and waiting to see the outcomes may provide answers, taking a proactive approach to combating the issue may provide better results. Programs designed to optimize physical and mental health in law enforcement currently exist. Many programs focusing on the physical and mental wellbeing of their membership include delivering information in assisting the member with necessary lifestyle changes. However, it may not be enough to rely on currently existing programs or adopting programs from other employers. These programs may have benefits, but not fit into the Fish and Wildlife Conservation Commission rules, regulations or culture.

The task at hand includes creating legally defensible programs that benefit the physical and mental health of FWC's workforce. These programs must encourage participation to ensure positive outcomes for optimizing total fitness. To ensure proper implementation, research must attempt to identify the positive and negative significances of an older workforce and how to mitigate the negative consequences. The research must also document which symptoms of aging can be targeted to maintain or increase professional effectiveness. Ultimately, the research should outline how an employer can motivate lifestyle changes to improve the overall health of their workforce.

## **Literature Review**

### ***Effects of Aging:***

Medicines, healthier lifestyles, and other environmental influences are already contributing to a growing number of people remaining socially, mentally, and physically fit into advanced age. Aging is connected to biological, physiological and psychological changes. Some age-related changes, such as skin wrinkling, do not affect the functionality of an individual. Nor do they directly impact the effectiveness of a law enforcement officer. However, other changes may result in a decline in functionality and adverse effects on a member's on-duty performance and overall quality of life. (Aging, 2016)

Physiological age-related changes to the cardiovascular system, joints, muscles, brain, eyes and ears have the potential to reduce functionality. Blood vessels and arteries stiffen, causing the heart to work harder, creating the risk of high blood pressure (hypertension) and other cardiovascular problems. Bones may shrink in size and overall density, making them weaker. Muscles lose strength, endurance and flexibility, potentially affecting coordination and balance. Changes in cognitive health can affect memory and thinking abilities. Eyesight becomes weaker causing difficulty focusing on close or small objects. Hearing can become diminished. These are just some of the challenges associated with aging. All of which can pose risks for law enforcement officers in the line of duty. (Healthy, 2018)

Studies have shown the effects of aging are evident in the physical performance of law enforcement officers. Male Portuguese police officers participated in a study analyzing the effect of age on physical fitness and on-duty task performance. The study also analyzed the relationship between physical fitness and on-duty task performance and attempted to identify the physical fitness attributes that better predict on-duty task performance. During the study, physical fitness attributes were measured using ten fitness tests, including hand grip strength, vertical jump, standing broad jump and aerobic capacity. A 60 second sit up test measured abdominal strength. A 60 second push up test measured upper body strength endurance. Bench press measured maximum (1RM) and relative upper body strength. An obstacle course simulated on-duty tasks to measure on-duty task performance. (Teixeira et al., 2019)

The study showed a very large effect of age on the standing broad jump, abdominal muscular endurance, aerobic capacity and the on-duty task simulation. As age increased, performance decreased. Previous studies emphasized that human muscular strength, including isometric strength and power, decreases with the aging process, especially in groups above 40 years old. The literature from previous studies explained that a loss of muscle mass during the aging process resulted in decreased strength. Aging also leads to a considerable decrease in explosive strength, particularly in the lower limbs. The study showed a significant disparity across all age categories in standing broad jump performance. However, results differed for the 60 second push-up test, as there were no significant performance variations between 20 and 59-year-old law enforcement officers. (Teixeira et al., 2019)

Additionally, a 1992 study analyzed mechanisms by which aging, sex, and physical activity influenced  $VO_2max$ . The study quantified  $VO_2$ , cardiac output, and heart rate during submaximal and maximal treadmill exercise. It was unclear how or if sex and level of physical activity influenced  $VO_2max$ . However, the study was conclusive regarding the effect of aging on  $VO_2max$ .  $VO_2max$  in subject groups was 28-37% lower in older subjects and 40-41% lower in older subjects when accounting for sex. Researchers determined their findings provide evidence that the decline in  $VO_2max$  with age is related primarily to a lower maximal cardiac output. Although a slower maximal heart rate accounts for a portion of the result, a smaller stroke volume is of greater importance. (Ogawa, 1992)

Another study assessing an officer's fitness or aerobic power using  $VO_2max$  scores, also assessed participants' ability to enjoy physical activities in retirement. Ph.D. candidate Jeffrey Lee utilized Law enforcement officers in northwest Florida for his research. (Lee, 2003)

### ***Mitigating the Effects of Aging:***

Aging is not a disease. However, advancing age is the major risk factor for many chronic diseases. Biological studies of aging have led to the emergence of new theories to explain aging. These studies have demonstrated that the rate of aging can be slowed. Studies suggest that targeting aging will coincidentally slow its effects and/or lessen the burden of numerous diseases, while increasing quality of life. (Aging, 2016)

Lifestyle choices can mitigate or at least minimize the physical influences of age. Exercise and other physical activities can promote cardiovascular health, maintain or increase flexibility, increase bone density, and improve blood flow to the brain. Exercise

also aids in stress management. A healthy diet may not be the same for everyone due to genetics or health issues but eating healthy is essential to lessening heart disease and other heart-related issues, improving bone strength, and fueling the brain. Eliminating tobacco products improves respiratory function and cognitive health. Minimizing stress also benefits heart health and brain function. And quality sleep is crucial in the healing and repair of the heart and blood vessels. (Healthy, 2018)

### ***Implementing Programs Designed to Optimize Total Fitness:***

Most researchers agree that police officers need to be physically fit. There are times when officers need to be able to exert maximum efforts for sustained periods of time. Police work can be sedentary at times, but it is believed that police officers should be at least as fit as the general population. However, most research reports that police officers are at or below average fitness levels. Many officers achieve an acceptable measure of physical fitness during their initial training at the law enforcement academy, but their fitness levels diminish without fitness maintenance programs. (Lee, 2003)

The law enforcement profession has historically focused on training and development of duty related skills, such as firearms, use of force scenarios and pursuit driving. Unfortunately, wellness programs often are dismissed by police administrators. Employee wellness programs not only minimize issues related to physical fitness, mental health, stress management and substance abuse, but also serve to improve recruitment, retention, absenteeism and overall job performance. Behavioral science experts who research officer wellness describe a “whole person” in four dimensions: mental, emotional, physical and spiritual. A healthy balance of these four equally important dimensions promotes wellness. (McDonough, 2011) Some departments have physical fitness programs but fail to include comprehensive wellness programs addressing stress management, mental health, diet/nutrition, and alcohol/chemical dependency. (Lee, 2003)

While fitness benefits the individual, Ed.D. candidate Alfred Winfield asked if the law enforcement fitness programs affect the agency. Specifically, Winfield asked whether rates of forced early retirement, on-duty injuries, use of sick leave, assignment of limited duty and deaths caused by medical/health factors are influenced by fitness programs. Prior studies supported the physiological and socio/psychological benefits of exercise. His research included a survey of 520 law enforcement agencies. Research showed 75% of early forced retirements occurred as a direct result of health related issues. However, research also concluded that fitness programs would have had little to no effect on the number. Analysis of limited duty assignments and deaths caused by medical/health factors received similar results, indicating minimal influence by fitness programs. However, fitness programs showed results in reducing on-duty injuries and the use of sick leave. (Winfield, 1983)

Inconsistent results from worksite wellness programs continue to undermine their potential value. The proper implementation of wellness programs is integral to their success. Wellness programs differ substantially in design and rarely report procedures in a manner that is replicable. Many programs often fall short of minimal recommendations for fitness from the Wellness Council of America (WELCOA) or the American College of Sports Medicine (ACSM). Most wellness programs appeared to prioritize

cardiorespiratory fitness or neglect muscular fitness altogether. Those that did address muscular fitness were often insufficient, targeting specific muscle groups while neglecting others. (Oliver et al., 2019)

One department demonstrated a systematic approach to developing a successful fitness program. The Laconia, New Hampshire Police Department wanted to replace a small, worn treadmill in its fitness center. Captain William Clary contacted Meredith McGilvray, wellness coordinator for New Hampshire Interlocal Trust (NHIT), to see if NHIT might pay for the treadmill to support the department's 2013 goal of improving employee health and fitness. That became the stimulus for a partnership with the department's insurance carrier that resulted in a customized wellness program with 85% participation. (Vogel, 2015)

The department followed the seven wellness program benchmarks recommended by the Wellness Council of America (WELCOA):

- (1) capturing CEO support,
- (2) creating a cohesive wellness team,
- (3) collecting data to drive health efforts,
- (4) carefully crafting an operating plan,
- (5) choosing appropriate interventions,
- (6) creating a supportive environment and
- (7) carefully evaluating outcomes.

Capturing CEO support came easy. The police commission already set the goal for improved fitness and NHIT's CEO supported the purchase of the treadmill as a pilot program. Creating a cohesive wellness team integrated seamlessly as well. The department had a fitness instructor on staff, who was the natural choice for the role of department fitness coordinator and was viewed as an advocate for the other members of the department. The fitness coordinator worked with NHIT to design a fitness program around the state's mandatory physical fitness test including bench press, push-ups, sit ups and run every three years. The fitness program consisted of a points system for employees to earn with each workout. The program remained flexible in order to encourage participation and allow for individual needs. (Vogel, 2015)

Stress is necessary to human functioning and benefits individuals when properly managed. Mismanagement or excessive stress creates problems, such as health concerns or substance abuse. Excessive stress can also result in work performance issues, which can be detrimental if mistakes are made at critical moments. Medical professionals identify stress as one of the leading causes of physical ailments. In some cases, physicians fault stress for 90% of all illness. (Winfield, 1983)

Most, if not all, law enforcement officers experience shift work during their careers. This may present a significant form of stress. As previously discussed, quality sleep allows one to recover. According to research related to law enforcement shifts, officers experienced less fatigue, more quality sleep at home, and increased overall work satisfaction when working ten-hour shifts. Eight-hour shifts resulted in officers with less sleep per twenty-four hours and worked more overtime. Officers working twelve-hour shifts were less likely to perform self-initiated tasks. (Portland, 2014)

While physical fitness is one form of stress management, it is not the only healthy outlet for relieving stress. Whether it's investigating a violent crime or dealing with the stressors of always being on high alert, law enforcement officers encounter job related stress daily. They work in environments where bad things happen. The stress levels can be so high that, in one study, 27% of officers reported symptoms of post-traumatic stress disorder (PTSD). In 2016, National Institute of Justice (NIJ) experts determined that a coordinated research agenda was needed to better respond to this long-standing issue. The NIJ created a plan calling for science-based tools to measure and monitor physical and mental health. The plan states that "the focus on stress, trauma, and suicide and self-harm prevention cuts across demographic areas highlighting the importance of promoting research of these topics within the criminal justice system." (Dawson, 2019) Scientific stress related research exists but may not be relevant to the law enforcement profession. The NIJ has focused on the use of scientific tools to obtain physical markers for stress and fatigue within criminal justice. (Dawson, 2019)

In addition to physical fitness, practices recommended to decrease officer stress include allowing officers more influence over work activities, efforts to increase job meaningfulness, clear promotional criteria for advancement, fair treatment and taking action to decrease bias. Additionally, employee assistance programs and peer-led critical stress debriefings assist employees with taking control of their own stress management in controlled environments. Officers can handle job related stress when given effective support and counseling. Other methods to monitor employee stress levels include anonymous stress related surveys and having organizational psychologists employed. (Portland, 2014)

## Methods

This research sought to identify the fitness goals of the sworn members of the Florida Fish and Wildlife Conservation Commission's (FWC) for comparison with FWC's Fitness and Wellness Program, which focuses on both mental and physical fitness, and the overall goals and benefits of law enforcement fitness programs and fitness programs identified in the literature review.

