A Human Study of Causal Fitness: A study on behavior

By Michael Andryauskas Bentley University It's a common tidbit amongst gym-goers that the busiest month of the year is January, when gyms welcome new patrons who have just made a New Year's Resolution to get in shape. However, when February starts, the dramatic falloff from the new patrons makes the gym attendable again for regulars, no longer needing to tolerate the newcomers at the gym. This demonstrates that despite knowing the positive benefits of having an active body, the actual commitment to performing the same exercises on a regular basis is often broken by new gym patrons. This is not an uncommon occurrence for new exercisers to propose to work out, only to not follow through on their commitment (Crossley, 2006). From a public health standpoint, I wanted to determine the reasons for keeping or dropping a workout routine, ideally from the perspective of individuals who do not consider themselves gym rats. In addition, I wished to understand the workout routines of these less hardcore regulars at the gym.

Methodology

During the study period between January and April of 2017, I employed several methods for gathering data on the individual and social aspects of regularly working out.

The primary method for data gathering came in the form of observation of the individuals in a workout facility while I worked out with them concurrently. There were two gyms visited during this time. For most of the study, I worked out and observed at the public gym in the Dana Center of Bentley University. This facility has two floors, with a weight room on the first floor and cardio equipment on the second. Typical patrons are students at Bentley University, with ages in the late teens to the mid twenties. The body types typically in attendance at Bentley's gym ranged from slightly overweight to extremely muscular.

The second gym visited was the Boston Sports Club in Lexington. While the gym at the Dana Center is not considered the most important draw to students at Bentley University, fitness is the primary purpose for most patrons to attend the Boston Sports Club (BSC). BSC has one large room and one small room for working out with exercise equipment and machines. Patrons are typically between 30 and 60 years old, and the body types vary from extremely fit to overweight. Patrons need to drive to this facility in order to enter or exit.

By working out concurrently in the same facility as other patrons, I hoped to get a better understanding of the motivations for becoming fit and for becoming a regular patron of the gym. The primary routines I employed were running exercises and weight exercises targeted at building my upper body strength.

While at these gyms, I conducted several informal interviews with regular patrons concerning their own experiences. The conversations typically lasted five to twenty minutes, discussing their workout and their motivations.

Finally, I constructed a survey concerning the routines and motivations for working out and asked members of the Bentley HFID FaceBook group to fill it out. The survey was constructed based on the findings of Crossley (2006). In total, I received 57 unique responses from the survey. I analyzed the data from the survey to find patterns in motivations and workout routines.

Data and Findings

For the information I found in the ethnographic study, there were several themes I wished to explore. Firstly, I wanted to explore motivations for regularly working out. Ideally, I would be able to find more obscure reasons behind why a person would work out that the common

person wouldn't account for when he is starting to work out on a regular basis. Secondly, I wanted to understand the routines people employ when working out. These would not only include the types of exercises for a given session, but would also monitor how the person conducts himself throughout the workout.

Motivations

While there are a variety of different motivations for working out, there are some that prove to be more effective for some individuals than they are for others. The most common motivations stem from the long-term benefits to working out, such as improvement in health and improvement in body image. These motivations require extended periods of time for individuals to notice the benefits to working out. It is suggested that a healthy weight loss rate is about 1-2 pounds per week (Centers for Disease Control and Prevention), so losing just 10 pounds in a method that is not harmful to one's health requires at least a month of continuous exercise and diet. The slow rate of improvement may not provide a person with enough of an incentive to continuously work out. For example, one respondent to the survey voiced her frustrations, telling me her primary motivations were to lose weight and for health reasons. However, despite working out for 8 months, she hadn't lost any weight.

Another downside to long-term based motivations is that they can be easily interrupted by other aspects of the individual's life. From the survey I distributed, the more common reasons cited by those who don't work out for not exercising included their lack of time or energy to continuously do so. When I asked people about a period of time when they stopped working out, many of them referred to other responsibilities such as work or school for not working out during that time. "I stopped working out for a week during midterms this semester," one informant told

me while he was eating a breakfast sandwich. "I didn't feel bad about it because I was focusing on school work, and that was enough justification for me."

