The Relationship of the COVID-19 Pandemic, Physical Activity and the Mental Health of NCAA Collegiate Baseball Players

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The COVID-19 pandemic could pose many issues expanding beyond the direct effects of those infected with the disease. One adverse effect of the pandemic could be on mental health. While there have been many studies attempting to identify possible effects on mental health, there is no current research identifying its presence. Physical activity is one potential variable that could influence mental health, as available research shows a strong relationship. NCAA collegiate baseball athletes are a population where these effects should be investigated, especially as the prevalence of mental health conditions continue to rise. The purpose of this study was to investigate the relationship of the COVID-19 pandemic, level of physical activity, and the mental health of NCAA collegiate baseball players. A cross-sectional, survey-based design was created to achieve this purpose. Current mental health was evaluated in a questionnaire and change in physical activity across three time periods (current [March 2021 – April 2021], September 2020 – December 2020, April 2020 – August 2020) were compared to a reference period of September 2019 – December 2019. A total of 19 subjects participated in this study with 16 complete responses, resulting in an average age of 20.58 ± 1.66 yrs. Subjects reported symptoms of mental health conditions/topics, with an increase in those currently experiencing anxiety (50%), depression (33%), sleep issues (61%), and energy level concerns (61%) compared to available research. Subjects level of physical activity remained mostly the same across all three time periods. Proportion of subjects reporting a mental health condition/topic did not show a statistically significant relationship with the proportion of subject participation in various levels of physical activity. Future research should continue investigating the relationship of mental health and

physical activity in relation to the pandemic and the importance of establishing a baseline mental health survey.

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1.0 Introduction

The COVID-19 pandemic is an unprecedented issue that has had far-ranging effects. Originating in Wuhan, China, the virus has spread worldwide,[1] infecting a total of over 171 million people.[2] As of June 2021, the virus has claimed over 3.69 million lives, with over 595,000 deaths occurring in the US alone.[2] Steps recommended by the Center for Disease Control (CDC) to prevent the spread of the virus have included wearing masks/face-shields, frequent testing, hand washing, and maintaining 6 feet of distance from other people. Further, from the months of March through July 2020, various cities and states across the US enforced different regulations, with some including a lockdown. The lockdown implemented travel restrictions both into and out of a state and rigorous stay-at-home orders in an effort to stop transmission of the disease.[3] As a result, businesses, schools, universities, gyms, and sporting events were all shutdown. While these steps are being taken with the public's best interests in mind, there is one unfortunate consequence exacerbating an already prevalent issue: mental health conditions.

Although extremely prevalent, with almost half of all Americans being likely to develop a mental health disorder in their life,[4] there is a stigma surrounding the topic of mental health. This is especially true in younger adults, where an estimated one in three college freshman report a problem with their mental health.[5] A further subset of the population where mental health is a topic of importance are college athletes. In addition to classes, projects, exams, and adjusting to life on campus, college athletes must manage early-morning weight-training sessions, practices, games, and travel. The prevalence of mental health conditions in college athletes is 14%, with 14.2% of males and 13.6% of females showing symptoms.[6] Although 14% is a clinically significant percentage, there is not much research on the topic when compared to other, less

frequent conditions. For example, from 2004-2013, across 15 sports, the NCAA reported a prevalence of ACL pathology no higher than 5.75%,[7] yet there is a plethora of information on the topic for this population when compared to mental health conditions. Mental health conditions showing such a high prevalence deserve as much attention, if not more, as musculoskeletal injuries, especially when taking into consideration the COVID-19 pandemic. College athletes are an important population to monitor mental health, especially in a sport such as baseball.

College baseball is a sport that was heavily affected by the COVID-19 pandemic. The season had just begun when the pandemic began in March 2020. As a result, a complete cessation of all games, events, and practices occurred. The restrictions also affected the ability of these athletes to train, with the NCAA citing local regulations as the biggest barrier to athletic training for its athletes.[8] The lack of sport participation and isolation could possibly lead to a loss of athletic identity for these athletes. Defined as the degree to which a person identifies with the athletic role,[9] a weaker sense of athletic identity has been shown to cause more depressive symptoms in collegiate athletes as a result of the COVID-19 pandemic.[10] As a result, the college baseball athlete is a further subset where the relationship between the COVID-19 pandemic and mental health should be explored.

1.1 COVID-19

COVID-19, caused by coronavirus 2 (SARS-CoV)-2, is a disease that affects the respiratory system, with severity of symptoms ranging from mild to potentially fatal The main symptoms include fever, cough, sore throat, fatigue, and headache.[11] The incubation period lasts anywhere from 2-14 days, with transmission mostly coming from respiratory droplets. Due to the

length of the incubation period and the possibility of being asymptomatic while positively diagnosed, the disease has a high transmission rate and has led to a worldwide-pandemic since early 2020.[12] Available testing for the disease includes viral testing to determine the current presence of infection and antibody testing to determine previous infection of the virus.[13] Testing includes swabbing of the nasal mid-turbinate or specimens collected from the nasopharynx/oropharynx, which are evaluated in a laboratory.[13] An additional, less invasive test for COVID-19 is saliva testing. Involving only producing saliva by the patient into a test tube, this option is much easier, stable method of testing.[14] Saliva testing additionally is much safer for clinicians to test than swab testing, as the virus is killed but the RNA of the disease is preserved, eliminating the infectious particles.[14]

While the presentation of symptoms could help in identifying the presence of the virus, it is also possible to test positive while being asymptomatic.[15, 16] As a result, it is possible to have previously had the virus unknowingly. To combat this unknown factor, antibody testing can be conducted. Blood tests can detect the presence of antibodies or immunoglobins produced as the immune system responds to an infection. Antibody tests can be used to determine both past and active infection.[17] While the presence of antibodies could sound as if a person is immune to COVID-19 after full recovery, that is not the case, as reinfection is possible.[18-20] Further, antibody testing is time sensitive. Antibody tests are ineffective after the first week of symptoms being shown and show a higher sensitivity after 2 weeks of symptom onset.[21] A study by Deeks et al. showed the sensitivity of antibody testing was 30.1% after 1-7 days of symptom onset, 72.2% after 8-14 days, and 91.4% from 15 to 21 days.[22]

Steps taken to prevent spread of the virus have included hand washing, wearing masks/face-shields and socially distancing 6 feet apart. Possible transmission routes of COVID-

19 are contact and droplet transmissions, resulting from contact with surfaces infected with the disease.[23] To combat this route, it is recommended for a person to wash their hands with soap and water for at least 20 seconds in duration or use a hand sanitizer that is at least 60% alcohol.[24] Further, it is possible for droplets to be spread via airborne transmission.[23] To reduce transmission via this route, it is recommended to wear a mask or face-shield, as these methods can reduce transmission via talking, breathing, coughing, and sneezing.[23] An additional method of avoiding transmission via air droplets is social distancing, defined as avoiding large crowds, crowded spaces, and the separation of a minimum of 6 feet between people.[24] On top of these methods, larger scale steps have been taken, affecting the general public.

1.1.1 COVID-19 and The General Public

From the months of March through June 2020, the United States implemented various state restrictions, as efforts to reduce the spread of the transmission included a mandatory quarantine. The Center for Disease Control (CDC) defines quarantine as separating and restricting the movement of those who were exposed to the disease to see if they become sick.[25] While it was recommended that the entire United States enter mandatory quarantine, states had different regulations. There were various stay-at-home orders statewide implemented as well. Different than quarantine, which applies only to those who may have been exposed to the virus, the National Conference of State Legislature (NCSL) defined the stay-at-home order as a broad application to the general public. The stay-at-home order instructed the population to remain in their places of residency and to only leave out of necessity. State legislatures enforced the lockdown differently in each state, with states showing a greater number of cases such as New York and California implementing stricter regulations. During lockdown, the population remained indoors, as

businesses, schools, and universities were all closed. The CDC estimated that without taking these steps, over 60% of the US population could have contracted the virus.[26]

1.1.1.1 Mental Health Effects

As a result of quarantine, many people were socially isolated. While social distancing and quarantining have been effective in slowing the spread of the virus,[3] there are also negative consequences of isolation. Many researchers have hypothesized that there would be adverse mental health effects due to quarantine.[27] This theory was validated in a study based in China, which showed the prevalence of mental health conditions such as depression and anxiety were significantly higher in those who quarantined as compared to those that did not.[28] Due to quarantine and the social isolation resulting from it, many people experienced poorer mental health.[29] One possible explanation for the poorer mental health is the lack of social interaction. Social interaction has been shown to have significantly positive effects on mental health.[30] Due to quarantine, many staples of social interaction such as bars, restaurants, and indoor gatherings were shutdown, resulting in a decrease of in-person social interactions.

In addition, those who have been infected by the virus can suffer from mental health effects. A systematic review by Vindegaard et al. showed that those who have contracted COVID-19 had had significantly increased symptoms of post-traumatic stress disorder and depression.[31] In a study by Bo et al. 714 patients who were diagnosed with COVID-19 were analyzed for symptoms of PTSD. The results showed that 96.2% of patients showed symptoms of PTSD, with demeaning news coverage of the disease (reporting of high number of cases and death rates, negativity of situation surrounding the virus) and social discrimination cited as reasons for the increase in symptoms.[32] Further, a study by Zhang, J. et al. (2020) analyzed the psychological distress of

those who were infected with COVID-19. The results showed a significant increase in depressive symptoms in 29.2% of patients who had previously tested positive.[33]

Lastly, in terms of the general public, there has been an overall decrease in quality of mental health during the pandemic. A study by Sonderskov et al. reports a lower psychological well-being of the general public, with nearly half of Americans stating anxiety of contracting COVID-19, and over a third of Americans citing the disease as having a significant impact on their mental health.[34] One possible attribution to an increased likelihood of anxiety and depression due to COVID-19 was a higher level of education.[35] There has already been an increase in mental health problems reported in higher education students worldwide.[36] The link of mental health and a higher level of education is further shown in the college student, as even prior to the COVID-19 pandemic one in five college students experienced one or more mental health disorder.[37] As a result, it is important to monitor the mental health of those in college, especially the college athlete.

1.1.2 COVID-19 and Collegiate Athletes

In addition to the general population, the mental and physical health of college students in relationship with COVID-19 must be taken into consideration. Due to the pandemic, NCAA President Mark Emmert canceled the remainder of the college season for all sports on March 12, 2020.[38] Further, colleges across the country advised students to return and remain home until further notice. Classes eventually began to be held virtually, and in some cases, students were not allowed to move back on campus for the remainder of the Spring 2020 semester. The abrupt change of lifestyle could affect the mental health of those in college, who have already shown a high level of mental health conditions, even before the pandemic. A 10-year study from the years 2007-2017

by Lipson et al. showed that 36% of US college students live with a mental health disorder, with depression being the most common. Further, the prevalence of mental health conditions in college students continue to increase.[39-41] In addition to mental health concerns of college students, the college athlete should be monitored as well. As a result of the NCAA canceling the remainder of the college seasons in March 2020, athletes were less physically active and separated from the team. which could pose issues to both mental and physical health.