The collection of data occurred by means of an internal anonymous survey given to the sworn members of the FWC's Division of Law Enforcement. FWC's Division of Law Enforcement consists of 848 full time sworn positions and approximately 40 part time positions at the time of the survey. Survey questions were intended to solicit feedback regarding individual fitness goals and how the program meets those goals. Survey questions were created in multiple choice and open-ended formats to allow for the consistent collection of sortable data, as well as the ability for participants to provide responses in their own words. General participant information, such as age ranges and years of service, was requested to help identify target audiences for program results and improvements and not to identify an individual participant. The survey also gave participants an opportunity to openly provide recommendation for improvements to the program.

FWC's Fitness and Wellness Program received updating on May 27, 2020, so participants may not understand the intent of the entire updated program at the time of survey completion potentially affecting data. Other potential concerns related to data include minimized participant openness despite the anonymous nature of the survey.

## Results

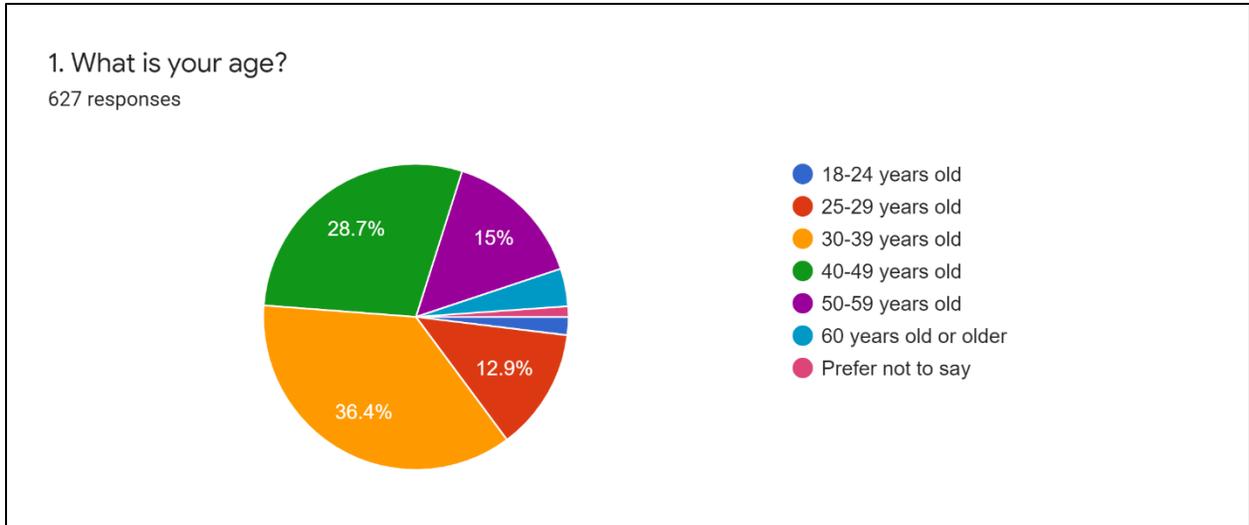
The survey was delivered electronically via an external platform, *Google Forms*, to 840 sworn law enforcement members of FWC's Division of Law Enforcement, which included all ranks from Officer to Colonel. 631 responses were received for a response rate of 75.12%. Some respondents chose not to answer some questions for unknown reasons.

The survey was divided into four sections. Questions one through six covered "Demographics and General Questions." Questions seven through 14 covered "Physical Fitness." Questions 15 through 18 covered "Mental Health" and questions 19 through 23 covered "Nutrition." Additionally, there was an opportunity for respondents to provide comments or recommendations and 41 respondents (4.88%) chose to do so.

Questions related to "Demographics and General Questions" attempted to categorize respondents by age, gender, and years of sworn law enforcement service and get an overall opinion of the benefits of the Fitness and Wellness Program. Survey question one asked respondents to provide their age in the appropriate range given. 1.9% (12) respondents reported being "18-24 years old." 12.9% (81) of respondents reported being "25-29 years old." 36.4% (228) of respondents reported being "30-39 years old." 28.7% (180) of respondents reported being "40-49 years old." 15% (94) of respondents reported being "50-59 years old." 4% (25) of respondents reported being "60 years old

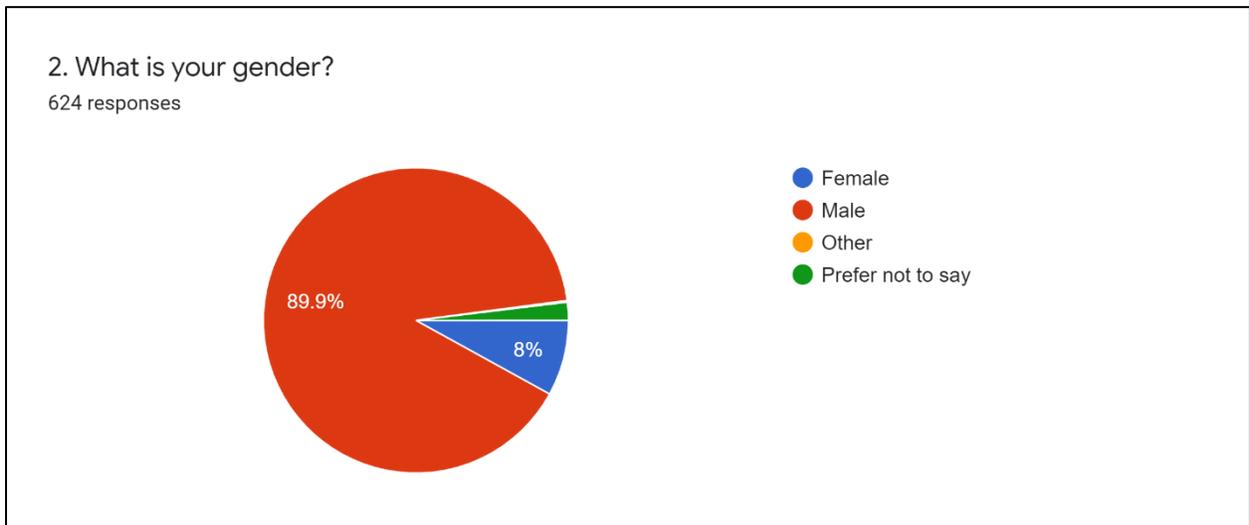
or older.” 1.1% (7) of respondents selected “Prefer not to say.” 4 respondents did not answer survey question one.

TABLE 1: Survey Question One – Age Range of Respondents



Survey question two asked respondents to provide their gender with potential answers as “Female,” “Male,” “Other” and “Prefer not to say.” 8% (50) selected “Female.” Of the 624 responses, 89.9% (561) of respondents selected “Male.” One respondent selected “Other” and 1.9% (12) selected “Prefer not to say.” Seven survey respondents did not make a selection to this question.

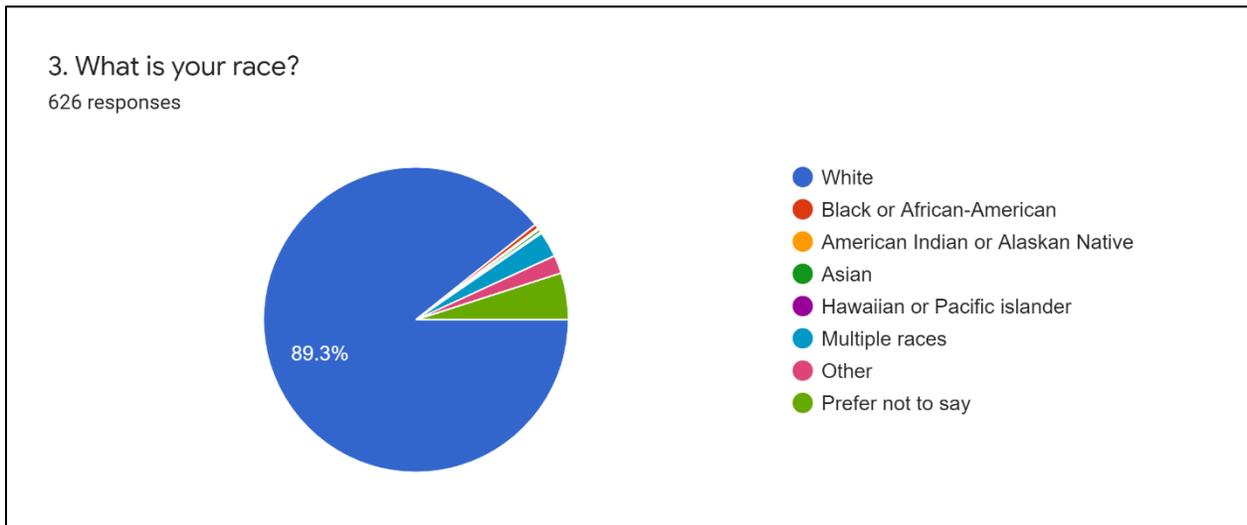
TABLE 2: Survey Question Two – Gender of Respondents



Survey question three asked respondents to categorize their race. 89.3% (559) of respondents selected “White.” 0.5% (3) of respondents classified as “Black or African-American.” “American Indian or Alaskan Native” was selected by 0.2% (1) of respondents.

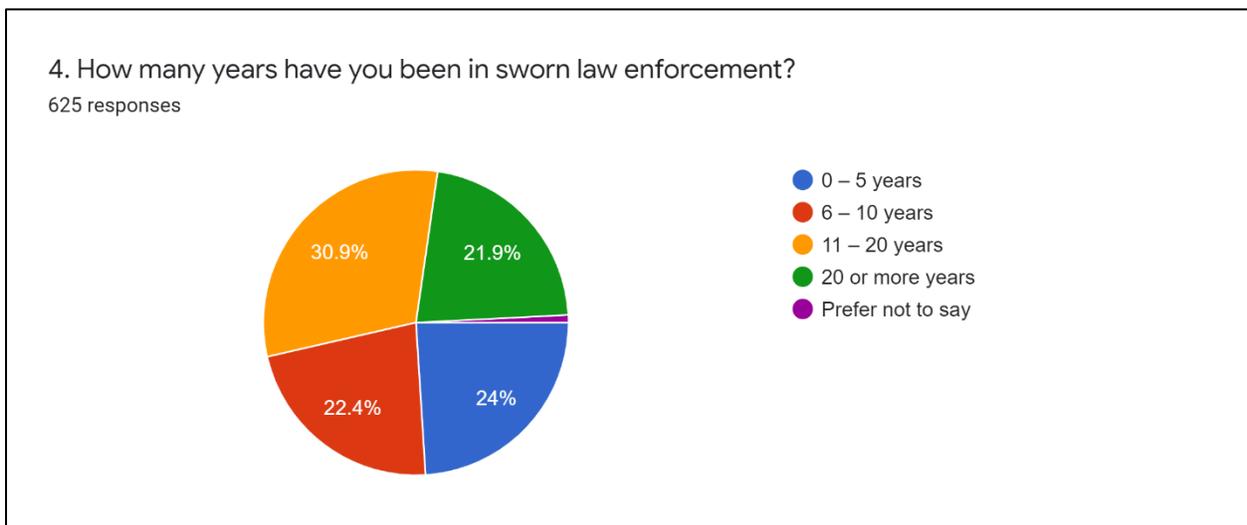
“Asian” was selected by 0.3% (2) of respondents. “Hawaiian or Pacific Islander” was selected by 0.1% (1) of respondents. “Multiple races” was selected by 2.7% (17) of respondents. “Other” was selected by 1.9% (12) of respondents. 5% (31) selected “Prefer not to say.” Five survey respondents did not provide a submission for survey question three.