Finally, when it comes to tracking the long-term improvements from working out, the results from the survey demonstrated that those who have been working out for less than a year are far less likely to track their improvement. While less than half of respondents who've been working out for less than a year track their progress, over 65% of respondents who've been working out for longer than a year utilize some method for tracking their own improvement, with a phone app being the most popular method for tracking this data. This could suggest that those who are already working out on a regular basis are the ones truly motivated to track their improvement.

Amongst the people I talked to, the way people felt after working out appeared to be a stronger motivator than the physical benefits. Most respondents to the survey claimed that the good feeling they receive from working out was a major factor for continuing their routine. While some individuals refer to the pain they feel after working out, others do not feel these aches or were willing and able to overcome these feelings to get to the positive feelings.

The good feeling is most likely the endorphins in the body giving the brain positive feelings that is similar to the feeling of being on drugs, but not supposed to be addictive (Crossley, 2006). Amongst some groups, this type of feeling is known as a "runner's high," even though that term is generally used for long-distance running (Boecker et al, 2008). How long it takes to release these endorphins depends on the individual and the workout intensity. Some individuals can get the endorphins active in as little as 10 minutes, while others need at least 30 minutes before they feel anything (Centers for Disease Control and Prevention).

Another reason that people cited for being a popular reason for working out is the mental benefits it provides. Some people noted the need for an "escape," meaning something different from the day-to-day routine (Crossley, 2006), from their other responsibilities, such as work, which require more mental energy. Gyms have been specifically designed to serve as an alternate reality where individuals only need to focus on themselves (Sassatelli, 2006) A few others specifically cited the stress relief they received from working out. It should be noted that not everyone experiences the positive feelings of working out (Crossley, 2006), and this would be a poor motivator for those people.

The positive feelings achieved from working out also provide people with a reason to resist the urge to skip a workout session. When asked about a time when they were tempted to skip a workout session but resisted the urge to do so, most people cited the feelings and enjoyment they receive from working out as the reason they didn't skip their session. "I usually just power through and go since I know I will feel better afterward," one respondent replied. "I've never regretted working out but have often regretted skipping a workout."

While not necessarily a major factor, where someone is able to perform their workout can dictate whether or not they're going to work out on a given day. From the survey, 45% of respondents say that the convenience of where they work out is a factor remaining motivated to work out. On respondent wrote that the gym is built into the building where he works, and the company provides software for tracking his workout. While the sparsely occupied Boston Sports Club requires patrons to drive to reach the facility, the often crowded gym at Bentley University is within walking distance for undergraduate students. If the person needs to workout outside, weather can be a determining factor for taking long period breaks from working out. "No

pool/swimming options," one respondent wrote. "I've gone 9 months [without working out], [I] always swim in [the] summer!!"

Routines

The use of the word "routine" for exercises makes it seem for those who continuously work out that the reps and sets are all a natural part of their daily activity. Some people have successfully ingrained their exercises so that it becomes as natural as eating or going to work. When asked about what prompted someone to work out on a regular basis, one person replied "Hmm. not really sure, I guess in high school to get in shape. I don't even think about why I work out at this point, it's just so integrated into my lifestyle."

Just having a routine is an important element for casual exercisers, with less than 20% of respondents saying that a workout routine is either not very important or not at all important.

These people are likely to schedule their workouts around their other responsibilities and consistently devote periods of time to the activity. Having some sort of consistency in their schedule would allow aspiring exercisers to maintain a constant workout schedule.

The specific contents of these routines, however, could vary depending on the day. If people are working out on different days of the week, the exercises they conduct each day are dependent on the activity they would like to work on or the muscles or the purpose for the workout. For example, some people run to build up cardio one or two days a week and then work out with weights to build strength on one or two other days. Other people might concentrate on specific muscles during their workouts, focusing on the upper body for one or two days, lower body for another one or two days, and then the core for a day. Building up each

group of muscles requires a different set of exercises, so the routine differs greatly among these days.

When it comes to working out, most people prefer to work out by themselves. In the survey, when asked about how social has your workout been, over 63% of respondents prefer to work out alone rather than alongside others. This appears to be the case at the BSC too, as patrons of the BSC are more likely to arrive as individuals rather than in groups.