1.1.2.1 Physical Effects

An array of direct and indirect concerns has arisen due to the lack of physical activity from the COVID-19 pandemic. Among the indirect concerns are the possibility of injuries due to the lack of conditioning during quarantine, the effects of training and competing with facial coverings, possible long-lasting effects on the ability/health of athletes who contract the disease, and the reopening of college campuses during an ongoing pandemic.[42] The lack of conditioning, in particular, could result in detraining effects. Detraining effects are a result of the reversibility principle, which describes a reversal of previous physical adaptions due to a significant decrease or complete stop in training.[43] Detraining in the short term could lead to decreased eccentric strength and Type II muscle fibers of the body,[44] which could be very important to a sport such as baseball. During the throwing motion, muscles at the shoulder and elbow eccentrically contract throughout the throwing motion,[45] highlighting the importance of eccentric strength. Baseball is also a highly anaerobic sport, as many of the actions performed are rapid and short bursting. The anaerobic nature of the sport demonstrates the importance of Type II muscle fibers, which are extremely vital to anaerobic exercises,[46]

In terms of training with facial coverings, the research shows that there are no significant effects on exercise. A study by Shaw et al. showed that face masks have no effect on strenuous

exercise in healthy subjects, though this study only included 14 participants.[47] A study by Epstein et al. showed further evidence supporting this claim. The authors showed no significant difference in heart rate, time to exhaustion, respiratory rate, blood pressure, and oxygen saturation while exercising in N95 respirators and surgical masks when compared to mask-less, though this study also included only 16 participants.[48] Though the available research shows no significant effects in exercising while wearing a facial covering, sample sizes are small, and athletes still have to adjust to a new method of training.

While the COVID-19 pandemic has indirectly caused the effects mentioned above, it is also important to recognize the direct physical effects it may have on those who have contracted the virus. Athletes who have previously tested positive for COVID-19 should be monitored, especially for the presence of myocarditis. Myocarditis, an inflammatory pathology of the heart, has been found in some patients who have contracted COVID-19.[49] Myocarditis is very important to keep track of in college athletes, as it is one of the leading causes of sudden cardiac death in sports in athletes under the age of 35.[50] Male dominated sports, such as baseball, present an additional concern since males are 3 to 5 times more likely to suffer from sudden cardiac death.[51] Further, a study conducted at The Ohio State University found that 15% of competitive athletes who were diagnosed with COVID-19 showed CMR findings consistent with myocarditis.[52]

Another factor that could both directly and indirectly contribute to physical effects of the COVID-19 pandemic on college students is the reopening of campuses. Some colleges and universities began allowing students to return to campus in August 2020 and proper regulations to eliminate the spread of the virus were put in place. Steps being taken were similar to those recommended to the general public: wearing a mask, regular hand hygiene, social distancing (6 feet), and limits on travel.[53] However, because of how novel the virus is, there is much that

remains unknown, such as its effect on return to sports. For example, there is one theory called the "open window theory," that suggests that infection rates could be higher after a vigorous training session, though this has shown conflicting reports.[54] A previous hypothesis was that vigorous training could temporarily suppress the immune system, but that has since been disproven.[54]

Several guidelines have been established to help athletes safely return to sport. One aspect is a pre-participation screening before any event, practice, or competition of all people involved, including athletes, coaches, officials, and other relevant personnel.[55] Other recommendations include social distancing during all events, not using the locker room, a reduction of spectators, regular disinfecting of equipment, and the use of face coverings.[55] These recommendations could affect the mental health of athletes when enforced, as it is much different from what they are usually accustomed to. These changes will directly affect all aspects of the athletes' day-to-day activities, which could also lead to increased anxiety.

1.1.2.2 Mental Health Effects

There are mental health concerns in addition to the physical concerns of the COVID-19 pandemic. Available research indicates that college students have shown an increase in symptoms of depression and anxiety, as well as a decrease in physical activity directly related to COVID-19.[56] A study conducted by Huckins et al. examined the mental health of 178 college students in a longitudinal smartphone study from January-March 2020. The authors determined that anxiety and depression were significantly linked to news of COVID-19.[56] Son et al. further investigated the relationship between COVID-19 and the mental health of college students, surveying 195 students via interview. The results indicated that 71% of the students stated an increased anxiety directly due to COVID-19. The authors attributed risk of infection of self or loved ones, a lack of sleep, and decreased physical interactions as factors contributing to these increased symptoms.[57]

Further, a study by Wang et al. examined the effect the COVID-19 pandemic has had on US college students via an online survey. The results showed that 48.14% of the students showed moderate to severe symptoms of depression and 38.48% showed moderate to severe symptoms of anxiety.[58] Even more significant, of the 2,031 participants in the study, 71.26% stated an increased level of stress and anxiety since the pandemic began.[58] While no available studies have investigated factors of the COVID-19 pandemic that could affect mental health, there is one possibility to consider: a decrease in physical activity.

A consensus statement written by Reardon et al. (2019) has shown that periods of no physical activity, isolation from a team, and being distanced from the athletic community can cause emotional distress and other mental health issues in athletes.[59] These findings were researched in a systematic review of the mental health of elite athletes, identified as athletes at the Olympic or collegiate level. The main concerns were anxiety, depression, sleeping disorders, bipolar disorders, eating disorders, and behavioral disorders.[59] Multiple authors have hypothesized that there will be negative mental health effects in athletes from a lack of activity as well due to COVID-19,[53, 60-62] but since the virus is still so new, research on this particular topic is lacking.

A survey conducted by the NCAA identified possible obstacles related to the decreased physical activity due to COVID-19 restrictions. A vast majority of athletes noted local regulations and closures and a lack of access to facilities, adequate equipment, training partners, and coaches as the main roadblocks to training.[8] Further, fear of exposure to COVID-19 and athletes being too anxious/depressed, as well as lack of motivation were also listed as barriers.[8] The survey also listed adverse mental health effects with anxiety, mental exhaustion, depression, sadness, loneliness, sleep difficulties, anger, hopelessness, and being overwhelmed as the main concerns.[8] While the physical and mental health effects of the COVID-19 pandemic have begun to be

identified in collegiate sports, identifying the effects on specific sports, such as baseball, remains an unknown.

1.1.3 COVID-19 and Collegiate Baseball Players

While the sport of baseball does not pose as high of a risk for contracting the disease as more high-contact sports due to less direct contact,[63] the regulations for returning to play could impact the mental and physical health of its players. Baseball is a sport with a strong team camaraderie, as practices/games are occurring nearly every day. As a result, players spend a frequent amount of time close together, whether in the dugout, the bullpen, locker rooms, or busses/airplanes for travel. A study by Zheng et al. (2020) evaluated the transmission of COVID-19 in airplanes, trains, and buses. The results showed a significant positive association of COVID-19 transmission in these situations.[64] These higher transmission rates could affect baseball players the most of any sport, as they travel more frequently due to their length of schedule and frequency of games. The COVID-19 pandemic has had numerous physical and mental effects on college baseball players due to these reasons.

1.1.3.1 Physical Effects

Sports medicine personnel working with baseball players may have additional concerns regarding these athletes contracting the virus or maintaining physical preparedness while in quarantine. Prior studies have attempted to identify an optimal living space for a team-sport athlete in isolation trying to maintain physical preparedness. Recommendations include athletes utilizing equipment to maintain aerobic fitness, such as a stationary bike or rowing ergometer, and free-weights to maintain strength. Additional recommendations include an emphasis on diet and

hydration, with an emphasis on Vitamin D and protein.[65] These recommendations might not be practical for collegiate baseball players. As student athletes, they rely on training at university facilities and may not have access to proper exercise equipment in their dormitory rooms or off-campus apartments. Sport specific activities for baseball such as throwing, fielding, and batting would also pose a problem in this situation. It is not feasible to expect baseball players to have the ability to practice throwing, fielding, and batting in a dormitory room. These issues may jeopardize the mental health of these athletes, as a reduction in physical activity has shown a poorer mental health in college students.[66] Access to the proper dietary recommendations would also prove to be problematic, as college athletes may rely on school cafeterias for meals. If they are forced to quarantine, these athletes would not have access to school cafeterias and as a result, would not have access to the necessary foods.

In the year 2019, the NCAA reported racial/ethnic minorities consisted of 20% of all baseball teams from Divisions I-III.[67] The percentage of racial and ethnic minorities in baseball are important when discussing COVID-19 because certain minorities have a higher risk of developing more severe symptoms.[63, 68] Diabetes, cardiovascular disease, and respiratory disease were identified as risk factors to developing a critical illness from COVID-19, and these conditions have been found in higher numbers in racial and ethnic minorities.[69, 70] Additionally, social disparities such as lower income, more dense neighborhoods/houses, and a lack of access to adequate testing have been attributed as possible reasons for a higher incidence of the disease in racial and ethnic minority groups.[71] The stress of being at a higher risk could affect the mental health of these athletes, highlighting the need for more information about this population.

1.1.3.2 Mental Health Effects

Baseball is a sport that requires a great amount of mental fortitude, as even the most successful batters get a hit only 3 out of 10 times. There may need to be significant changes to the day-to-day structure of baseball, as social distancing in a dugout or bullpen may not be practical. As a result, teammate interactions could reduce, which could lead to negative mental consequences. A study examining teammate interactions and the mental health of student athletes following COVID-19 showed that athletes who received less social support and teammate interaction displayed poorer mental health and wellbeing.[10]

An additional area of concern for collegiate baseball players is the concept of athletic identity. As previously described, athletic identity is the degree to which a person identifies with the athletic role.[9] Due to the cessation of the college baseball season in March 2020, these athletes were unable to train as a team for many months. Some athletes also were unable to train individually, with local regulations and a lack of access to facilities and equipment being the main roadblocks.[8] As a result, these athletes were unable to do many things contributing to their athletic role, which potentially could impact their athletic identity. A change in athletic identity could impact their mental health, as a higher sense of athletic identity could lead to a higher risk of anxiety after retirement.[72] The higher risk of anxiety due to a high level of athletic identity results from having such a strong sense of identity coming from being an athlete that upon retirement, the athlete perceives a great loss of who they are. A lower sense of athletic identity would not lead to such a loss after retirement, as the athlete never felt a strong sense of their identity resulted from being an athlete itself. While the cessation of sporting events and retirement are different concepts, there is a strong comparison between the inability to participate in training due to COVID-19 and an involuntary sport retirement. Both are out of the athlete's control and are unforeseen

circumstances. Further, it is possible that an involuntary retirement could lead to a higher risk of a negative psychological well-being in college athletes.[73, 74]

While involuntary retirement may not be an ideal comparison, especially to younger college baseball players, it could be an apt comparison to those who are seniors or in their last year of eligibility. Due to the cessation of the season in March 2020, the NCAA granted all college baseball players one extra year of eligibility.[75] However, if the 2021 season is interrupted or canceled again, baseball athletes in Division I and II won't be granted an extra year of eligibility, while those in Division III will be.[75] As a result, involuntary retirement may be the most apt comparison to the cessation of sporting activities due to COVID-19 for those in their last year of eligibility, as only 9.9% of college baseball athletes are drafted to a professional league following retirement.[76]

1.2 Definition of the Problem

The COVID-19 pandemic could pose many issues to the mental health of those who it affects. Multiple studies have identified possible effects on the mental health of the population due to the disease, but no current research has identified the presence of these effects. The college athlete, specifically baseball, is a further subset where there could be a high prevalence of these effects, and further research is warranted to investigate the prevalence of, and related risk factors for, COVID-19 related mental health concerns in these athletes.

1.3 Purpose of the Study

The purpose of this study is to determine the relationship between the COVID-19 pandemic, level of physical activity, and the mental health of NCAA collegiate baseball athletes. Additionally, this study will attempt to identify whether decreased physical activity as a result of COVID-19 is related to the mental health status of collegiate baseball players.

1.4 Specific Aims and Hypothesis

Specific Aim 1: To assess the current mental health of NCAA collegiate baseball players in relationship to the COVID-19 pandemic.

> ***Hypothesis 1:*** Subjects will report exhibiting symptoms of mental health conditions/topics, such as anxiety and depression, in relationship to the COVID-19 pandemic.

Specific Aim 2: To investigate whether there is a change in level of physical activity due to the COVID-19 pandemic.

> ***Hypothesis 2:*** There will be a decrease in level of physical activity due to the COVID-19 pandemic.

Specific Aim 3: To investigate whether there is a relationship between a decrease in physical activity and the mental health of NCAA collegiate baseball players.

> ***Hypothesis 3:*** There will be a significant correlation between a decrease in physical activity and the mental health of collegiate baseball players.