TABLE 3: Survey Question Three – Race of Respondents



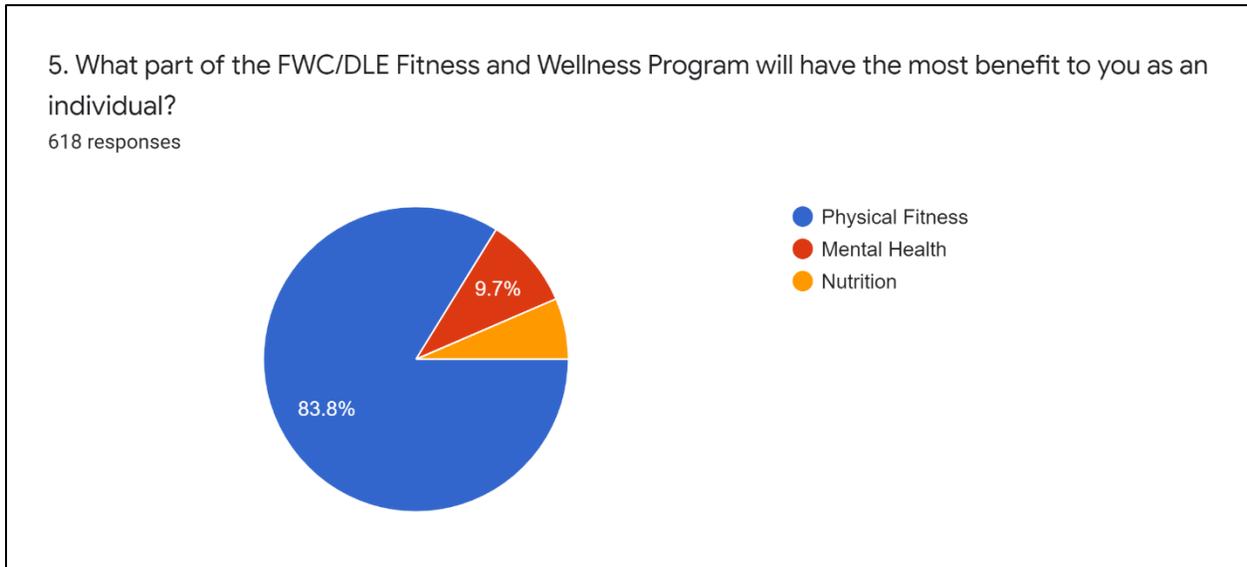
Survey question four asked respondents to provide their years in sworn law enforcement within the given ranges. 24% (150) of respondents selected “0 – 5 years.” “6 – 10 years” was selected by 22.4% (140) of respondents. The most common answer was “11 – 20 years” selected by 30.9% (193) respondents. 21.9% (137) of respondents reported having “20 or more years” of service and 0.8% (5) of respondents selected “Prefer not to say.” Six survey respondents did not answer survey question four.

TABLE 4: Survey Question Four – Law Enforcement Years of Service



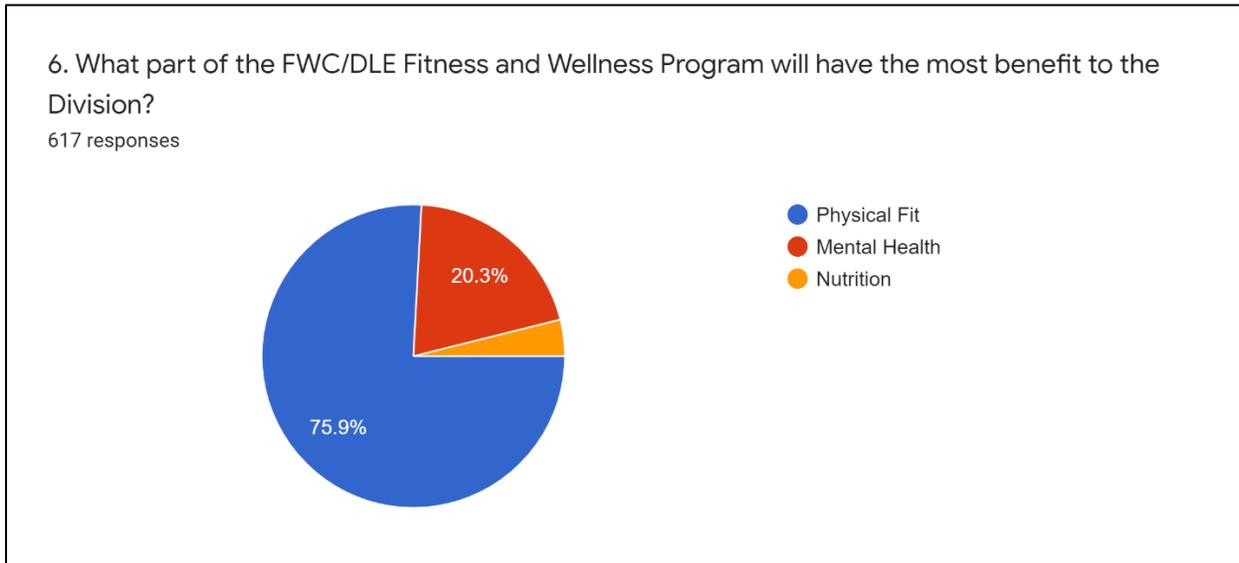
Survey question five asked respondents what part of the FWC/DLE Fitness and Wellness Program would have the most benefit for them as individuals with available choices of “Physical Fitness,” “Mental Health” or “Nutrition.” “Physical Fitness” was the overwhelming response with 83.8% (518) of respondents. 9.7% (60) of respondents selected “Mental health” and 6.5% (40) of respondents selected “Nutrition.” 13 survey respondents did not provide an answer to survey question 5.

TABLE 5: Survey Question Five – Benefit of Fitness Program to Individual



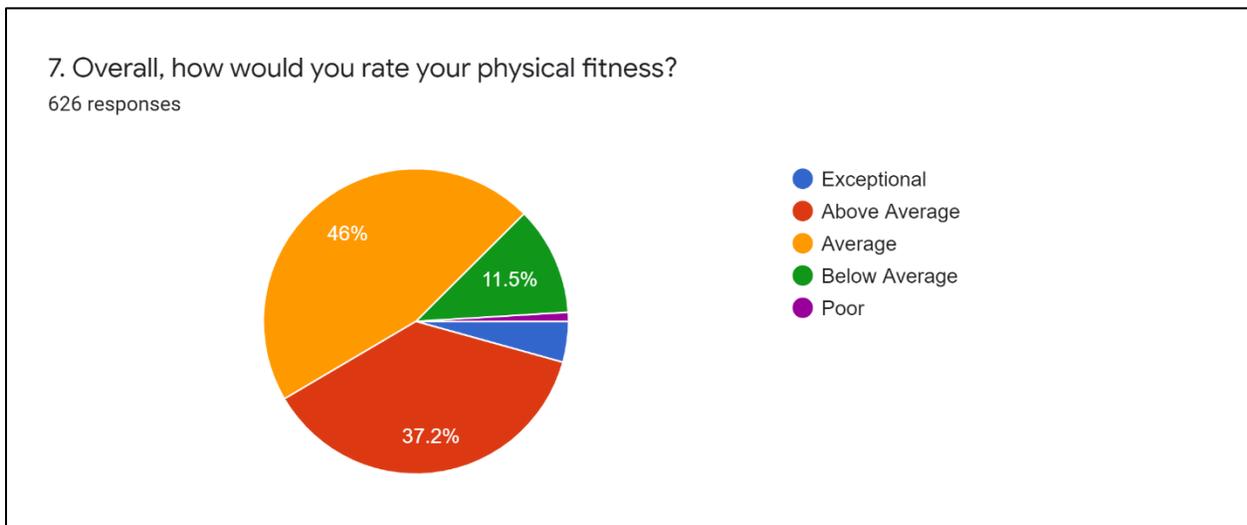
Survey question six asked respondents what part of the FWC/DLE Fitness and Wellness Program would have the most benefit for FWC/DLE as a whole, with the same choices as survey question five. Again “Physical Fitness” was the overwhelming response with 75.9% (468) of respondents. 20.3% (125) of respondents selected “Mental health.” 3.8% (24) of respondents selected “Nutrition.” 14 survey respondents did not provide an answer to survey question six.

TABLE 6: Survey Question Six – Benefit of Fitness Program to FWC/DLE



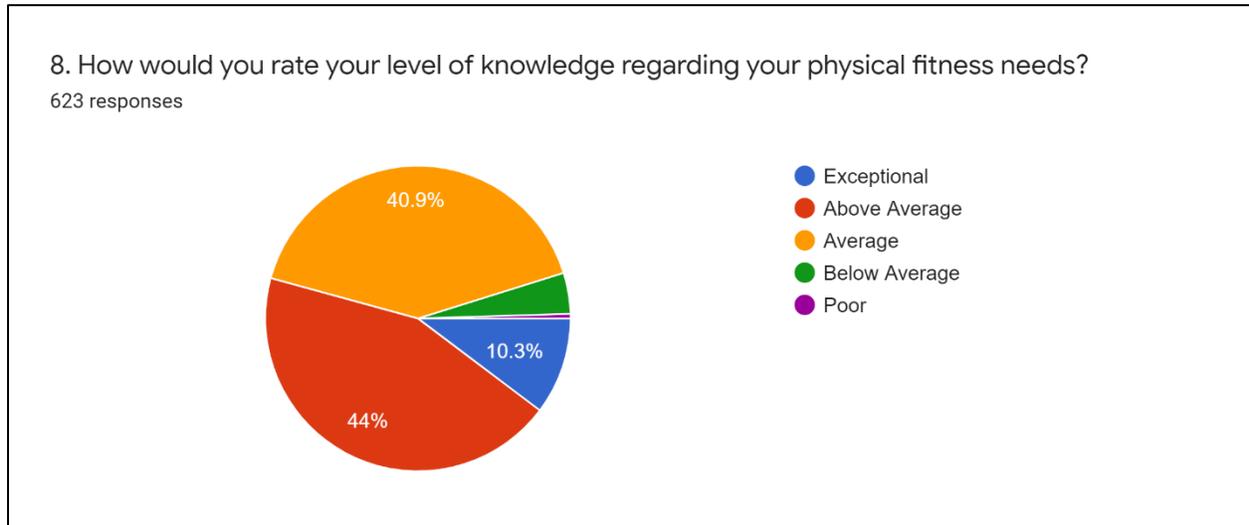
Survey question seven began the section specific to physical fitness and asked respondents to rate their own physical fitness as “exceptional,” “above average,” “average,” “below average” or “poor.” 4.3% (27) of respondents selected “exceptional.” 37.2% (233) of respondents selected “above average.” 46% (288) of respondents rated their physical fitness as “average.” 11.5% (72) of respondents reported a “below average” level of physical fitness and 1% (6) selected “poor.” Five survey respondents did not provide an answer for this question.