Due to the close proximity of the patrons of Bentley's gym to the gym itself, people were more likely to visit the gym together when they work out. It should be noted that even though it was easier for people to gather and work out cooperatively, several patrons of Bentley's gym still prefered to work out alone. One patron I interviewed at Bentley's gym, who was originally a member of the Bentley football team, talked about his personal preference to working out alone. "When I work out alone" he told me as he was waiting for his breakfast, "I can get into the zone, focus on my workout. In the varsity gym, I feel like I have to talk to [my teammates]. Nothing against them, but I want to focus on my workout."

However, if aspiring exercisers do end up joining a group or class when they work out, they're more likely to be integrated into fitness culture and less likely to miss sessions at the gym (Crossley, 2006). Most of the regulars at Bentley's gyms originate from members of sport teams or fraternities, where they bond outside of class as they work out. If a person in this group were to skip a session, it would possibly be met with jeers at his expense, and he would try to avoid these feelings by committing to the gym (Crossley, 2006).

The idea that exercisers workout without engaging in social behavior might originate from the individualistic attitude that working out entails. Most of the motivations mentioned in

the previous section discussed the improvement of self as a factor for exercising. When it came to coincidental interactions, these discussions tended to be shorter and uneasy, with each patron exchanging pleasantries before trying to distance himself to resume his routine. When people wished to keep to themselves, they employed several strategies to keep themselves at arms distance from other people.

The most common method for keeping oneself isolated is to put on earbuds and listen to music while working out. When asked about the media they consumed while they worked out, listening to music, with 42% of respondents, was the most popular response by a wide margin. Just before they start to interact with the workout equipment, people placed their earbuds in one after the other, tilting their head while they held their phone, searching for their workout playlist. They press play, place the phone on the dashboard of the machine or in their pocket, and started their workout, keeping their earbuds on even as they were leaving the workout area.

Listening to music also serves the purpose to assist in workout performance, especially when it comes to running. People are able to become in sync with the rhythm of the songs on their playlist to maintain a pace while they are exercising. While some sporting competitions such as triathlons or 5k runs allow participants to listen to music, there are penalties for doing so in the form of additional time added to their final completion time.

People also preferred to physically separate themselves from other people when they wanted to work out alone. With a large number of cardio machines available at both the Boston Sports Club and Bentley's Gym, exercisers generally select machines that aren't adjacent to another machine in use during non-popular hours of the day. Weight machines are also typically not used during social interaction, with users looking straight ahead and mimicking the position

presented on the machine when they work out. Even when people were stretching in the same area before their workout, they tried to move themselves towards the edges of the mats or kept to their own padded section, divided by the folds in the mat.

Some machines are large enough not only to provide a variety of exercises, but to allow for multiple patrons to utilize that machine simultaneously. While the machine is capable of creating a central hub for multiple patrons to gather and perhaps socialize, there is no guarantee for such a community to appear. While there is a set of people who use this machine for simultaneous fitness and social activities at the Dana Center, such a community is not pervasive at Boston Sports Club around this machine. The machine itself could be considered intimidating for new patrons, and usually the users of these large machines are like-minded individuals who have pre-established relationships with one another.

In terms of determining which routine is most comfortable for them, the origin of these routines vary from person to person. Few people look up exercises online through an app or a website, although some may refer to videos on their phones if they're unclear about how to perform a specific exercise. It's more likely that people learned their routine through trainers, coaches, and instructors, who can also provide feedback and moral support to each person.

Personal Experiences

At first, the driving force that got me working out was that the gym was close to where I lived and convenient for me. Bentley University is about five minute drive from where I live at the time of this writing, so it was easy to reach. However, the convenience by itself was not enough to regularly go to the gym. I tried various methods to motivate me to exercising regularly, and I found that I was more likely to go to the gym when I specifically planned a time

to go to the gym that was easier to adhere to. Attempting to wake up at 6:30 to get to the gym at 7:00 was not fruitful, and I felt that if I didn't get there in time, there was no point in going.

If I planned to go to the gym before or after class, however, the convenience of being on campus was effective to get me to the gym. However, I still managed to skip sometimes because I forgot to bring an item I needed, and I was not committed to returning after a long day. One time, I intended to go to the gym in the evening after class, and I was about to leave Bentley's Forest Street entrance. I normally turned right to go home, but I turned left to get to the gym with the excitement of being able to find a good time to work out. However, I soon realized that I forgot to bring my sneakers. Because of this and other school work I needed to do, I decided to skip working out for that evening.