1.5 Study Significance

The outcome of this study will be important in expanding the research of mental health effects related to the COVID-19 pandemic. Due to the novelty of the virus, there is much that is unknown about the effects, and this study will incorporate available information to examine a population where COVID-19 research is lacking: the mental health of the collegiate baseball athlete. This study will be important to sports medicine clinicians, as it is the first of its kind to attempt to identify mental health effects of a novel virus in a previously un-investigated population.

2.0 Methodology

2.1 Experimental Design

This study utilized a survey-based cross sectional study design. To investigate the relationship between the COVID-19 pandemic, level of physical activity and the mental health of collegiate baseball players, an online survey was sent out to this specific population. The survey consisted of five sections: a demographics section, a section which includes general mental health status directly related to COVID-19, and three sections assessing level of physical activity during three different time periods. The survey took 5-10 minutes and could be completed on any computer or mobile device.

2.2 Subjects

To recruit subjects, an email was sent to the athletic trainers of all the colleges/universities, from Division I to Division III. This email was sent through the NATA to 1,000 Sports Medicine programs to recruit subjects. The survey included an acknowledgement to participate in the study and an assurance granting complete anonymity to the participants. Subjects were given detailed instructions of how to fill out the survey prior to completion. However, to reduce bias, subjects did not have knowledge of what the study is attempting to evaluate.

2.2.1 Inclusion/Exclusion Criteria

Subjects were included in this study if they were 18-23 years old and were an active member of an NCAA collegiate baseball team (Division I-III). Those who opted out of the 2021 collegiate baseball season were included as well, as they could have provided valuable data on the relationship between COVID-19 and mental health. Subjects were excluded if they had an injury preventing them from current sport specific activity.

2.2.2 Subject Recruitment

To recruit subjects, an email was sent out to a distribution list obtained through the NATA. The email was sent to the baseball teams' athletic trainers and instructed them to send the email to their team's baseball players. If the email was sent to a college/university athletic trainer who was not the baseball athletic trainer, it instructed the recipient to forward the email to their school's baseball athletic trainer. A follow up email was sent out after each week, as the data collection window was three weeks.

2.3 Instrumentation

2.3.1 Qualtrics Survey Software

The Qualtrics Survey Software, a software system utilized by the University of Pittsburgh, was utilized to create and administer this survey. The software has shown high security results, as it has numerous certifications to comply with regulations. Among these certifications is the FedRAMP, which is the gold standard of U.S. federal security compliance. In addition, the Qualtrics Survey Software is the only experience management software which is certified in Health Information Trust Alliance (HITRUST), a HIPAA security requirement.[77]

2.3.2 Patient Health Questionnaire–9 (PHQ-9)

The PHQ-9 incorporates questions to survey for conditions such as depression, anxiety, eating disorders, and sleeping disorders. As it shows a high sensitivity in identifying these conditions,[78] the PHQ-9 was a valuable tool to base the initial portion of the survey off of. Further, a study assessing the impact of COVID-19 on the mental health of health care workers utilized the PHQ-9 as well[79], showing a precedent in utilizing this specific questionnaire to evaluate mental health due to the disease. Questions from the PHQ-9 were included as well as modified questions about concerns related to the pandemic.

2.4 Procedures

First, subjects received an email from their athletic trainer about the survey. Then, they read through the inclusion criteria and acknowledge their intent to participate in the study. After, the subjects filled out the first section assessing demographics: age, level of study (freshman through senior, graduate), division level (Division I-III), region in which they live in (Northeast, Midwest, Southeast, South Central, Southwest, West Coast), primary baseball position, and racial ethnicity. Next, subjects proceeded to the second section assessing current mental health. Mental health was assessed via a questionnaire derived from the PHQ-9. Subjects scored mental health conditions (anxiety, depression, sleep issues, energy level concerns) and topics (concerns related to travel and sharing a locker room/other spaces with teammates) on a symptom score sheet utilizing the values "Never, Some of the Days, >Half off the days, and Nearly Every day."

After completing the second section, subjects moved on to the third section, which assessed changes in their physical activity level. In this section, subjects' level of physical activity at three separate time periods were compared to the period of September 2019 – December 2019. Due to the occurrence of the pandemic during March 2020, Sep. 2019 – Dec. 2019 was the most recent time that was unaffected by the pandemic. As a result, this time period was the most effective basis for level of physical activity prior to the pandemic. The first part of the physical activity section compared subjects' current level of physical activity (March 2021 – April 2021) to their level of physical activity from Sep. 2019 – Dec. 2019. The second part of this section compared the subject's level of physical activity from Sep. 2020 – Dec. 2020 to Sep. 2019 – Dec. 2019. The third and final section of the physical activity section compared the subjects' level of physical activity from Apr. 2020 – Aug. 2020 to the period of Sep. 2019 – Dec. 2019.

To assess the change in level of physical activity, the subjects were asked to report the change in their amount of time cardiovascular (CV) training (running, elliptical, etc.), weightlifting, batting, fielding, and throwing. The options provided for each activity were "less, somewhat less, same, somewhat more, more." Instructions were clearly provided at the beginning of each part of the physical activity section to avoid any confusion.

2.5 Data Reduction

All responses were reviewed in the Qualtrics Survey Software. Any responses that contained identifiable subject factors such as subject name or name of school would have been excluded, as they would not grant complete anonymity. However, there were no cases of these responses being recorded. Incomplete response were included in order to collect as much data as possible. Responses of the three time periods for level of physical activity (current [March 2021 – April 2021], Sep. 2020 – Dec. 2020, Apr. 2020 – Aug. 2020) were compared to the time period of Sep. 2019 – Dec. 2019.

2.6 Data Analysis

Data was collected via Qualtrics Core XM Online Survey System (Qualtrics XM, Provo, UT, USA). Descriptive statistics were used to identify demographics. Reports of conditions/topics from the Mental Health Questionnaire were analyzed in a clustered bar chart. Changes in level of physical activity were also analyzed in clustered bar charts for each section. Fisher's Exact Tests

were used to identify correlation between mental health conditions and the variables from the physical activity sections. IBM SPSS Statistics Version 26 (IBM Corporation, Armonk, USA) was used to analyze the data. Statistical significance was decided *a priori* at alpha = .05, two sided.

3.0 Results

The data collection period for this study lasted three weeks, resulting in 61 survey responses. Of those 61 responses, only 20 were by NCAA collegiate baseball players. One participant exited the study after answering the first question, and another had incomplete responses after answering the demographics section. Of the remaining 18 responses, two submitted an incomplete survey after the second part of the Level of Physical Activity Section for a total of 16 complete responses. The results of those survey responses are listed in the following sections.

3.1 Demographics

3.1.1 Age

Figure 1: Subjects' Age (in Years)

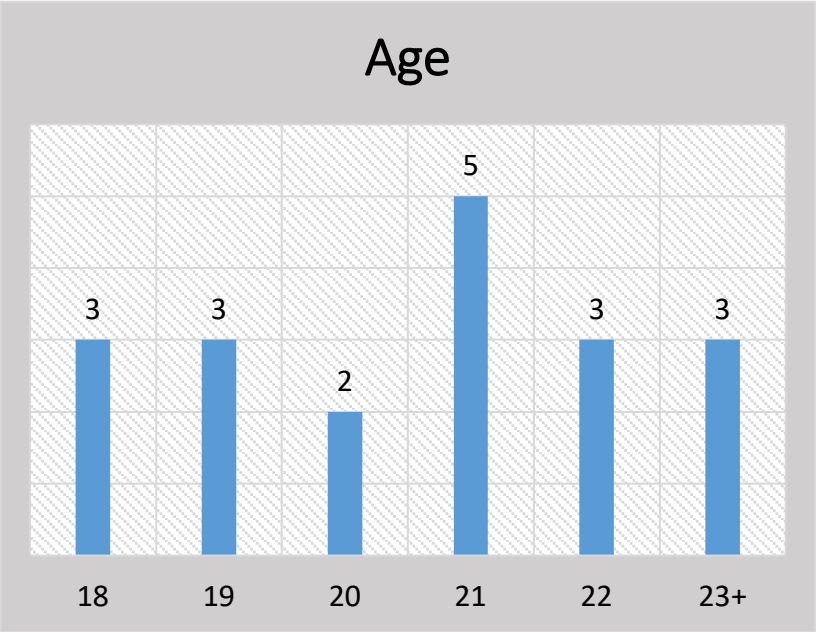


Figure 1 represents subjects' age. Ages were reported from 18-23 years, with the highest frequency of responses from players 21 years of age. The average age (n = 19) was 20.58 ± 1.66 yrs.

3.1.2 Subject's Level of Study

Figure 2: Level of Study

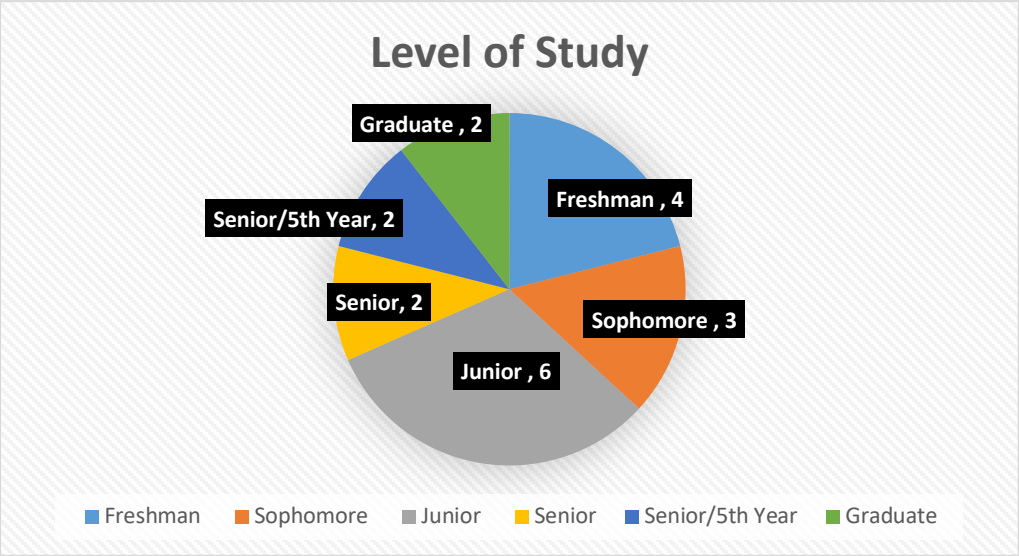
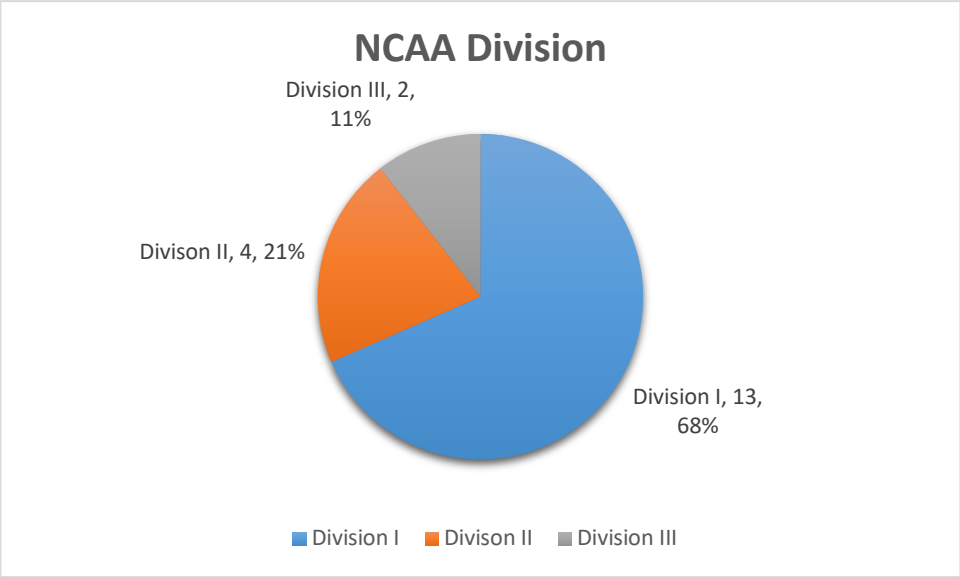


Figure 2 represents subjects' level of study. Subjects (n = 19) were asked to report their current level of study at their university, with options including Freshman, Sophomore, Junior, Senior, Senior/5th Year, and Graduate student. The majority of subjects were juniors (32%), followed by freshmen (21%) and sophomores (16%).