TABLE 7: Survey Question Seven – Rate Your Physical Fitness



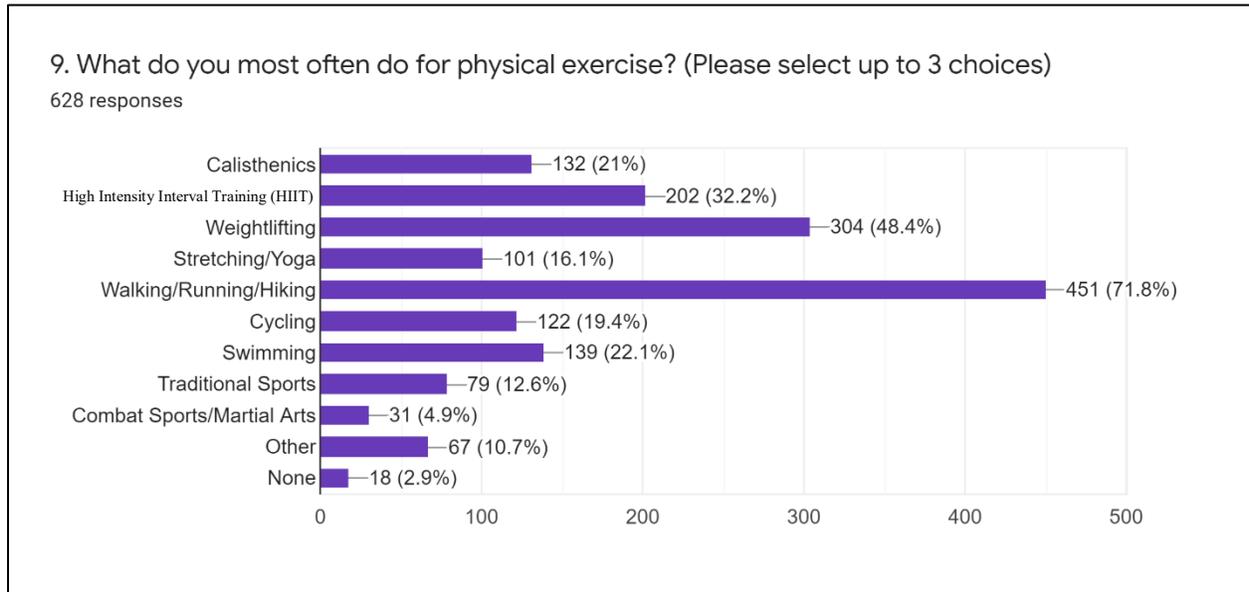
Survey question eight asked respondents to rate their level of knowledge for their physical fitness needs with the same response options as question seven. 10.3% (64) of respondents described their knowledge level of physical fitness needs as “exceptional.” 44% (274) of respondents selected “above average.” 40.9% (255) selected “average.” 4.3% (27) of respondents selected “below average” and 0.5% (3) reported “poor.” Eight survey respondents did not reply to survey question eight.

TABLE 8: Survey Question Eight – Knowledge of Physical Fitness Needs



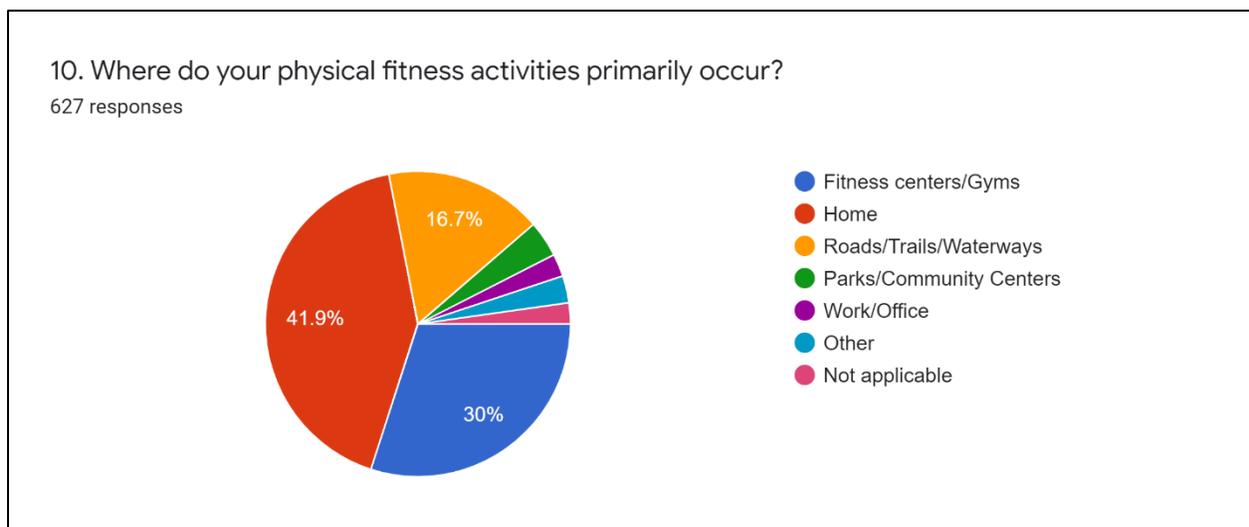
Survey question nine asked respondents what they did most often for physical exercise, allowing up to 3 choices from a defined list. 21% (132) of respondents selected “calisthenics.” 32.2% (202) of respondents reported participation in “High Intensity Interval Training (HIIT).” “Weightlifting” was selected by 48.4% (304) of respondents. “Stretching/yoga” was selected by 16.1% (101) of respondents. 71.8% (451) of respondents selected “walking/running/hiking.” 19.4% (122) of respondents selected “cycling.” 22.1% (139) of respondents selected “swimming.” 12.6% (79) of respondents reported participation in “traditional sports.” 4.9% (31) of respondents participate in “combat sports/martial arts.” 10.7% (67) of respondents selected “other” and there was no option for explanation of this selection. 2.9% (18) selected “none.” Three survey respondents did not provide selections for survey question nine.

TABLE 9: Survey Question Nine – Physical Exercise Done Most Often



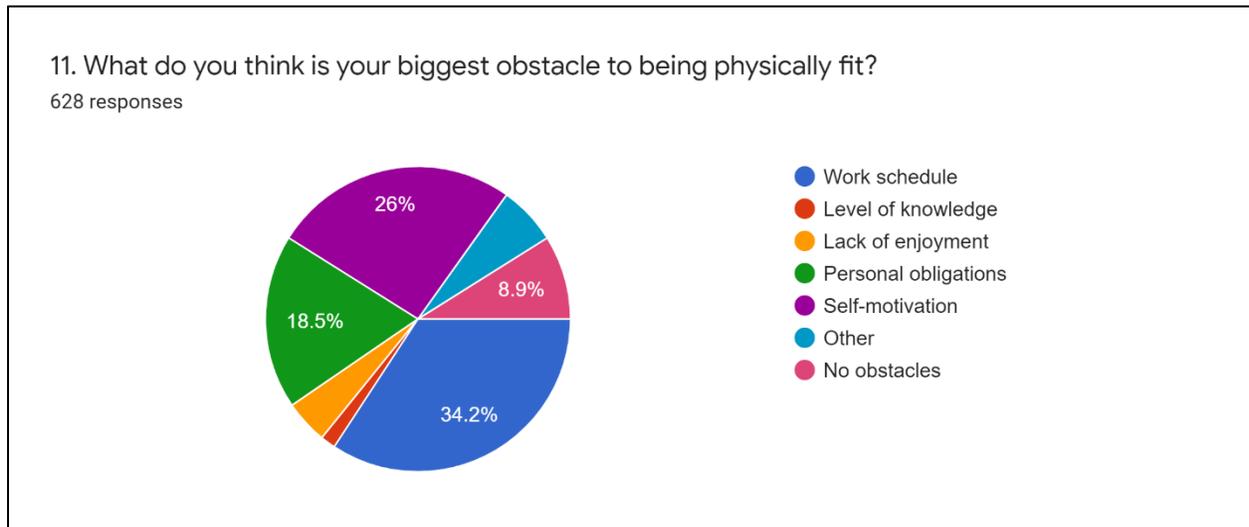
Survey question 10 asked respondents where their physical fitness activities primarily occur. Respondents were given a defined list from which to select. “Fitness centers/gyms” was selected by 30% (188) of respondents. 41.9% (263) of respondents selected “home.” 16.7% (105) of respondents reported using “roads/trails/waterways.” 3.8% (24) of respondents selected “parks/community centers.” 2.4% (15) of respondents chose “work/office.” “Other” was selected by 3.0% (18) of respondents and there was no option for explanation of this selection. 2.2% (14) chose “not applicable.” 4 survey respondents did not provide a selection for survey question 10.

TABLE 10: Survey Question 10 – Location of Physical Fitness Activities



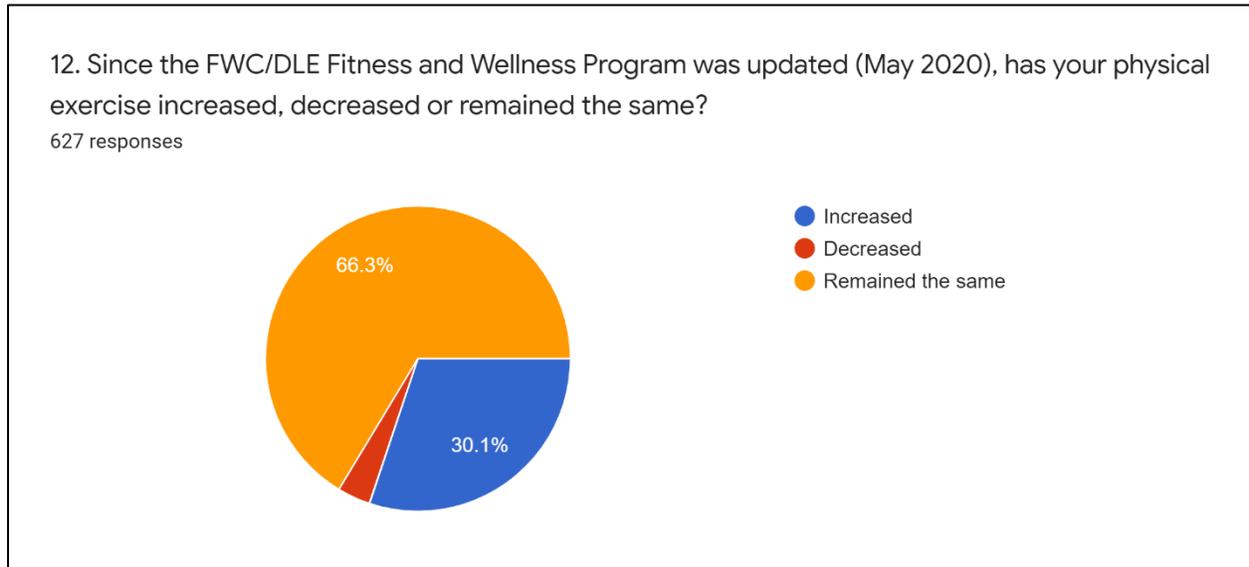
Survey question 11 asked respondents to provide their opinion of their biggest obstacle to being physically fit. “Work schedule” was selected by 34.2% (215) of respondents. 1.6% (10) selected “level of knowledge.” “Lack of enjoyment” was selected by 4.6% (29) of respondents. 18.5% (116) of respondents selected “personal obligations.” 26% (163) of respondents chose “self-motivation.” 6.2% (39) of respondents reported “other” and there was no option for explanation of this selection. 8.9% (56) of respondents reported having “no obstacles” to being physically fit. Three survey respondents did not provide a selection to survey question 11.

TABLE 11: Survey Question 11 – Obstacle to Physical Fitness



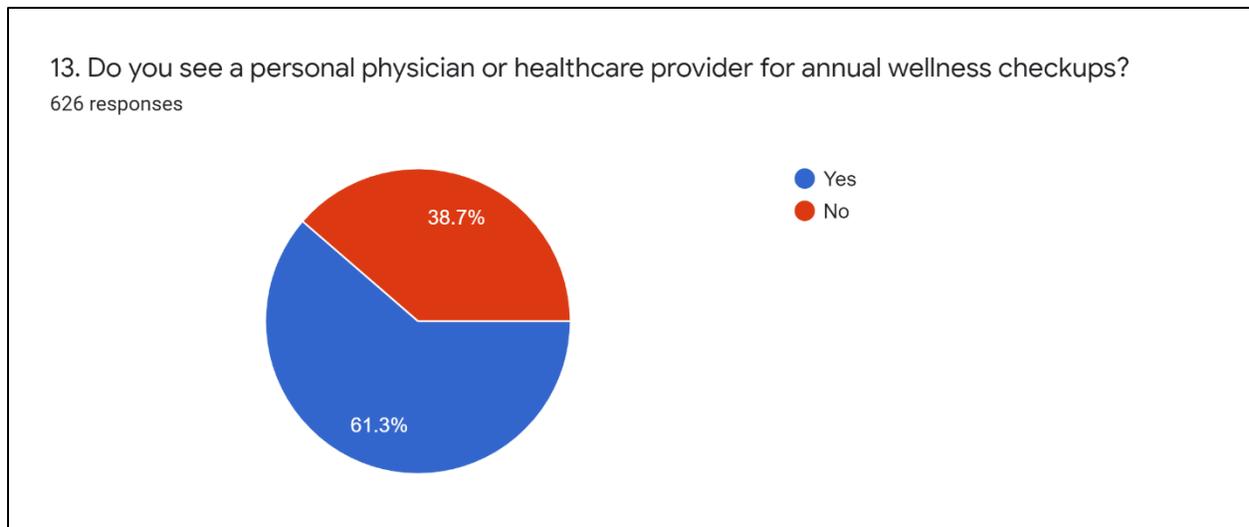
Survey question 12 asked if their physical exercise “increased,” “decreased” or “remained the same” since the program was updated in May 2020. 30.1% (189) of respondents selected “increased” and 3.6% (22) selected “decreased.” 66.3% (416) of respondents reported that their physical exercise had “remained the same.” Four survey respondents did not provide a response to survey question 12.