However, there was a moment that allowed me to work out spontaneously, which came on the first warm day of 2017. I woke up earlier than expected, with the light from the window hitting my face. As opposed to the dreary light that was abundant during the winter, the spring sun seemed to be full of life. I woke up, descended the stairs and walked outside in my pajamas, to check the temperature for the day to determine what I was going to wear. Instead of going inside immediately like previous days, I ended up lingering on the outdoor steps for a few seconds, arms elevated a little bit from my sides as I basked in the glow of the sun. I took a breath and inhaled the fresh aroma of Spring hidden in the dark months. I realized that the weather was perfect for me, and I was beginning to feel cooped up in my home. As such, I changed into shorts, jersey, and shoes and ran for 2 miles before my day began.

As I worked out more and more regularly, my own perception of how I looked started to give me an ego boost for working out. I started to gain a slight distinction between my biceps

and triceps after I worked them out. I sat on the freeweight bench and stared into the mirror directly into my upper arm, with my elbow bent and resting on my knee. I felt pride in the work that I have accomplished, and was hoping to work out more to further define this definition.

However, I found that the most disruptive method for continuous exercising is course & work crunches and life emergencies. At the time of this writing, my family had encountered several medical emergencies that prevented me from working out on a regular basis. My family is dependent on me for medical appointments and to run errands. In addition, because the semester is ending, a large workload prevented me from working out as often as I would have otherwise desired.

In terms of my own workout routine, the routine has gradually evolved over time. When using the weights, I initially relied on the workout machines due to the instructions for proper use posted on them, but most machines are only capable of one or two actual exercises. Those who wish for a more general workout would need to constantly move around to find the right machine to use at the time. In comparison, free weights such as dumbbells provide the freedom to work out in whatever exercises the patron is comfortable with performing with a small set of equipment. As such, people tend to spend more time in the free weight area as opposed to an area for any particular weight machine.

In these areas, it's easier to observe and mimic the exercises other patrons are performing. While determining my own workout routine, I often observed the exercises that my fellow patrons performed and copied what they did. For example, I learned how to perform Lawn Mower Rows and Tricep Extensions for my triceps, as well as the Lying Fly for my chest muscles from observing the patrons who worked out in the same area. Some patrons who knew

each other used the area to perform routines together, either taking turns between working out and spotting for their partner or performing the same exercise simultaneously.

Example of an Encounter

In one instance at the Boston Sports Club, a woman was conducting Seated Dumbbell Shoulder Presses when another patron approached her. Regardless of whether or not the exerciser was complete with her set, she dropped the dumbbells on the floor on either side of her and gleefully greeted her friend. Apparently, they were coworkers and friends outside of work. The exerciser remained seated on the bench, twisting her head and looking up towards her standing friend as they talked. It seemed that while the exerciser was happy to see her friend, she didn't want her own routine to be interrupted. At a nearby bench press, a patron had started to rack up some weight, adding a good amount of weight to the barbell. He admired the amount of weight he was going to attempt to lift, but had second thoughts regarding whether or not he would be able to lift it on his own. He looked over at the free weight area and noticed the two ladies having a conversation. Keeping one hand on the barbell as if to retain possession of the bench, he called the friend who was not working out.

"Excuse me" he asked in a polite tone. The two ladies turned their head towards the patron, but he was looking directly at the standing woman. "Could you spot for me?"

"Oh, that's far too much for me to lift" the standing woman exclaimed. Apparently, she was unaware of what it meant to spot for another person at the gym, and believed that she would need to be capable of benching just as much weight just to be able to lift it.

The sitting woman turned back to her friend and informed her that "it's actually not that hard. He'll really do most of the work, you just need to guide the bar when he needs to rerack it."

When her friend walked over to the bench press, the sitting woman returned to her exercises. Meanwhile, the guy started to bring the bar to his chest and started to extend his arms straight up, but not enough to lock the elbows and potentially harm his arms. The spotter stood by the man's head with her hands pressed on her hips in a defiant stance. She seemed to enjoy imitating the common perception of a body builder's personality, exclaiming phrases at a lower octave such as "get buff" and "don't be a wussy man" and giving a short and small laugh after each phrase.