3.1.3 Subjects' NCAA Division of Participation

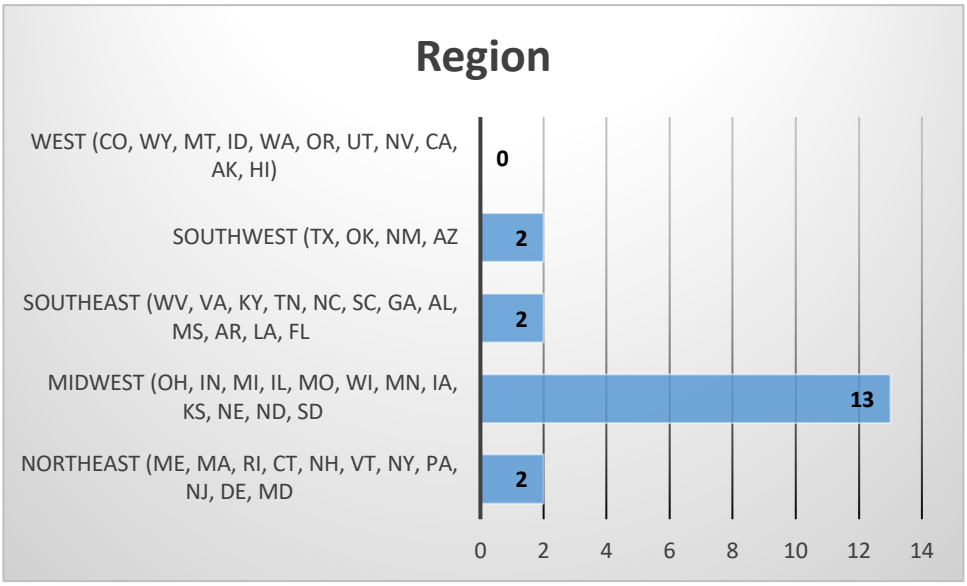
Figure 3: NCAA Division



Subjects were asked to identify what NCAA Division they participate in, with options including Divisions I, II and III. The vast majority (68%) attended Division I universities.

3.1.4 Subjects' Region of Univeristy Location

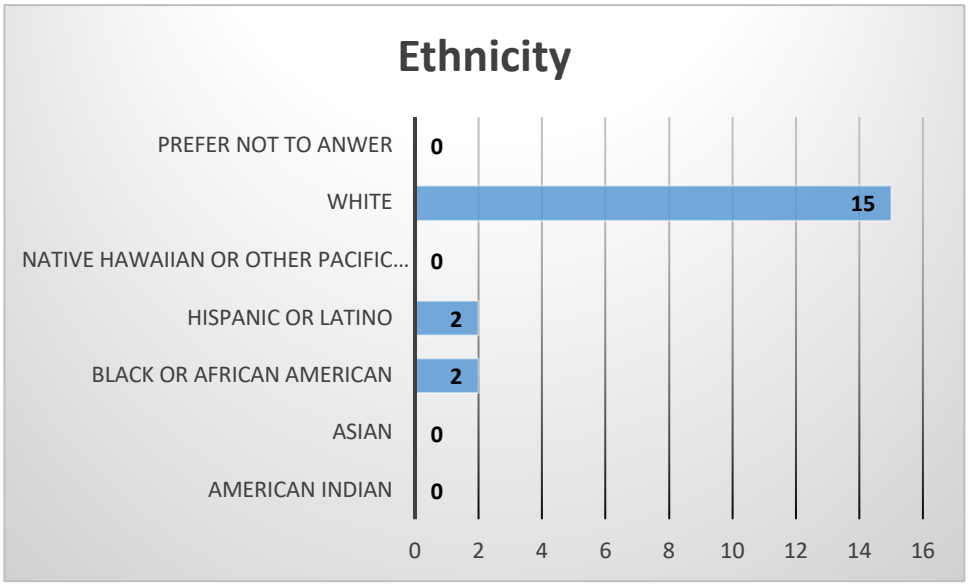
Figure 4: Region of University Location



Subjects were asked to identify where their universities were located based on state. The states were categorized into specific regions. Figure 4 shows the region of subjects' universities**.** Based upon location of the subjects' university, subjects chose the associated region. 68.4% of subjects reported attending a university in the Midwest region.

3.1.5 Subjects' Ethnicity

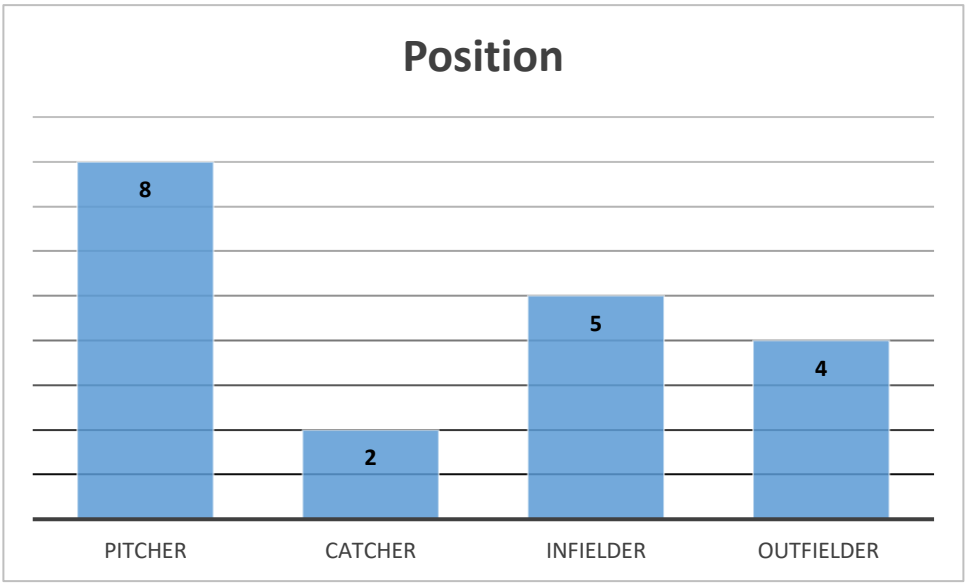
Figure 5: Ethnicity



Subjects were asked to report with which ethnicity they identify. Options provided were American Indian, Asian, Black/African American, Hispanic or Latino, Native Hawaiian/Other Pacific Islander, White, or Prefer not to Answer. Figure 5 represents subjects' ethnicity, which was predominantly white (78.9%).

3.1.6 Subjects' Primary Baseball Position

Figure 6: Primary Baseball Position

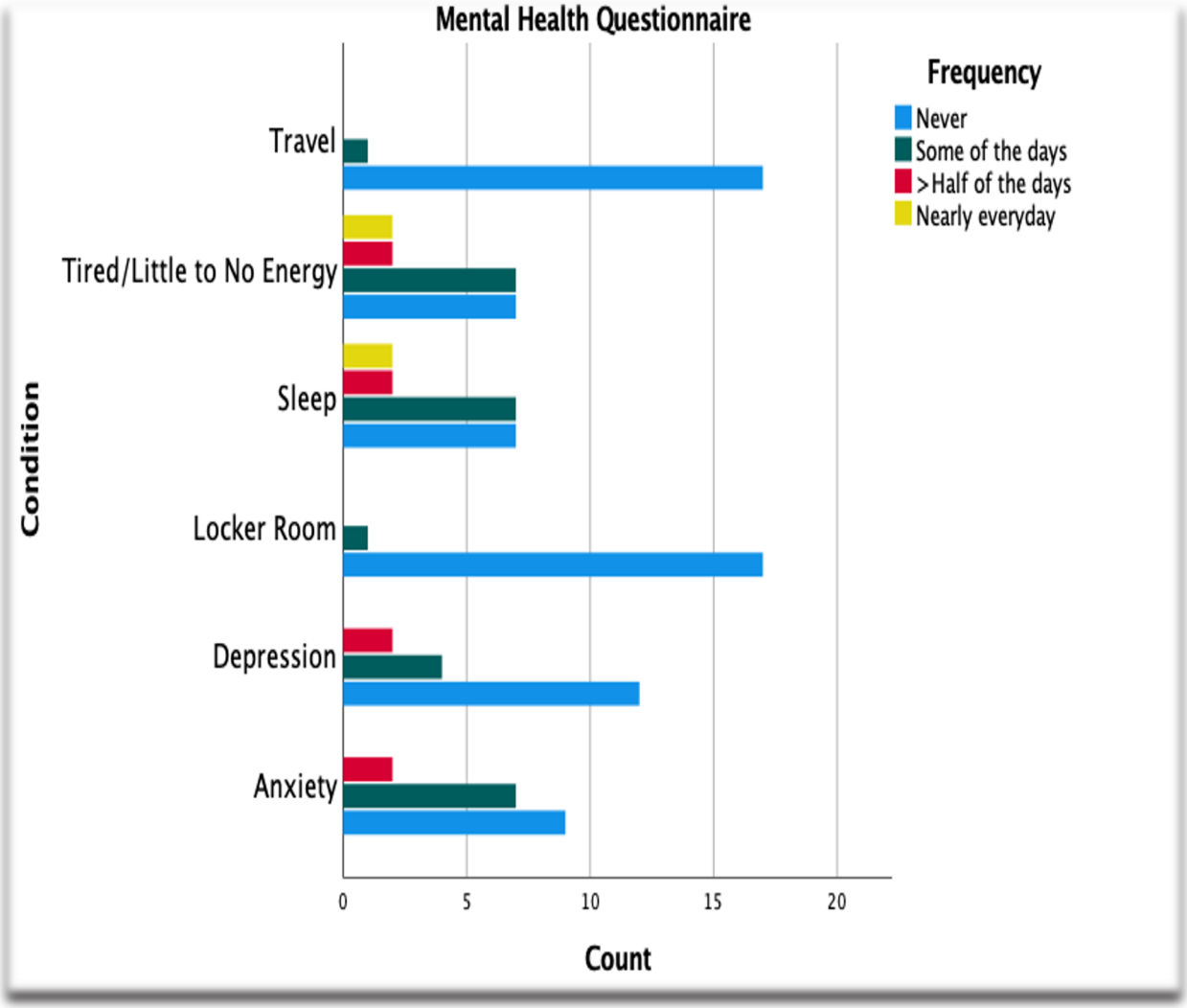


This study identified which position subjects primarily played. The respondents primarily were pitchers (42%). Other options were represented as well, with infielders (26.3%), outfielders (21%), and catchers (10.7%) being the next most frequent responses.

3.2 Mental Health Questionnaire

In the Mental Health Questionnaire, subjects were asked questions of mental health conditions derived from the PHQ 9 and asked questions of other relevant mental health topics in relation to the COVID-19 pandemic. Subjects were asked to self-report frequency of symptoms for travel concerns, energy level concerns, sleep issues, locker room concerns, depression, and anxiety. Subjects were asked to report frequency of symptoms utilizing the following scale: Never, Some of the Days, More than Half of the Days, and Nearly Every day.