TABLE 12: Survey Question 12 – Physical Exercise since Program Update



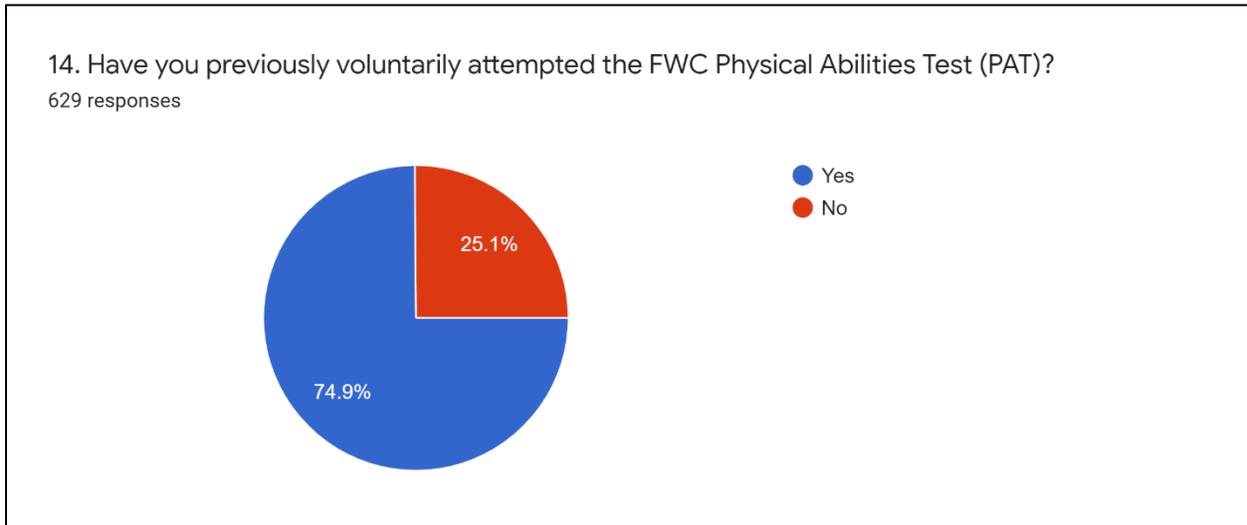
Survey question 13 asked respondents if they get annual wellness checkups. 61.3% (384) of respondents selected “yes” and 38.7% (242) selected “no.” Five survey respondents did not provide an answer to this question.

TABLE 13: Survey Question 13 – Annual Wellness Checkups



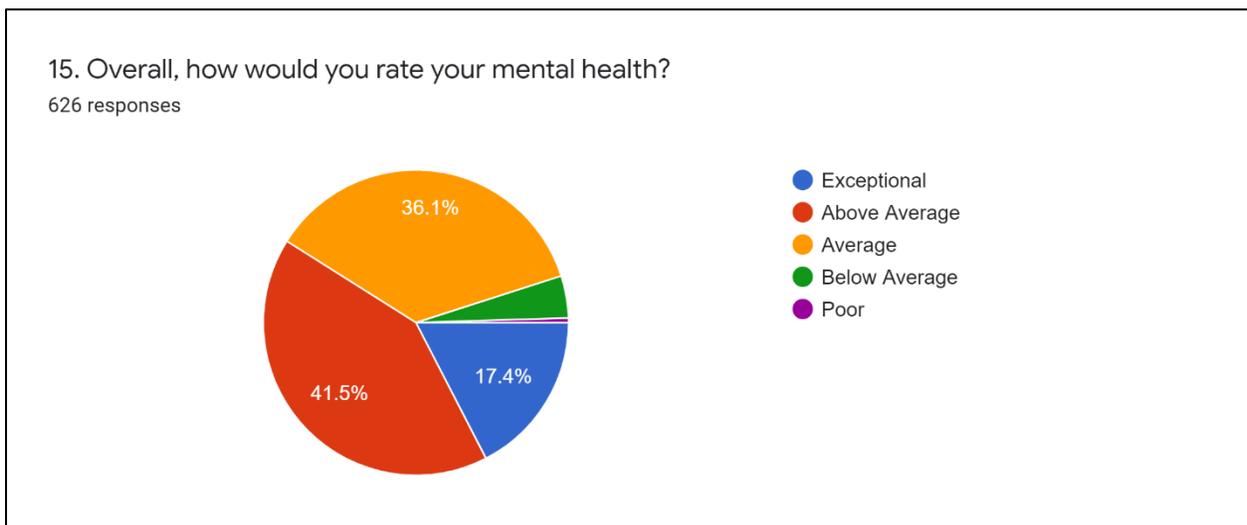
Survey question 14 asked respondents if they have previously voluntarily attempted the FWC physical abilities test (PAT). 74.9% (471) of respondents selected “yes” and 25.1% (158) selected “no.” Two survey respondents did not provide a response to survey question 14.

TABLE 14: Survey Question 14 – FWC Physical Abilities Test (PAT)



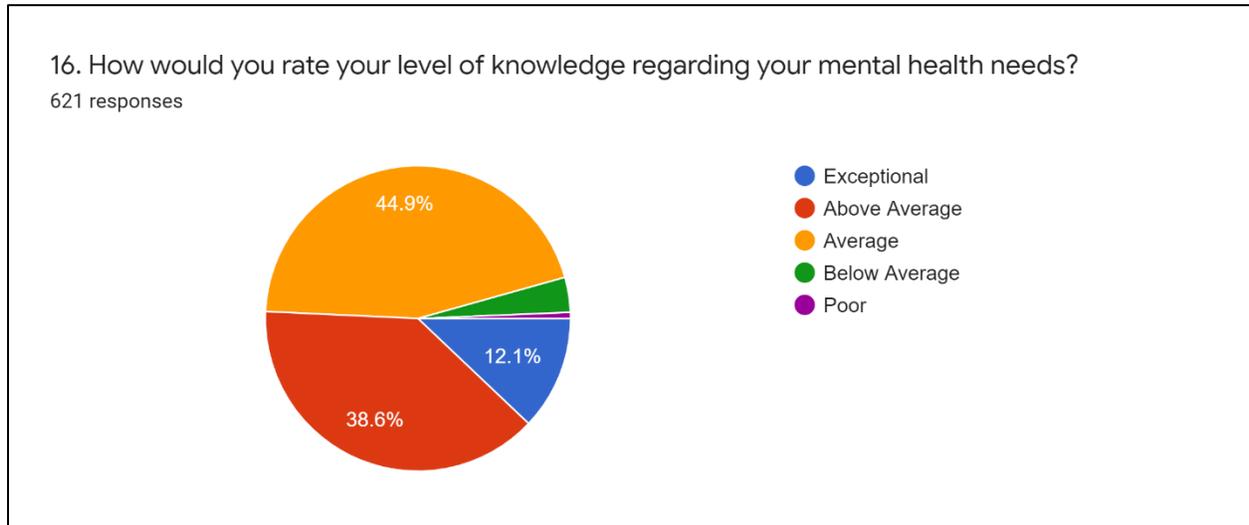
Survey question 15 began the section specific to mental health and asked respondents to rate their own mental health as “exceptional,” “above average,” “average,” “below average” or “poor.” 17.4% (109) of respondents reported an “exceptional” level of mental health. 41.5% (260) of respondents rated their mental health as “above average.” 36.1% (226) of respondents selected “average.” 4.5% (28) of respondents selected “below average” and 0.5% (3) selected “poor.” Five survey respondents did not provide an answer for this question.

TABLE 15: Survey Question 15 – Rate Your Mental Health



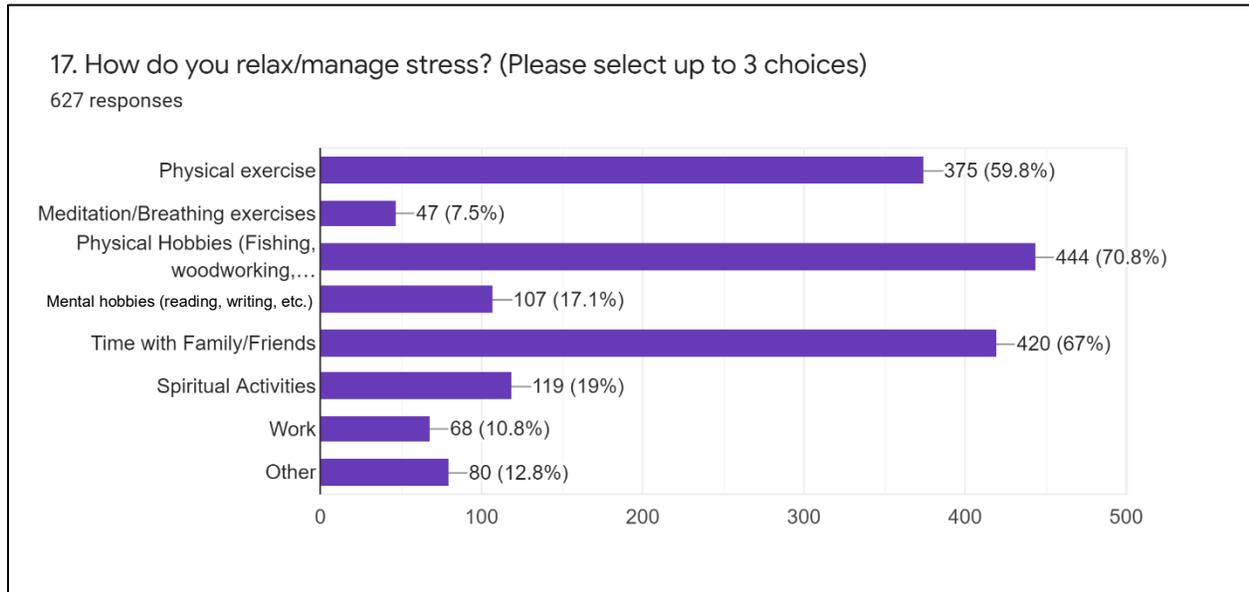
Survey question 16 asked respondents to rate their level of knowledge for their mental health needs with the same response options as question 15. 12.1% (75) of respondents described their knowledge level of mental health needs as “exceptional.” 38.6% (240) selected “above average.” 44.9% (279) of respondents selected “average.” 3.7% (23) of respondents selected “below average” and 0.7% (4) reported “poor.” 10 survey respondents did not reply to survey question 16.