As the number of reps he completed increased, his pace when it came to lifting the bar slowed down, and he started to blow air out of his lungs as he took longer breaths in as he tried harder to lower the bar in a controlled fashion. After 5 reps, it was clear that it was too much weight for him to complete any more, so he extended his arms to signal that he was finished. He had to hold up the bar for a second or two before uttering "OK" in a strained voice towards his spotter. She took both hands in an underhanded motion and pulled on the barbell until it was over the rack. When it hit the rack's back, the man dropped the barbell on the rack and began to sit up before leaning forward on the bench in exhaustion. He thanked her for spotting for him, and they had a short conversation to introduce themselves.

General Discussion

Through observation, talking with individuals, sending surveys, and performing my own exercise routine, I was able to have an understanding of what is effective in what brings people to the gym and what causes people to stop going.

Firstly, exclusively relying on long-term payoffs to muster motivation is generally insufficient to maintain a regular exercise routine. For example, simply knowing the health-based benefits of exercise will not motivate most people towards working out, especially if they are healthy in a general sense. This may provide a good method for continuously exercising after doing so for an extended period of time, but this would not be effective for those who have not been able to previously properly work out.

Ample time should be dedicated to the act of exercising. Those who explicitly place a hole in their schedule to work out are less likely to skip due to prior engagements. This would also help combat the most apparent deterrent to working out, which is related to stress load at work or life.

The individualistic mindset for improving oneself makes it less likely for people to work out in groups. It is generally inconvenient for friends to workout together due to conflicting schedules and their commutes between home, work, and a gym. However, if an exerciser can make his workout routine a positive social experience, the influence of his peers may provide a positive catalyst for working out.

However, a person would be more likely to exercise if there is a convenience factor to do so. People may be more likely to work out if the method of workout is convenient for the exerciser. This would include the location where they would work out, as well as providing the means for the person to work out properly.

Potential exercisers should also aim to reach a sustained release of endorphins to experience the positive feelings that committed exercisers glow about during their workouts. Designing the workout to take at least 10-30 minutes would be recommended, and the exerciser should time how long it takes to feel the positive feelings. This may prove to be difficult due to other avenues of dopamine release that would require less effort. A deeper understanding of the different types of dopamine release would be recommended.

If someone has an overwhelming workload, they're also more susceptible to at least temporarily suspending their regular workouts, if not completely abandoning them. While this is not something a person can have control over, the mental benefits from exercise can actually offset any perceived loss of man hours in more productive and insightful individuals.

Limitations

While there was a lot of data collected during this study, I must acknowledge that there were a few issues that would require a more extensive study in order to fully understand the motivations and routines of a gym patron. Firstly, the time period was very limiting, restricted to the winter and spring months. The behavior of an average patron could be altered once the colder months have been completed and the warm summer months encourages some individuals to work out more.

Secondly, the only types of exercises observed during this time period were cardio exercises on machines and weight lifting routines in the gym. The study didn't have the chance to observe alternative methods of working out, such as swimming, outdoor running, and gym classes. More observations related to how fitness gurus interact with average people could lead to insights that encourages patrons to visit the gym more often.

In addition, the targeted demographic of young casual exercisers was very difficult to locate and to build into a regular relationship. While gym rats are consistently found at the gym, patrons who are not as serious about working out were not as consistent with days and time. Many people I interviewed previously were no longer adhering to their routines, and so I was unable to talk to them again for follow up interviews. Follow-up interviews about what had changed between interviews may have provided insights to how people keep motivated as they work out over an extended period of time.

Finally, the sample size for the survey could have come from a more diverse source. The Bentley HFID FaceBook page is filled with a lot of like-minded individuals who would have similar priorities when they perform tasks. Gathering data from more diverse populations might have yielded data that could better reflect the general population.

Conclusion

While exercise has numerous benefits for an individual, encouraging people to work out continuously is difficult to accomplish if framed improperly. Relying on long-term health benefits as the motivator for working out is not effective for the majority of people, as they're looking for instant results. While social methods might allow for a tight community within a workout space, it's not something that can be depended on for being a positive influence.

Instead, allocating specific time at least a few times a week has been shown to be the most effective method for encouraging workouts. In addition, finding a method to working out that is convenient for the exerciser would make the person more likely to take care of his body. Once a person is able to push himself hard enough to feel the endorphins kick in, he may also be more

inclined to work out to experience that feeling again. Finally, people would be likely to be unable to work out if they believe that they lack the time to do so.

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