Figure 7: Mental Health Questionnaire



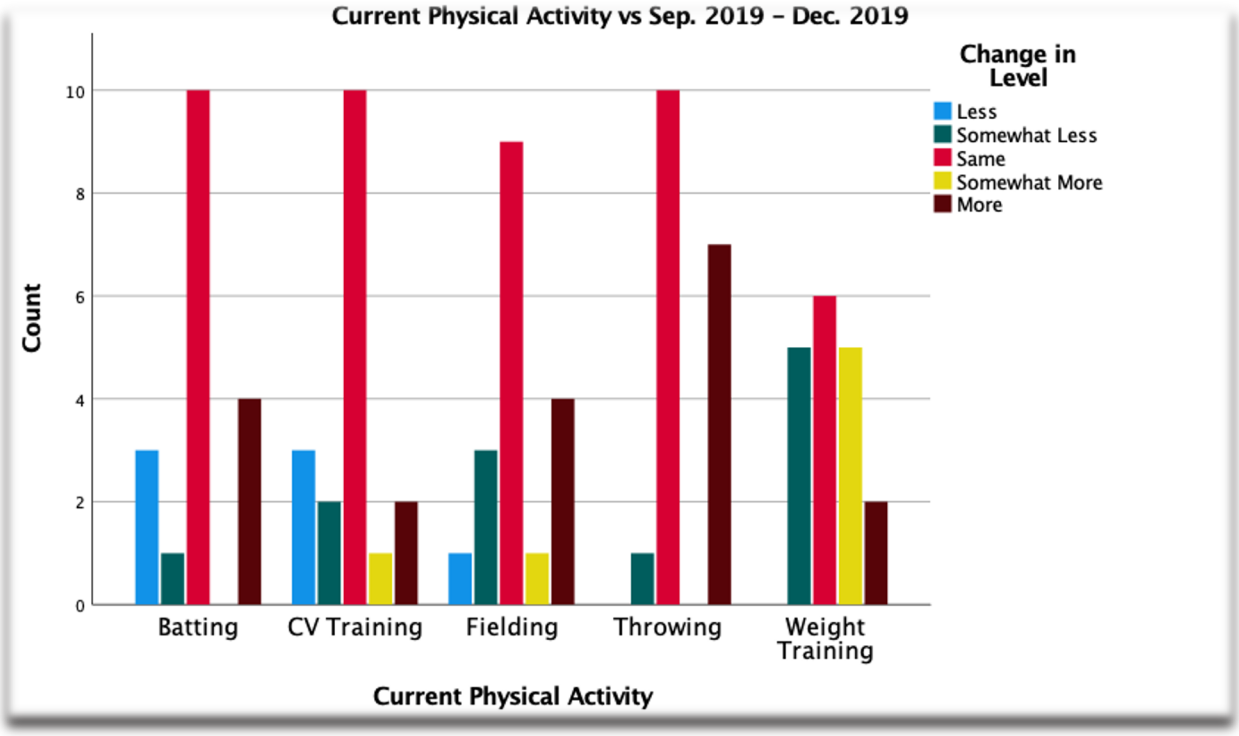
Subjects (n = 18) reported the highest frequency of symptoms with sleeps issues (61%) and energy level concerns (61%). The next most frequently reported symptoms were of anxiety (50%) and depression (33%). Only one subject reported concerns of travel and of sharing a locker room.

3.3 Level of Physical Activity

Subjects were asked to compare their level of physical activity during three time periods (Current [March 2021 – April 2021], September 2020 – December 2020, and April 2020 – August 2020) to the reference period of September 2019 – December 2019. The following options were provided to identify the any potential change in level of physical activity: “less, somewhat less, same, somewhat more, more.” The variables measured were cardiovascular (CV) training, weight training, throwing, batting, and fielding.

3.3.1 Subjects' Current (March 2021 – April 2021) Level of Physical Activity

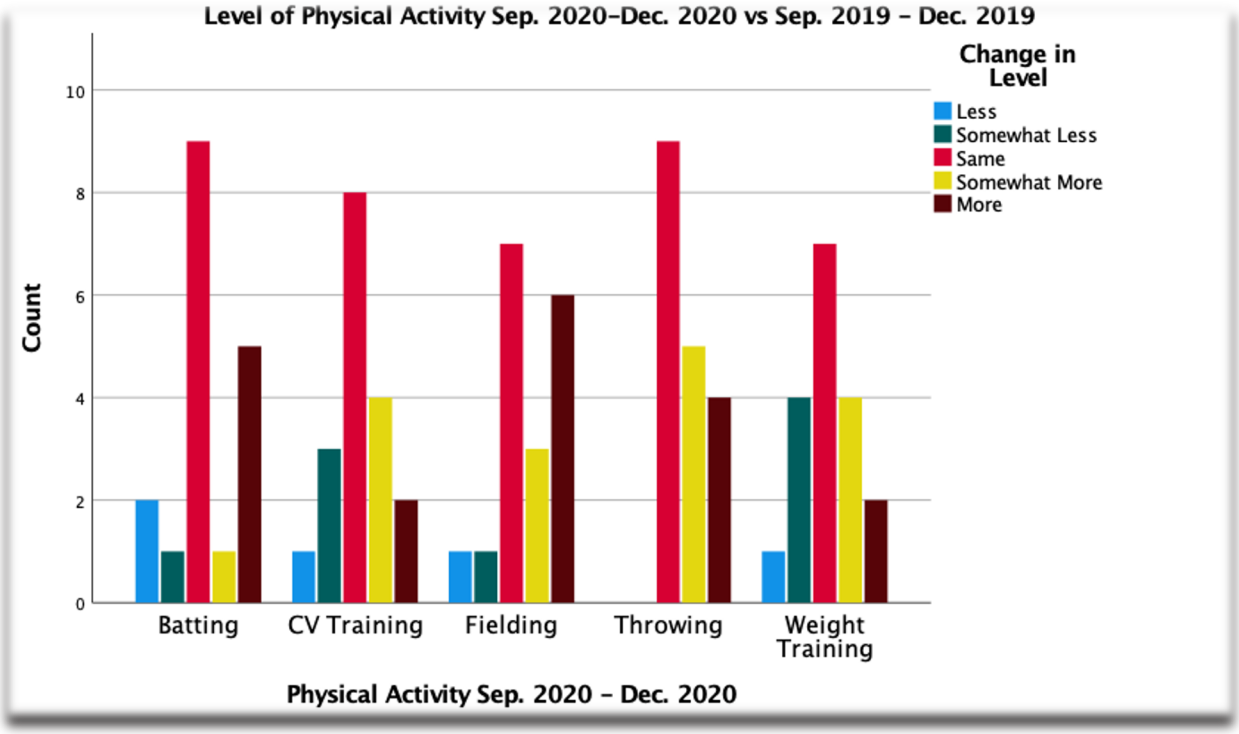
Figure 8: Current (March 2021 – April 2021) Level of Physical Activity



Subjects' (n = 18) level of physical activity during the survey period (March 2021 – April 2021) was compared to the reference period of September 2019 – December 2019. Amount of physical activity mostly remained the same for batting (55.5%), CV training (55.5%), fielding (50%), throwing (55.5%), and weight training (33%) in the current time period as compared to the reference period.

3.3.2 Subjects Level of Physical Activity from September 2020 - December 2020

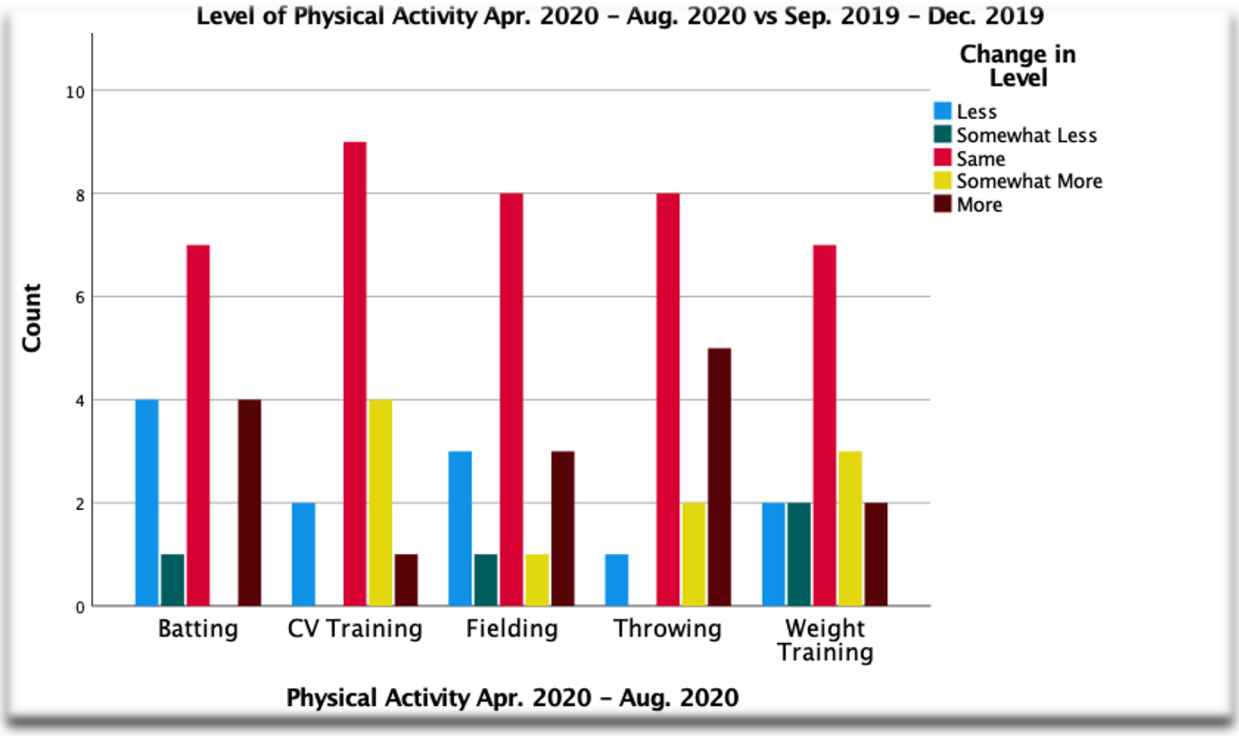
Figure 9: Level of Physical Activity September 2020 - December 2020



Subjects' (n = 18) level of physical activity from September 2020 – December 2020 was compared to the reference period of September 2019 – December 2019. Subjects reported spending the same amount of time batting (50%), CV training (44.4%), fielding (38.9%), throwing (50%) and weight training (38.9%) in this time period as compared to the reference period.

3.3.3 Subjects' Level of Physical Activity from April 2020 – August 2020

Figure 10: Level of Physical Activity April 2020 – August 2020



Subjects' (n = 16) level of physical activity from April 2020 – August 2020 was compared to the reference period of September 2019 – December 2019. Subjects reported level of physical remained the same for time batting (43.7%), CV training (56.3%), time fielding (50%), time throwing (50%) and weight training (43.7%) during this time period as compared to the reference period.