TABLE 16: Survey Question 16 – Knowledge of Mental Health Needs



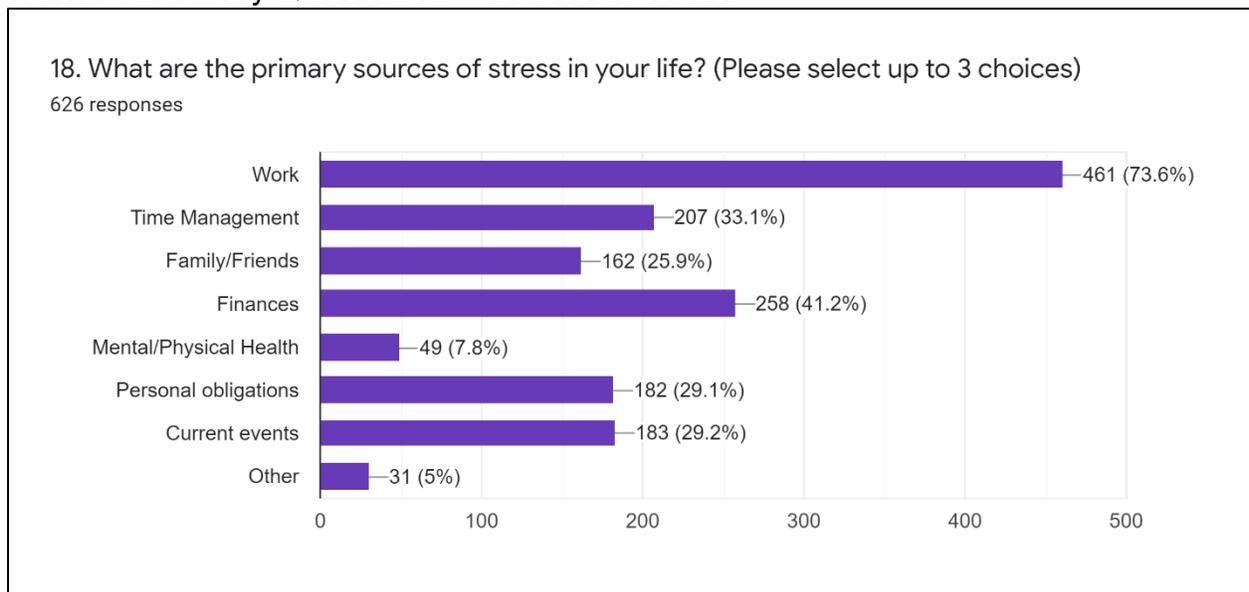
Survey question 17 asked respondents how they relaxed or manage stress, allowing up to 3 choices from a defined list. 59.8% (375) of respondents reported participation in “physical exercise.” 7.5% (47) of respondents reported participation in “meditation/breathing exercises.” 70.8% (444) of respondents selected “physical hobbies (Fishing, woodworking, etc.)” 17.1% (107) of respondents selected “mental hobbies (reading, writing, etc.)” “Time with family/friends” was selected by 67% (420) of respondents. 19% (119) of respondents selected “spiritual activities.” “Work” was selected by 10.8% (68) of respondents. 12.8% (80) of respondents selected “other” and there was no option for explanation of this selection. Four survey respondents did not provide selections for survey question 17.

TABLE 17: Survey Question 17 – Stress Management



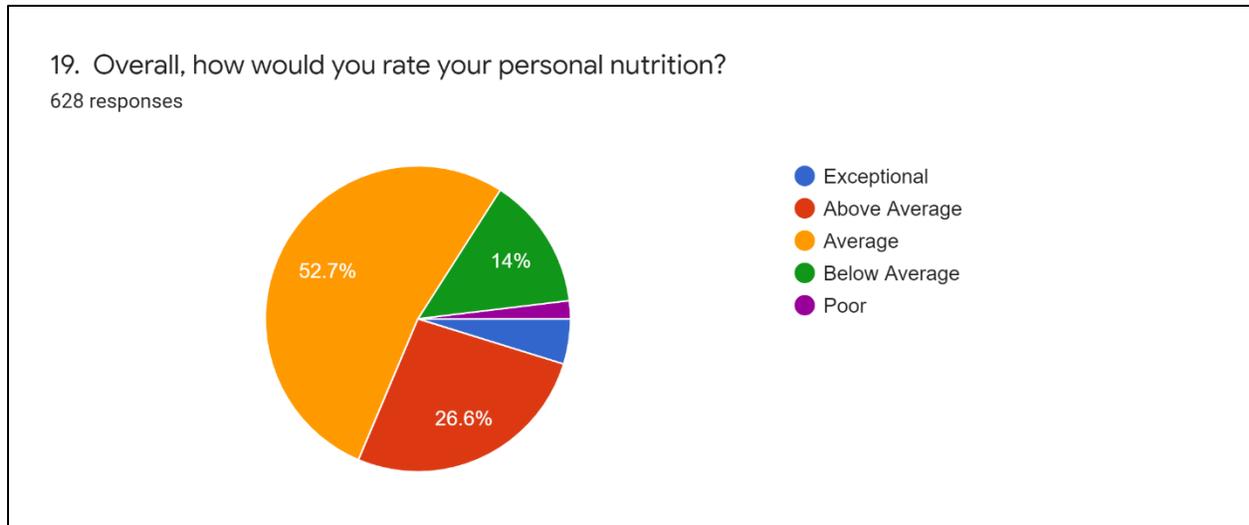
Survey question 18 asked respondents what the primary sources of stress were in their life, allowing up to 3 choices from a defined list. 73.6% (461) of respondents selected “work.” 33.1% (207) of respondents reported participation in “time management.” 25.9% (162) of respondents selected “family/friends.” “Finances” was selected by 41.2% (258) of respondents. “Mental/physical health” was selected by 7.8% (49) of respondents. 29.1% (182) of respondents selected “personal obligations.” 29.2% (183) of respondents selected “current events.” 5% (31) of respondents reported “other” forms of stress and there was no option for explanation of this selection. Five survey respondents did not provide selections for survey question 18.

TABLE 18: Survey Question 18 – Sources of Stress



Survey question 19 began the section specific to nutrition and asked respondents to rate their personal nutrition as “exceptional,” “above average,” “average,” “below average” or “poor.” 4.8% (30) of respondents selected “exceptional.” 26.6% (167) of respondents selected “above average.” 52.7% (331) of respondents rated their nutrition as “average.” 14% (88) of respondents reported a “below average” rating of personal nutrition and 1.9% (12) selected “poor.” Three survey respondents did not provide an answer for this question.

TABLE 19: Survey Question 19 – Rate Your Nutrition

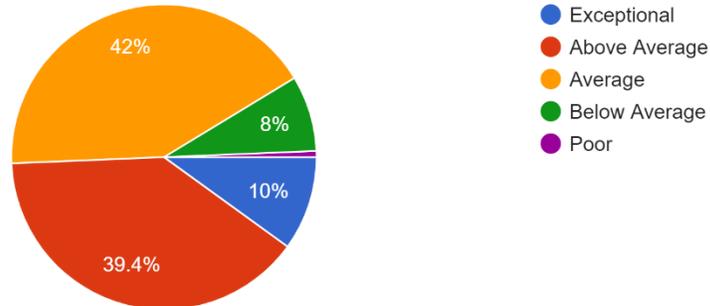


Survey question 20 asked respondents to rate their level of knowledge for their nutritional needs with the same response options as question 19. 10% (62) of respondents described their knowledge level of their nutritional needs as “exceptional.” 39.4% (245) selected “above average.” 42% (261) of respondents selected “average.” 8% (50) of respondents selected “below average” and 0.6% (4) reported “poor.” Nine survey respondents did not reply to survey question 20.

TABLE 20: Survey Question 20 – Knowledge of Nutritional Needs

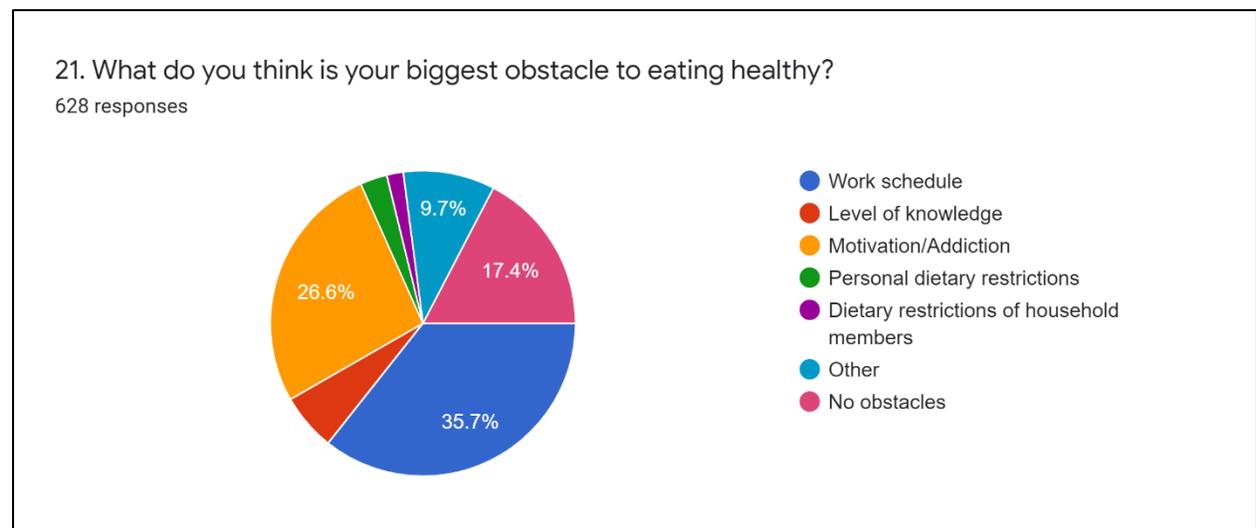
20. How would you rate your level of knowledge regarding your personal nutritional needs?

622 responses



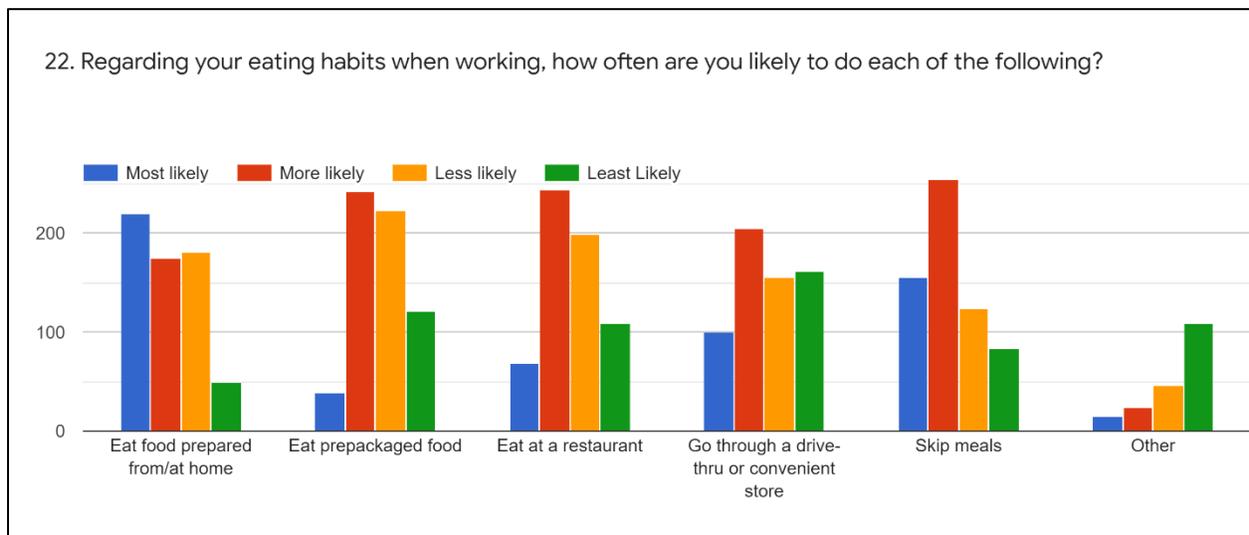
Survey question 21 asked respondents to provide their opinion of their biggest obstacle to eating healthy. “Work schedule” was selected by 35.7% (224) of respondents. 6.0% (38) of respondents reported “level of knowledge” as the leading obstacle. 26.6% (167) of respondents chose “motivation/addiction.” “Personal dietary restrictions” was selected by 2.9% (18) of respondents. 1.7% (11) selected “dietary restrictions of household members.” 9.7% (61) of respondents selected “other” and there was no option for explanation of this selection. 17.4% (109) of respondents reported having “no obstacles” to eating healthy. Three survey respondents did not provide a selection to survey question 21.