3.4 Relationship Between Mental Health and Level of Physical Activity

The following tables depict relationships of conditions/topics from the mental health questionnaire and variables of level of physical activity. The proportion of responses in each category of the mental health questionnaire were compared to the proportion of responses in each category of the physical activity sections via Fisher's Exact Tests. Mental health conditions (anxiety, depression, sleep issues, energy level concerns) topics (concerns with travel, concerns with sharing a locker room/other spaces with teammates) were cross tabulated with variables of level of physical activity (CV training, weight training, throwing, fielding, and batting). Tests that resulted in statistically significant p-values ($p < .05$) are represented below. Fisher's Exact Tests were used to determine association. The vast majority of tests were not statistically significant, and they are included in **Appendix B.**

3.4.1 Relationship of Subjects' Sleep and Amount of Time Throwing

There was a significant association between sleep issues and throwing across all three time periods. The Fisher's Exact Tests showed that those who spent more time throwing across all three time periods were less likely to experience issues with sleep **(Table 1: Relationship of Sleep, Table 2: Relationship of Sleep Issues and Throwing September 2020 – December** 2020 **, Table 3: Relationship of Sleep Issues and Throwing April 2020 - August** 2020 **.**

Table 1: Relationship of Sleep Issues and Current (March 2021 – April 2021) Throwing

			SLEEP			
			Never	Some of the days	>Half of the days	Nearly everyday
CURRENT THROWING	More	Count (% within Current Throwing)	5 (71.4%)	0 (0.0%)	1 (14.3%)	1 (14.3%)
	Same	Count (% within Current Throwing)	2 (20%)	7 (70%)	1 (10%)	0 (0.0%)
	Somewhat Less	Count (% within Current Throwing)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100%)

Table 1: This table represents the relationship of current (March 2021 – April 2021) time spent throwing and self-reported sleep issues. There was a tendency towards association between lower frequency of reported sleep issues and an increase in current time throwing ($p = .004$).

Table 2: Relationship of Sleep Issues and Throwing September 2020 – December 2020

			SLEEP			
9.20-12.20 THROWING			Never	Some of the days	>Half of the days	Nearly everyday
	More	Count (% within 9.20-12.20 Throwing)	3 (75%)	0 (0.0%)	0 (0.0%)	1 (25%)
	Somewhat More	Count (% within 9.20 - 12.20 Throwing)	3 (60%)	1 (20%)	0 (0.0%)	1 (20%)
	Same	Count (% within 9.20 - 12.20 Throwing)	1 (11.1%)	6 (66.7%)	2 (22.2%)	0 (0.0%)

Table 2: This table represents the relationship of change in time spent throwing from September 2020 – December 2020 and self-reported frequency of sleep issues. There was a tendency towards association between lower frequency of reported sleep issues and an increase in time throwing from September 2020 – December 2020 ($p = .025$).

Table 3: Relationship of Sleep Issues and Throwing April 2020 - August 2020

			SLEEP			
4.20 - 8.20 THROWING			Never	Some of the days	>Half of the days	Nearly everyday
	More	Count (% within 4.20 - 8.20 Throwing)	4 (80%)	0 (0.0%)	0 (0.0%)	1 (20%)
	Somewhat More	Count (% within 4.20 - 8.20 Throwing)	0 (0.0%)	2 (100%)	0 (0.0%)	0 (0.0%)
	Same	Count (% within 4.20 - 8.20 Throwing)	1 (12.5%)	5 (62.5%)	2 (25%)	0 (0.0%)
	Less	Count (% within 4.20 - 8.20 Throwing)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100%)

Table 3: This table represents the relationship of changes in time throwing from April 2020 – August 2020 and self-reported frequency of sleep issues. There was a tendency towards association between lower frequency of reported sleep issues and an increase in time throwing from April 2020 – August 2020 ($p = .006$).

3.4.2 Relationship of Subjects' Sleep Issues and Amount of Time Fielding

There was a significant association between fielding and sleep issues during the September 2020 - December 2020 time period. Those who spent more time fielding reported less concerns with sleep from September 2020 – December 2020.

Table 4: Relationship of Sleep Issues and Fielding September 2020 - December 2020

			SLEEP			
9.20 - 12.20 FIELDING			Never	Some of the days	>Half of the days	Nearly everyday
	More	Count (% within 9.20 - 12.20 Fielding)	2 (33.3%)	1 (16.7%)	1 (16.7%)	2 (33.3%)
	Somewhat More	Count (% within 9.20 - 12.20 Fielding)	3 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Same	Count (% within 9.20 - 12.20_Fielding)	1 (14.3%)	6 (85.7%)	0 (0.0%)	0 (0.0%)
	Somewhat Less	Count (% within 9.20 - 12.20 Fielding)	0 (0.0%)	0 (0.0%)	1 (100%)	0 (0.0%)
	Less	Count (% within 9.20 - 12.20 Fielding)	1 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Table 4: This table represents the relationship of change in time spent fielding from September 2020 – December 2020 and self-reported frequency of sleep issues. There was a tendency towards association between lower frequency of reported sleep issues and an increase in time fielding from September 2020 – December 2020 ($p = .009$).

3.4.3 Relationship of Subjects' Sleep Issues and Amount of Time Batting

There was a significant association between batting and sleep issues during the September 2020 - December 2020 and April 2020 - August 2020 time periods. Those who spent more time batting reported a lesser frequency of issues with sleep from September 2020 – December 2020 and April 2020 – August 2020 **(Table 5: Relationship of Sleep Issues and Batting September 2020 - December 2020, Table 6: Relationship of Sleep Issues and Batting April 2020 - August 2020).**

Table 5: Relationship of Sleep Issues and Batting September 2020 - December 2020

			SLEEP			
9.20 - 12.20 BATTING			Never	Some of the days	>Half of the days	Nearly everyday
	More	Count (% within 9.20 - 12.20 Batting)	3 (60%)	1 (20%)	0 (0.0%)	1 (20%)
	Somewhat More	Count (% within 9.20 - 12.20 Batting)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Same	Count (% within 9.20 - 12.20 Batting)	3 (33.3%)	6 (66.7%)	0 (0.0%)	0 (0.0%)
	Somewhat Less	Count (% within 9.20 - 12.20 Batting)	0 (0.0%)	0 (0.0%)	1 (100%)	0 (0.0%)
	Less	Count (% within 9.20 - 12.20 Batting)	1 (50%)	0 (0.0%)	1 (50%)	0 (0.0%)

Table 5: This table represents the relationship of change in time spent batting from September 2020 – December 2020 and self-reported frequency of sleep issues. There was a tendency towards association between lower frequency of reported sleep issues and an increase in time batting from September 2020 – December 2020 ($p = .019$).

Table 6: Relationship of Sleep Issues and Batting April 2020 - August 2020

			SLEEP			
4.20 - 8.20 BATTING			Never	Some of the days	>Half of the days	Nearly everyday
	More	Count (% within 4.20 - 8.20 Batting)	3 (75%)	0 (0.0%)	0 (0.0%)	1 (25%)
	Same	Count (% within 4.20 - 8.20 Batting)	1 (14.35)	6 (85.7%)	0 (0.0%)	0 (0.0%)
	Somewhat Less	Count (% within 4.20 - 8.20 Batting)	0 (0.0%)	0 (0.0%)	1 (100%)	0 (0.0%)
	Less	Count (% within 4.20 - 8.20 Batting)	1 (25%)	1 (25%)	1 (25%)	1 (25%)

Table 6: This table displays the relationship of changes in time batting from April 2020 – August 2020 and self-reported frequency of sleep issues. There was a tendency towards association between lower frequency of reported sleep issues and an increase in time batting from April 2020 – August 2020 ($p = .01$).

3.4.4 Relationship of Subjects' Energy Level Concerns and Amount of Time Throwing

Subjects also showed a significant association between energy level concerns and throwing during the September 2020 – December 2020 time period. Those who spent more time throwing from April 2020 – August 2020 reported less concerns with energy levels.

Table 7: Relationship of Energy Level Concerns and Throwing April 2020 - August 2020

			TIRED/LITTLE TO NO ENERGY			
4.20 - 8.20 THROWING			Never	Some of the days	>Half of the days	Nearly everyday
	More	Count (% within 4.20 - 8.20 Throwing)	4 (80%)	1 (20%)	0 (0.0%)	0 (0.0%)
	Somewhat More	Count (% within 4.20 - 8.20 Throwing)	0 (0.0%)	0 (0.0%)	1 (50%)	1 (50%)
	Same	Count (% within 4.20 - 8.20 Throwing)	3 (37.5%)	4 (50%)	1 (12.5%)	0 (0.0%)
	Less	Count (% within 4.20 - 8.20 Throwing)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100%)

Table 7: This table displays the relationship of changes in time throwing from April 2020 – August 2020 and self-reported frequency of energy level concerns. There was a tendency towards association between lower frequency of reported energy level concerns and an increase in time throwing from April 2020 – August 2020 ($p = .041$).

4.0 Discussion

This study was the first of its kind to investigate the relationship between the COVID-19 pandemic, level of physical activity, and the mental health of NCAA collegiate baseball players. When analyzing survey responses in the demographics section, subjects were mainly white Division 1 pitchers from the Midwest. Subjects were evenly distributed amongst both age and level of study, with the most frequent responses being 21 years of age and a junior in college. There were reports of mental health conditions/topics, showing an increase in frequency of symptoms of certain conditions compared to available research. Level of physical activity did not significantly change. Lastly, symptoms of most mental health conditions/topics did not show a statistical significance when correlated with variables of physical activity.

4.1 Mental Health Assessment

The first aim of this study was to assess the current mental health status of this population in relation to the pandemic, with the hypothesis that there would be reports of negative mental health conditions. The most frequent mental health conditions/topics reported were related to sleeping and energy issues. 61% of all subjects reported issues with falling/staying asleep and having little to no energy. Of the 11 subjects reporting issues with sleep and energy levels, seven reported experiencing these issues on some of the days, two reported experiencing symptoms on more than half the days, and two reported a frequency of nearly every day. The high number of subjects reporting these concerns is not uncommon, with a study by Ma et al. showing 42% of

college athletes experience poor sleep quality and 51% experience daytime tiredness.[80] Another study further supporting an increase in these conditions was conducted by Zhang et al., which reported that there was a direct negative impact of the pandemic on quality of sleep in college students.[81]

Anxiety was the next most common condition reported, with 50% of subjects reporting at least some experience with it related to the pandemic. Of those nine subjects, seven reported experiencing anxiety on only some of the days, and two subjects reporting experiencing it more than half of the days. Depression followed reports of anxiety, with 6/18 subjects reporting experiencing this condition related to the pandemic. Of those six subjects, four experienced it on some of the days and two reported experiencing it on >half of the days. The 50% anxiety rate and 33% depression rate are similar to an NCAA COVID-19 Well-Being Survey conducted in the fall of 2020, which showed that 44% of male collegiate athletes experienced anxiety and 24% experienced depression.[8]

Subjects reported very few issues related to team participation due to the pandemic, with 18/19 subjects never experiencing concerns of traveling or sharing a dugout/locker room/field with teammates. The low level of concerns with traveling and sharing spaces with teammates are also unsurprising. A study by Graupensperger et al. evaluating the effects of teammate interactions on the mental health of collegiate student-athletes during the COVID-19 pandemic showed that those who receive more social support are less likely to experience mental health conditions. [10] Subjects having more teammate interactions in the dugout, locker room, and while traveling delivers a sound explanation for a low prevalence of mental health concerns, as there is more social interaction/support in these situations.

After reviewing the data, there were reports of mental health conditions/topics in relation to the COVID-19 pandemic. Further, there was an increase in reports of anxiety and depression as compared to the NCAA COVID-19 Well-Being Survey and study conducted by Ma et al. As a result, the hypothesis stating that there would be reports of mental health conditions should be accepted.

4.2 Level of Physical Activity

The second aim of this study was to determine whether there was a change in level of physical activity in relation to the pandemic, with the hypothesis that there would be a decrease in physical activity. Most subjects spent the same amount of time doing CV training across the three time periods compared to September 2019 – December 2019. 56% of the subjects reported currently spending the same amount of time CV training, 44% reported spending the same amount of time from September 2020 – December 2020 and over half reported spending the same amount of time from April 2020 – August 2020. Further, a greater number of subjects reported spending less time currently on CV training, with 5/18 subjects stating spending less or somewhat less time vs 3/18 subjects spending more time. This trend was the opposite during the time period of September 2020 – December 2020, with a third of subjects stating spending more/somewhat more time vs 22% of subjects spending less/somewhat less time CV training during this time period. The time period of April 2020 – August 2020 followed this trend, with 5/16 subjects spending more/somewhat more time on CV training vs only 2/16 subjects spending less time on this type of training during the time period.

One possible explanation for spending more time on CV training during the two time periods when compared to current levels is the time periods of September 2020 – December 2020 and April 2020 – August 2020 are both out of season. Athletes focusing on CV training more in the offseason is normal, as this is the time where players typically focus on conditioning. Conditioning during the offseason is a part of the concept of periodization, defined as a programmed manipulation of several key training variables throughout a training cycle.[82] A training cycle consists of multiple smaller time-periods, including the offseason where most subjects work on conditioning.[82] Subject responses for weight training were similar across all time periods, though most reported spending the same amount of time compared to the reference period of September 2019 – December 2019.

Currently, most subjects are spending the same amount of time on sport-specific activities (throwing, fielding, and batting) compared to the reference period. Over half of the subjects are spending the same amount of time throwing and batting, while half of the subjects are spending the same amount of time fielding. A much higher percentage of athletes are spending more time throwing, with 7/18 subjects reporting spending more time and just one subject spending somewhat less time. Subjects were very similar in terms of more vs less time on fielding and batting, with only 1 subject spending more time fielding and an identical amount of subjects spending somewhat less/less time and somewhat more/more time on batting.

The most significant report of higher sport-specific activity came during September 2020 – December 2020. In this time period, a significantly higher number of subjects spent more time on sport specific activities. Half of subjects spent somewhat more/more time throwing and fielding, while one-third of subjects spent somewhat more/more time batting. Interestingly, this was during the same time of year as the reference time period, September 2019 – December 2019. A possible

explanation could be local regulations at the universities. If the universities had strict rules enforcing their students to stay in their places of residencies except to practice, attend class, study, or to get a meal, it is possible the subjects had nothing else to do but practice on sport specific activities with teammates.

Half of the subjects stated spending the same amount of time throwing and fielding from April 2020 – August 2020, and 7/16 reported spending the amount of time batting. However, a much higher number described throwing somewhat more/more (44%) than somewhat less/less (7.25%). Time fielding was identical, with four stating spending somewhat less/less time and four spending somewhat more/more time. Time batting was also very similar, with only one subject stating spending somewhat less time than more/somewhat more.

After reviewing the data, NCAA collegiate baseball players' level of physical activity throughout the various time periods appears to be about the same, with a slight favor of an increase. The results of this study contradict available research, which shows that level of physical activity declined in relation to the pandemic.[83-85] As a result, the hypothesis that there would be a decrease in level of physical activity should be rejected.

4.3 Relationship Between Level of Physical Activity and Mental Health

The third and final aim of this study was to investigate whether there was a relationship between a decrease in physical activity and the mental health of this population, with the hypothesis that there would be a significant correlation. However, most variables of level of physical activity did not show a decrease. Further, as Section 3.4 shows, there was not a significant association between most mental health conditions/topics and variables from the physical activity

section. The mental health condition/topic with the most significant results were sleep issues, which was significantly associated with sport specific activities across all three time periods. There was a significant association between sleep issues and throwing across all three time periods, a significant association with fielding and batting during the September 2020 - December 2020 time period, and with batting during the April 2020 - August 2020 time periods.

Those who threw, batted, and fielded more often were less likely to experience issues with sleep. Though most subjects currently are spending the same amount of time performing sport specific activities, there was a significant report of an increase in time during the September 2020 – December 2020 time periods. There were also many reports of an increase in time spent batting and fielding during the April 2020 – August 2020 time periods. These results are consistent with available research, which states that an increase in physical activity results in better quality of sleep.[86] These results were shown in a study of 41 adult subjects, where those who increased their exercise had a significant decrease in insomnia, depression, and anxiety as compared to those who did not increase their level of physical activity.[86]

Further, a systematic review by Kredlow et al. showed that adults who exercise regularly reported significantly greater benefits in sleep time (duration of sleep), efficiency (ability to stay asleep), and latency (time taken to fall asleep) as compared to those who do not exercise regularly. Additionally, the study showed significantly greater effects of regular physical activity on sleep in men and in those who have a higher baseline of physical activity. The study identified athletes as having a "high baseline of physical activity" as compared to the rest of the population[87] Since they are NCAA collegiate baseball players, this population is male-dominated, participate in regular physical activity, and have a high baseline of physical activity at the collegiate level. The results of the study by Kredlow et al. further show a consistency with the results of this study, as

subjects in both studies were male, participate in regular physical activity, had a higher baseline physical activity, and showed a lesser frequency of sleep issues as sport-specific activity increased.

A significant association was also shown between throwing during the April 2020 – August 2020 time period and energy level concerns. Subjects who spent more time throwing reported lower frequencies of energy level concerns. As athletes exercise more, they build up more efficient energy systems.[88] As athletes build up their energy systems, the amount of energy that they need to expend on a task decreases, since the energy systems are more efficient.[89] For the subjects of this study, the more they throw, the more efficient they are at that task. As a result, they require less energy over time, which would lead to lesser energy level concerns as those who do not throw as much.

An additional explanation for the significant association between throwing and energy level concerns is the energy cost of eccentric contractions. A study by LaStayo et al. reported that the energy cost to produce magnitude and duration of force is the lowest during an eccentric contraction.[90] When throwing a baseball, force production is at its highest during the cocking and deceleration phases. During the deceleration phase, the rotator cuff muscles at the shoulder are eccentrically contracting to help stabilize the joint.[91] As a result, the force production when throwing at its highest peak requires the lowest amount of energy to produce the magnitude and duration of force to help stabilize the shoulder. The results of this study, which shows that those who threw more often experienced symptoms of energy level concerns less frequently, are consistent with the available research discussed.

There does not seem to be a correlation between level of physical activity and the mental health of NCAA collegiate baseball players for most variables. As a result, the hypothesis that there would be a correlation should be rejected.

4.4 Limitations

This study had several limitations, with one being recall bias. As the survey asked for estimates of time during three time-periods ranging from current to 18 months prior, it may have been difficult for athletes to remember exact hourly estimates per week. A study by Kjellsson et al. stated recall periods range from 2 weeks to 14 months, with most surveys utilizing a time period between 1-12 months.[92] Further, the longer the recall period, the less accurate that subject estimates are.[93],[94] A recall period ranging 18 months would not be ideal, but due to the length of the pandemic, 14-18 months in the past is the most recent time period unaffected by the COVID-19 pandemic. A lack of motivation could be another possible explanation for the presence of recall bias, as those who have a lack of motivation have shown a higher frequency of recall bias.[95] As only 16 out of 20 subjects finished the survey, a lack of motivation could be a possible factor.

Due to the low response rate, it is difficult to show that there has been an increase in symptoms of mental health conditions/topics related to the pandemic. Though the responses did show that there were reports of negative mental health conditions/topics (supporting the hypothesis), it is difficult to state that there is in fact an increase in conditions related to the pandemic as compared to the NCAA COVID-19 Well-Being Survey and study by Ma et al. Low response rates are not uncommon, as subjects are showing declining rates in completing surveys in research.[96] However, a study by Hendra et al. suggests that low response rates could be just as valid as those with a higher number of responses. The validity of lower response rates could depend on what the survey is trying to identify, displaying the need for further research on this topic.[97]

Another limitation of this study contributing to the low number of subjects was a lack of direct access. There was no direct access due to the recruitment method of obtaining an email list through the NATA. Due to a lack of direct access, the two (and in some cases three) degrees of

separation from the athletes could have led to some confusion about the survey. However, direct access was not feasible, as it would not have granted complete anonymity. In the case of athletic trainers who were not the baseball athletic trainer receiving the email, there is a chance that there was an oversight after the reading the instructions and the survey might have been forwarded to a team other than baseball. As a result, only 20 of the 61 survey responses were by NCAA collegiate baseball players.

One final limitation of this study was the timeframe of the mental health questionnaire. In an effort to reduce recall bias, subjects were asked for their current mental health in regard to the COVID-19 pandemic. Having subjects trying to recall their mental health state from a year ago could have proven difficult, as discussed previously. Further, it is not possible to discuss any changes related to mental health throughout the pandemic as there were no baseline survey and statistics to compare. It is also possible that subjects' mental health one year into the pandemic could be different from when it first began, as local and state regulations have since loosened, as well as the presence of the vaccine. As regulations have loosened and the vaccine has become more widespread, it is possible subjects may not have the same level of concern about the virus as they did previously.

Another consideration of the mental health questionnaire is the stigma surrounding mental health. A study by Clement et al. described a third of 60,036 subjects with a mental health condition listed stigma as a barrier for them seeking help.[98] The stigma surrounding this topic could have led subjects to not want to report issues of mental health as they know they are being recorded. Though the survey granted the subjects complete anonymity, internalized stigma could be a key factor for subjects possibly not describing mental health conditions as well. Internalized stigma is described as the shame and embarrassment a person may have about a condition.[98] As a result, it

is possible subjects did not honestly answer the mental health questionnaire even though they were granted complete anonymity.

4.5 Future Research

This study was the first of its kind to evaluate the possible effects of an unprecedented pandemic in a population that presently lacks research regarding mental health. Due to the low number of survey responses, this study can act as a pilot study in evaluating the relationship between the COVID-19 pandemic, level of physical activity, and the mental health of collegiate baseball players. Even more broadly, mental health can be investigated in the collegiate baseball population moving forward, as the prevalence of mental health conditions continue to rise.[39] Investigating possible reasons for the rise in prevalence of mental health conditions is very important for clinicians.

The relationship between mental health and level of physical activity could be one possible explanation, especially in the presence of the COVID-19 pandemic. Though this study did not show conclusive results, further research could explore how a potential decrease in physical activity could have affected the mental health of this population. There is also a possibility that those who exercise more frequently could have had a greater impact on their mental health due to a decrease in activity related to the pandemic. A study by Vankim et al. showed that college students who exercised more vigorously were less likely to experience poorer mental health.[66] Collegiate baseball players are likely to meet the requirements of vigorous activity, as they are members of NCAA programs. As a result, a decrease in that vigorous activity could lead to poorer mental health, showing the need for further research.

As discussed, there are no baseline mental health statistics for this population, demonstrating the need for more information. If clinicians have an established baseline for their athletes' mental health, they can more easily show changes and whether there is an increase in symptoms or conditions. If mental health were to be evaluated every month, for example, clinicians would be able to see whether there was a significant change. If there was to be a significant change in mental health, clinicians would be able to review if there were any changes to the athletes' schedules during that month and determine whether there were any possible factors that played a role. Specific to this study, if there were baseline mental health evaluations every month, clinicians would be able to determine whether mental health was affected at the beginning of the pandemic when local/state regulations became more severe and limited opportunities for physical activity.

4.6 Conclusion

The results of this study are an important first step in determining the relationship between the COVID-19 pandemic, level of physical activity, and the mental health of NCAA collegiate baseball players. The first hypothesis regarding reports of negative mental health conclusions was supported, though the other two hypotheses were rejected. The results of this study showed an increase in certain mental health conditions when compared to other data, specifically anxiety and depression. However, due to the low survey response rate, it is not feasible to definitively state that there is an increase, displaying the need for further research. The hypothesis stating a decrease in level of physical activity was rejected, as cardiovascular training, weight training, and sport specific activity levels were mostly the same throughout the three time periods. Lastly, the final

hypothesis stating that there would be a significant correlation between a decrease in physical activity and reported mental health conditions/concerns was rejected as well. The data did not show a decrease in physical activity, and there were not many statistically significant correlations between level of physical activity and mental health status. In conclusion, this study could provide a framework for future research examining the relationship of the COVID-19 pandemic, physical activity, and the mental health of NCAA collegiate baseball athletes.