TABLE 21: Survey Question 21 – Obstacle to Healthy Eating



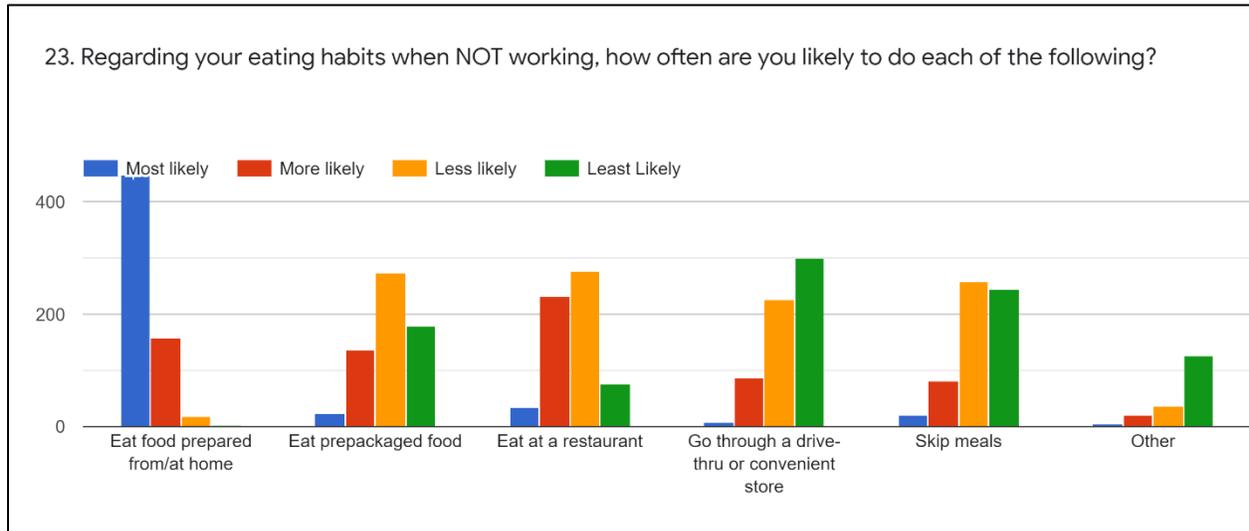
Survey question 22 asked respondents to rate a defined list of eating habits while at work as “most likely,” “more likely,” “less likely,” or “least likely.” When asked if they ate food prepared from/at home, 220 respondents stated this was “most likely” and only 50 stating it was “least likely.” 242 respondents stated that they were “more likely” to eat prepackaged food and only 39 were “most likely.” Regarding eating at a restaurant when working, 244 respondents selected “more likely” and only 69 selected “most likely.” 205 respondents reported that they were “more likely” to go through a drive thru or convenient store and 101 reported they were “least likely.” The option of skipping a meal while working was “more likely” for 254 respondents and “least likely” for 84 respondents. Other eating habits were “least likely” for 110 and “most likely” for 15 respondents. 5 survey respondents did not provide any selections for question 22.

TABLE 22: Survey Question 22 – Eating Habits at Work



Survey question 23 asked respondents to rate a defined list of eating habits while not working as “most likely,” “more likely,” “less likely,” or “least likely.” When asked if they ate food prepared from/at home when not working, 448 respondents stated this was “most likely” and zero stating it was “least likely.” 275 respondents stated that they were “less likely” to eat prepackaged food and only 23 were “most likely.” Regarding eating at a restaurant when not working, 276 respondents selected “less likely” and only 33 selected “most likely.” 300 respondents reported that they were “least likely” to go through a drive thru or convenient store and 7 reported they were “most likely.” The option of skipping a meal while working was “less likely” for 258 respondents and “most likely” for 22 respondents. Other eating habits were “least likely” for 126 and “most likely” for 5 respondents. 8 survey respondents did not provide any selections for question 23.

TABLE 23: Survey Question 23 – Eating Habits When Not at Work



The completion of the survey included a thank you statement and allowed for “additional comments or recommendations.” 6.5% (41) of respondents provided a response. Those responses are included in Appendix B: Additional Comments or Recommendations Provided to Survey. A majority of the responses stated appreciation for the program or recommended more paid physical fitness time. A minority of responses explained an answer or simply stated “N/A.”

## Discussion

Survey results offer many interesting and sometimes significant viewpoints regarding FWC’s Fitness and Wellness Program. Survey respondents reported being mostly in their thirties (36.4%) and forties (28.7%), male (89.9%) and white (89.3%). However, there was a much more even distribution with the years of sworn law enforcement experience reported. As an overall review of the program, physical fitness was overwhelmingly expected to have the most benefit to individuals (83.8%) and FWC’s Division of Law Enforcement (75.9%). However, 9.7% of respondents stated that mental health would be their biggest benefit to them as individuals and that number more than doubles (20.3%) when the same group responded regarding the biggest benefit to FWC’s Division of Law Enforcement.

Work was referenced several different times within the survey and consistently work or a work component was reported to have negative effects on an individual’s fitness. Work schedule was the most selected obstacle to being physically fit (34.2%). 73.6% of survey respondents selected “work” as their primary source of stress, significantly leading that category. Work schedule also led as the biggest obstacle to eating healthy, as selected by 35.7% of respondents. Furthermore, research shows preparing meals at home can be the healthiest option, but respondents reported they were “more likely” to eat something not prepared from home when working. One positive

reference related to work was that 10.8% of respondents reported work as a way to relax or manage stress. However, respondents selected 6 other ways that they are more likely to relax or manage stress.

Survey results related to physical fitness show that 12.5% of respondents rate themselves as having below average or poor physical fitness. However, only 4.8% report the same levels for their knowledge of physical fitness needs. Consequently, motivating and removing obstacles for those with below average or poor physical fitness may have a greater impact than educating those same individuals. Additionally, weightlifting was reported as the second most popular type of physical exercise among respondents, utilized by nearly half (48.4%) of those in the survey group. Currently, approved activities for on duty workouts does not include weightlifting due to the perceived potential for injury.

The updated Fitness and Wellness Program is intended to provide employees with training and resources in order to achieve and maintain appropriate levels of total fitness to meet the demands of the FWC officer and to provide for quantity and quality of life, professionally and personally. A high majority of survey respondents reported at least an average level of knowledge of their needs related to physical fitness (95.2%), mental health (95.7%) and nutrition (91.4%). Very few respondents report a need to know more in these areas. However, respondents rated their levels at below average or poor 15.9% for nutrition, 12.5% for physical fitness and 5% for mental health. While 5% is very low, that still accounts for 31 members who believe they have challenges with their mental health.

Other points of interest stood out when analyzing survey results. Despite the ability to work out on duty three times weekly with the updated program, only 30.1% of survey respondents reported an increase in physical exercise. This could be explained by COVID-19 related challenges, such as gyms closures or simply a majority of survey respondents already workout regularly. Additionally, 38.7% of respondents do not receive annual wellness checkups from a healthcare provider. This opens the potential for untreated conditions that may be unknown to the employee. And finances were reported by 41.2% of respondents as a primary source of stress.

The results of the given survey indicate that the majority of employees report having the knowledge of and are achieving average or better results in the areas of physical fitness, mental health and nutrition. While these ratings are subjective, the overall numbers are encouraging for their professional and personal quality and quantity of life. The FWC Division of Law Enforcement Fitness and Wellness program may not be entirely responsible for these results, but the results give guidance for areas of focus for the program.

## **Recommendations**

The recommended program areas of focus related to total fitness can be summarized by assisting employees with the removal of obstacles. These obstacles can come in many varieties and are often individualized for the specific circumstance and goals of the employee. An educational approach to these topics may benefit the level of knowledge of some, but a motivational approach to overcoming obstacles is likely to have a greater effect on performance and overall total health improvements for the majority of employees.

Specific recommendations related to physical fitness begin with the removal of obstacles. The number one obstacle to being physically fit reported during the survey was work schedule by over a third of respondents. The policy currently affords employees three 30-minute training sessions per week. The physical fitness training sessions shall occur immediately prior to a shift (without allowance for travel time), immediately after a shift and/or during their assigned lunch hour (if assigned to an administrative position or office). While different areas throughout the state have different patrol needs related to staffing, it is recommended the fitness policy be amended to allow more flexibility with when and where employees can participate in on duty workouts. Other obstacles related to physical fitness that were reported in significant numbers were self-motivation and personal obligations. Group workouts are a great way to motivate individuals through positive peer pressure. Policy flexibility as recommended above can assist in promoting group workouts. It is recommended that supervisors identify those personnel that may lack self-motivation and lead by example. Supervisors can also use their discretion to assist with removing obstacles related to personal obligations when appropriate. Additionally, the list of approved activities for on duty workouts should be researched to verify accurate risk of injury rates. Once research is completed, the list of approved activities should be amended as appropriate, ensuring a direct correlation of the activity to improved member work performance.

Mental health related recommendations focus mainly on the identification of mental health issues as a preventative measure and peer support opportunity. It is recommended that employees receive continued mental health awareness training to include available employee assistance programs, peer support groups, and resiliency building. This training would serve to assist employees to prepare for, recover from and adapt to various forms of stress. It would also serve to identify signs and symptoms of those experiencing distress in order to provide peer support. An additional opportunity to assist employees may exist related to financial stress. While increasing salaries for all employees isn't a likely strategy, ensuring employees are familiar with financial services available through the employee assistance program (EAP) may help reduce finance related stress by educating employees in that area.

Nutrition related recommendations should focus on educating employees how to access proper nutrition and how to access the appropriate information for their individual needs. Some of the open comments provided at the end of the survey support this recommendation. "...Eating healthy costs a lot" and "Most of my struggles with eating healthy results from entertaining guest of socially eating at restaurants" are two related comments. According to research, meals prepared at home are often the most nutritious choice when compared to alternatives such as eating at a restaurant. There was a noticeable distinction between how employees eat when at work compared to when not working. 448 respondents were "most likely" to eat food prepared from/at home when not working compared to only 220 while working. Providing training on cost effective and creative ways to eat healthy while working will give employees a helpful resource. It is recommended that the program does not make nutritional recommendations related to what should be consumed as everyone's requirements differ. Employees should be directed to a physician, dietician or other similar profession if requiring guidance on their individual nutritional needs.

Survey results indicate that the FWC Division of Law Enforcement has an overall fit staff, but this doesn't include all members and a majority of members still have yet to reach optimal fitness. By removing obstacles and motivating and training employees, fitness and wellness program can provide the opportunities necessary for all employees to achieve better results.

Captain Patrick Walsh is a Navy veteran and began his career with the Florida Fish and Wildlife Conservation Commission in 2004 as a law enforcement officer. During his 16+ years with the Commission, he has also served as an investigator, training coordinator and field supervisor. Patrick currently serves as Training Captain, leading an amazing team who work together to oversee statewide in-service training and recruiting. He is a graduate of the Florida Leadership Academy, Class 26. Patrick graduated from the University of South Florida (Go Bulls!) with a Bachelor of Arts degree in Interdisciplinary Science with a concentration in Chemistry.

## References

- Aging well in the 21st century: Strategic directions for research on aging. (2016). *National Institute on Aging*. Retrieved from: <https://www.nia.nih.gov/sites/default/files/2017-07/nia-strategic-directions-2016.pdf>.
- Dawson, J. (2019). Fighting stress in the law enforcement community. *NIJ Journal* 281. <https://nij.ojp.gov/topics/articles/fighting-stress-law-enforcement-community>.
- Healthy aging. (2018). Mayo Clinic. <https://www.mayoclinic.org/healthy-lifestyle/healthy-aging/in-depth/aging/art-20046070>.
- Lee, J.C. (2003). Police fitness: *The effects of activities, service, limitations and programs on fitness and retirement*. Retrieved from *Dissertation Archive*. 2215. [https://aquila.usm.edu/theses\\_dissertations/2215](https://aquila.usm.edu/theses_dissertations/2215).

- McDonough, M.E. (2011). The employee wellness plan: A strategy for fighting the “evil from within.” *FBI Law Enforcement Bulletin*. <https://leb.fbi.gov/articles/featured-articles/the-employee-wellness-plan-a-strategy-for-fighting-the-evil-from-within>.
- Portland State University, Criminology and Criminal Justice Senior Capstone. (2014). Prevention and Management of Stress in Policing: A Review of the Literature. *Criminology and Criminal Justice Senior Capstone Project. Paper 11*. [http://pdxscholar.library.pdx.edu/ccj\\_capstone/11](http://pdxscholar.library.pdx.edu/ccj_capstone/11)
- Oliver, D., Boivin, A., & Crimmins. (2019). Fitness practices amongst worksite wellness programs: A scoping review. *The International Journal of Health, Wellness, and Society*, 9(4), 15-35.
- Ogawa, J., Spina, R.J., Martin III, W.H., Kohrt, W.M., Schechtman, K.B., Holloszy, J.O. & Ehsani, A.A. (1992). Effects of aging, sex, and physical training on cardiovascular responses to exercise. *Circulation*, 86(2), 494-503. <https://doi.org/10.1161/01.CIR.86.2.494>.
- Teixeira, J., Monteiro, L., Silvestre, R. , Beckert, J., & Massuca, L. (2019, June). Age-related influence on physical fitness and individual on duty task performance of Portuguese male non-elite police officers. *Biology of Sport*. 36(2),163–170.
- Vogel, C. (2015, July). What’s working: Customized wellness program pays off for police department. *Benefits Magazine*, 52(7).
- Winfield, A.J. (1983, December). *A study of the need for a comprehensive physical fitness training and evaluation program for law enforcement officers*. (Doctoral dissertation). Retrieved from University Microfilms International. The Florida State University, College of Education. (8407013)

## Appendix A:

### Survey on FWC DLE Fitness and Wellness

#### Introduction

As part of the FDLE Senior Leadership Program, Captain Patrick Walsh is conducting research regarding the Florida Fish and Wildlife Conservation Commission DLE Fitness and Wellness Program. The answers provided will be used to shape the future of the program to ensure the program continues to meet the needs of our members. The survey is anonymous and should take no more than 10 minutes.

Thank you in advance for your input!

#### Demographics and General Questions

1. What is your age?
  - 18-24 years old
  - 25-29 years old
  - 30-39 years old
  - 40-49 years old
  - 50-59 years old
  - 60 years old or older
  
2. What is your gender?
  - Female
  - Male
  - Other
  
3. What is your race?
  - White
  - Black or African-American
  - American Indian or Alaskan Native
  - Asian
  - Hawaiian or Pacific islander
  - Multiple races
  - Other
  
4. How many years have you been in sworn law enforcement?
  - 0 – 5 years
  - 6 – 10 years
  - 11 – 20 years
  - 20 or more years

5. What part of the FWC/DLE Fitness and Wellness Program will have the most benefit to you as an individual?
  - Physical Fitness
  - Mental Health
  - Nutrition
  
6. What part of the FWC/DLE Fitness and Wellness Program will have the most benefit to the Division?
  - Physical Fit
  - Mental Health
  - Nutrition

#### Physical Fitness Questions

7. Overall, how would you rate your physical fitness?
  - Exceptional
  - Above Average
  - Average
  - Below Average
  - Poor
  
8. How would you rate your level of knowledge regarding your physical fitness needs?
  - Exceptional
  - Above Average
  - Average
  - Below Average
  - Poor
  
9. What do you most often do for physical exercise? (Please select up to 3 choices)
  - Weightlifting
  - Walking/Running/Hiking
  - Bicycling
  - Swimming
  - Calisthenics
  - Stretching/Yoga
  - Traditional Sports
  - Combat Sports/Martial Arts
  - Other
  - None

10. Where do your physical fitness activities primarily occur?

- Fitness centers/Gyms
- Home
- Roads/Trails/Waterways
- Parks/Community Centers
- Work/Office
- Other
- N/A

11. What do you think is your biggest obstacle to being physically fit?

- Work schedule
- Level of knowledge
- Lack of Enjoyment
- Personal obligations
- Self-motivation
- Other
- No obstacles

12. Since the DLE Fitness and Wellness Program was updated (May 2020), has your physical exercise increased, decreased or remained the same?

- Increased
- Decreased
- Remained the same

13. Do you see a personal physician or healthcare provider for annual wellness checkups?

- Yes
- No

14. Have you previously voluntarily attempted the FWC Physical Abilities Test (PAT)?

- Yes
- No

#### Mental Health Questions

15. Overall, how would you rate your mental health?

- Exceptional
- Above Average
- Average
- Below Average
- Poor

16. How would you rate your level of knowledge regarding your mental health needs?

- Exceptional
- Above Average
- Average
- Below Average
- Poor

17. How do you relax/manage stress? (Please select up to 3 choices)

- Physical exercise
- Meditation/Breathing exercises
- Physical Hobbies (Fishing, woodworking, etc.)
- Mental Hobbies (Reading, writing, etc.)
- Time with Family/Friends
- Spiritual
- Work
- Other

18. What are the primary sources of stress in your life? (Please select up to 3 choices)

- Work
- Time Management
- Family/Friends
- Finances
- Mental/Physical Health
- Personal obligations
- Current events
- Other

#### Nutrition

19. Overall, how would you rate your personal nutrition?

- Exceptional
- Above Average
- Average
- Below Average
- Poor

20. How would you rate your level of knowledge regarding your personal nutritional needs?

- Exceptional
- Above Average
- Average

- Below Average
- Poor

21. What do you think is your biggest obstacle to eating healthy?

- Work schedule
- Level of knowledge
- Motivation/Addiction
- Personal dietary restrictions
- Dietary restrictions of household members
- Other
- No obstacles

22. Regarding your eating habits when working, how often are you likely to do each of the following:

Always/More Likely/Less Likely/Never

- Eat food prepared from/at home
- Eat prepackaged food
- Eat at a restaurant
- Go through a drive-thru or convenient store
- Skip meals
- Other

23. Regarding your eating habits when NOT working, how often are you likely to do each of the following:

Always/More Likely/Less Likely/Never

- Eat food prepared from/at home
- Eat prepackaged food
- Eat at a restaurant
- Go through a drive-thru or convenient store
- Skip meals
- Other

Thank You

Thank you for taking the time to participate in this survey regarding the FWC DLE Fitness and Wellness Program. Your answers will be used to shape the future of the program to ensure the program continues to meet the needs of our members. Please use the space below to provide any additional comments or re recommendations.

## Appendix B:

### Additional Comments or Recommendations Provided to Survey

I am old and tired. I don't think anyone has found the Fountain of Youth yet. Please let me know when they do.

Longer work out time

Eat pasture raised eggs, grass fed and finished red meat, fresh caught sardines, bone broth from pasture raised chickens and beef, drink filtered water, do intermittent fasting and LIVE FOREVER CARNIVORE DIET WILL SAVE YOUR LIFE.

I exercise more now with the paid 196 time.

na

I would recommend changes to the use of cad during exercising, it severely limits my ability to have a complete workout having to log out and then return to my workout due to the half hour window. My workouts are generally an hour long. Currently I go 196, warm up, start my workout, log out, return to my workout then stretch. It is somewhat difficult to remember to logout when in the "zone". But Overall I am very excited to have the agency allow 196 on duty!

NA

30 minutes of 196 might not enough for some. I understand there is a fine line between what can be done while x8, but just a thought.

Two answers were marked other... money is the main obstacle to both questions. Gyms cost a lot i.e. cross fit, orange theory, 9 round etc. ... and eating healthy costs a lot.

More than half an hour of allotted physical fitness time three days a week during shift please.

Maybe get rid of Activitynet, I'd rather spend that time bettering myself.

Some hesitation by officers is the monthly cost to join a gym/training center, by incentivize officers with a monthly credit will help officer start their physical fitness goals and/or continue them.

Most of my struggles with eating healthy results from entertaining guest or socially eating at restaurants

Keep up the good work!

I think its a great idea the fitness program was made mandatory.

More FWC workout time and gym equipment at FWC offices would be extremely beneficial.

In reference to question 11 - My biggest obstacles are the injuries/surgeries I have accumulated over 34 years of law enforcement. Shoulders, back, knees, and feet.

I know we have a list of workouts but maybe doing a meal prep list for the week and a weekly mental health activity would be cool to do.

Some TYPES of work are stress relieving. Patrolling in low activity areas and enjoying the natural surroundings.

I really appreciate the changes to the Fitness and Wellness Program that allow members to exercise on x8 time for three times per week. Thank you for implementing that part of the program and I'm excited to see what new changes occur as a result of the survey.

The thirty minutes given before or after shift for workout is not long enough to workout and clean up afterwards so I do not even bother with it. It's a good idea but not enough time is given. Going to two hours twice a week would do more than three thirty minute sessions.

Maybe expand the approved workouts to include weightlifting.

Cost effective suggestions for healthy foods

think about allowing more than 30 mins a day to workout.. ex, atleast 1 hour

EXCELLENT, I LOVE THIS!

n/a

Would be nice to have a place to work out like a field office when there are no gyms or anything of that sort in the county you work.

Nutrition, Physical Fitness and Mental Health are all interrelated. Shift work, long term exposure to critical incidents over your career and the ever changing political environment and hostility towards officers is going to take a toll on our personnel. I believe this program if it is continued will help our people.

need more time for workouts

While the fitness program is a great start an direction from FWC, is it not supported in practice by LTs. Our workload and task load they give us and expectations are still unattainable being down staff here yet having to pick up the same workload - without using any OT - and then having to

flex the time off, but then being unable to because of "coverage" issues. Even though there is no coverage from 2300-0800. Our supervisor expectations make us unable to take advantage of and use this program as it is intended. Yet we're expected to complete the PAT by these same superiors. It's a stressful, unreachable catch 22.

I feel that the updated fitness program is a great step in the right direction. I have been involved in memorial workouts and various PT components of training evolutions, and am excited that the agency is promoting fitness in such a positive way. I have been utilizing the time allowed us to PT more, and have been encouraging others to do the same. I feel that morale is up due to this initiative!

Would prefer an hour for PT as opposed to 30

the ability to workout on the clock a few times a week for 30 minutes each is a HUGE benefit and has not only help create time to get healthy but has also created a new found motivation for not only myself by my officers as well !!

great program!

I have really enjoyed the new fitness program and allowed exercise hours. They have helped a lot in finding the time to get it done and stay healthy, thank you.

1 hour of workout time on the clock would be more optimal to attain desired physical fitness.

N/A

No one can beat time. It would seem to me it would be a better monitor of physical fitness having a sliding scale where the younger the officer the more was expected. If I am at the same fitness /conditioning at age 24 as 54, I should be faster, stronger and more endurance at 24.

I would like to see the ability to coming 30 minute workouts if wanted and use them together. Not all the time but if need be.

better schedules that are more consistent because switching every 28 days is miserable

Questions 5 and 6 don't apply to me. Should have a Not applicable answer. Also, the agencies 30 minutes is not enough time for me to get a workout in. Probably good for beginners.

Recommend allowing officers to work out (on duty 196) in the middle of shift instead of just before/after shift