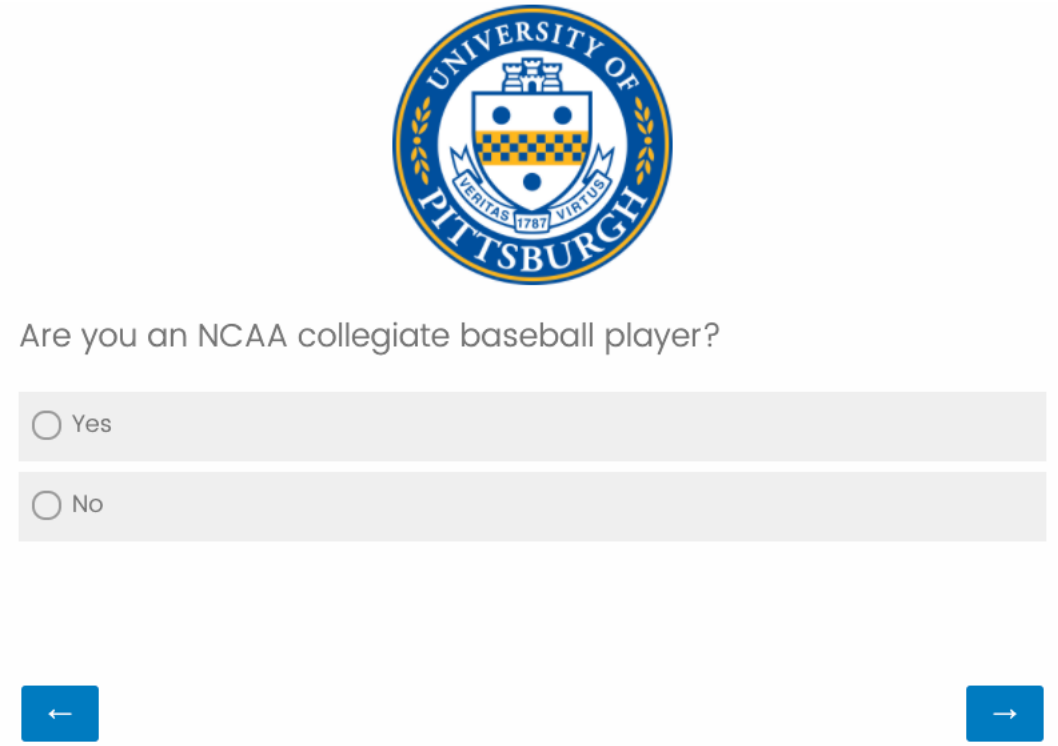
Appendix A : Survey

Introductory Script

This survey will consist of three sections. It will ask you questions of your demographics, your mental health and level of physical activity. Answers are completely anonymous, and the surveyy should take a total of 5-10 minutes. Your participation is completely voluntary, and you can withdraw at any time. To take this survey you must be an active member of an NCAA collegiate baseball team (Divisions I-III), at least 18 years old, and have no current injury preventing you from physical activity. If you meet these criteria and would like to take the survey, click the button below to start.

→

NCAA Baseball Player



NCAA Baseball Player: If subjects answered "No" to this question, the survey was ended. If subjects answered "Yes," they were permitted to continue to the following section.

Demographics Section: Age and Level of Study

What is your age (in years)?

- ◯ 18
- ◯ 19
- ◯ 20
- ◯ 21
- ◯ 22
- ◯ 23+

What is your level of study?

- ◯ Freshman
- ◯ Sophomore
- ◯ Junior
- ◯ Senior
- ◯ Senior/5th year
- ◯ Graduate

Demographics Section: Division and Region

What NCAA division do you play in?

- ◯ Division I
- ◯ Division II
- ◯ Division III

What region is your institution in?

- ◯ Northeast (ME, MA, RI, CT, NH, VT, NY, PA, NJ, DE, MD)
- ◯ Midwest (OH, IN, MI, IL, MO, WI, MN, IA, KS, NE, ND, SD)
- ◯ Southeast (WV, VA, KY, TN, NC, SC, GA, AL, MS, AR, LA, FL)
- ◯ Southwest (TX, OK, NM, AZ)
- ◯ West (CO, WY, MT, ID, WA, OR, UT, NV, CA, AK, HI)

Demographics Section: Ethnicity and Primary Baseball Position

What is your ethnicity?

- ◯ American Indian
- ◯ Asian
- ◯ Black or African American
- ◯ Hispanic or Latino
- ◯ Native Hawaiian or Other Pacific Islander
- ◯ White
- ◯ Prefer not to answer

What is your primary position?

- ◯ Pitcher
- ◯ Catcher
- ◯ Infielder
- ◯ Outfielder

Mental Health Questionnaire

Mental Health Questionnaire – In this section, answer the following questions about your current mental health in relation to the COVID-19 pandemic.

	Symptoms Score Sheet			
	Never	Some of the days	>Half of the days	Nearly everyday
How often do you experience symptoms of anxiety?	○	○	○	○
How often do you experience symptoms of depression?	○	○	○	○
Do you have problems falling or staying asleep?	○	○	○	○
Do you feel tired, or have little to no energy?	○	○	○	○
Do you have concerns of traveling with your team?	○	○	○	○
Do you have concerns of sharing a locker room, dugout, field, etc. with your team?	○	○	○	○

← →

Current Level of Physical Activity

Physical Activity Part 1 **(Current vs Past):** In this section, please answer these questions of your **current level of physical activity** as it compares to your level of physical activity during the time period of **Sept. 2019 - Dec. 2019.**

Time spent cardiovascular training (running, elliptical, etc.)

Time spent weight training

Time spent practicing throwing

Time spent practicing fielding

Time spent practicing batting

Level of Physical Activity from September 2020 – December 2020

Physical Activity Part 2 **(Past vs. Past):** In this section, please answer these questions of your level of physical activity from **Sept. 2020 - Dec. 2020** as it compares to your level of physical activity during the time period of **Sept. 2019 - Dec. 2019.**

Time spent cardiovascular training (running, elliptical, etc.)

Time spent weight training

Time spent practicing throwing

Time spent practicing fielding

Time spent practicing batting

Level of Physical Activity from April 2020 – August 2020

Physical Activity Part 3 **(Past vs. Past)**: In this section, please answer these questions of your level of physical activity from **April 2020 - Aug. 2020** as it compares to your level of physical activity during the time period of **Sept. 2019 - Dec. 2019.**

Time spent cardiovascular training (running, elliptical, etc.)

Time spent weight training

Time spent practicing throwing

Time spent practicing fielding

Time spent practicing batting

Appendix B : Relationship of Mental Health and Physical Activity

Current CV Training x Anxiety Crosstabulation

Current_CV_Training * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
Current_CV_Training	Less	Count	0	1	2	3
		% within Current_CV_Training	0.0%	33.3%	66.7%	100.0%
	More	Count	0	1	1	2
		% within Current_CV_Training	0.0%	50.0%	50.0%	100.0%
	Same	Count	2	6	2	10
		% within Current_CV_Training	20.0%	60.0%	20.0%	100.0%
	Somewhat Less	Count	0	0	2	2
		% within Current_CV_Training	0.0%	0.0%	100.0%	100.0%
	Somewhat More	Count	0	1	0	1
		% within Current_CV_Training	0.0%	100.0%	0.0%	100.0%
Total		Count	2	9	7	18
		% within Current_CV_Training	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.352[a]	8	.499	.597
Likelihood Ratio	8.891	8	.352	.604
Fisher-Freeman-Halton Exact Test	7.731			.595
N of Valid Cases	18			

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .11.

Current Weight Training x Anxiety Cross Tabulation

Current_Weight_Training * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
Current_Weight_Training	More	Count	0	2	0	2
		% within Current_Weight_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	3	2	6
		% within Current_Weight_Training	16.7%	50.0%	33.3%	100.0%
	Somewhat Less	Count	1	1	3	5
		% within Current_Weight_Training	20.0%	20.0%	60.0%	100.0%
	Somewhat More	Count	0	3	2	5
		% within Current_Weight_Training	0.0%	60.0%	40.0%	100.0%
Total		Count	2	9	7	18
		% within Current_Weight_Training	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.700[a]	6	.583	.710
Likelihood Ratio	6.118	6	.410	.710
Fisher-Freeman-Halton Exact Test	4.816			.758
N of Valid Cases	18			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .22.

Current Throwing x Anxiety Crosstabulation

Current_Throwing * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
Current_Throwing	More	Count	1	3	3	7
		% within Current_Throwing	14.3%	42.9%	42.9%	100.0%
	Same	Count	1	6	3	10
		% within Current_Throwing	10.0%	60.0%	30.0%	100.0%
	Somewhat Less	Count	0	0	1	1
		% within Current_Throwing	0.0%	0.0%	100.0%	100.0%
Total		Count	2	9	7	18
		% within Current_Throwing	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.149[a]	4	.708	.748
Likelihood Ratio	2.470	4	.650	.748
Fisher-Freeman-Halton Exact Test	3.002			.748
N of Valid Cases	18			

a. 8 cells (88.9%) have expected count less than 5. The minimum expected count is .11.

Current Fielding x Anxiety Crosstabulation

Current_Fielding * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
Current_Fielding	Less	Count	0	0	1	1
		% within Current_Fielding	0.0%	0.0%	100.0%	100.0%
	More	Count	1	2	1	4
		% within Current_Fielding	25.0%	50.0%	25.0%	100.0%
	Same	Count	1	3	5	9
		% within Current_Fielding	11.1%	33.3%	55.6%	100.0%
	Somewhat Less	Count	0	3	0	3
		% within Current_Fielding	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	1	0	1
		% within Current_Fielding	0.0%	100.0%	0.0%	100.0%
Total		Count	2	9	7	18
		% within Current_Fielding	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.607[a]	8	.473	.470
Likelihood Ratio	9.306	8	.317	.460
Fisher-Freeman-Halton Exact Test	8.388			.464
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current Batting x Anxiety Crosstabulation

Current_Batting * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
Current_Batting	Less	Count	0	1	2	3
		% within Current_Batting	0.0%	33.3%	66.7%	100.0%
	More	Count	1	2	1	4
		% within Current_Batting	25.0%	50.0%	25.0%	100.0%
	Same	Count	1	5	4	10
		% within Current_Batting	10.0%	50.0%	40.0%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within Current_Batting	0.0%	100.0%	0.0%	100.0%
Total		Count	2	9	7	18
		% within Current_Batting	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.002[a]	6	.809	.948
Likelihood Ratio	3.484	6	.746	1.000
Fisher-Freeman-Halton Exact Test	3.989			.968
N of Valid Cases	18			

a. 11 cells (91.7%) have expected count less than 5. The minimum expected count is .11.

Current CV Training x Depression

Current_CV_Training * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
Current_CV_Training	Less	Count	1	1	1	3
		% within Current_CV_Training	33.3%	33.3%	33.3%	100.0%
	More	Count	0	2	0	2
		% within Current_CV_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	7	2	10
		% within Current_CV_Training	10.0%	70.0%	20.0%	100.0%
	Somewhat Less	Count	0	1	1	2
		% within Current_CV_Training	0.0%	50.0%	50.0%	100.0%
	Somewhat More	Count	0	1	0	1
		% within Current_CV_Training	0.0%	100.0%	0.0%	100.0%
Total		Count	2	12	4	18
		% within Current_CV_Training	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.550[a]	8	.804	.903
Likelihood Ratio	5.152	8	.741	.946
Fisher-Freeman-Halton Exact Test	6.262			.774
N of Valid Cases	18			

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .11.

Current Weight Training x Depression Crosstabulation

Current_Weight_Training * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
Current_Weight_Training	More	Count	0	2	0	2
		% within Current_Weight_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	3	2	6
		% within Current_Weight_Training	16.7%	50.0%	33.3%	100.0%
	Somewhat Less	Count	0	3	2	5
		% within Current_Weight_Training	0.0%	60.0%	40.0%	100.0%
	Somewhat More	Count	1	4	0	5
		% within Current_Weight_Training	20.0%	80.0%	0.0%	100.0%
Total		Count	2	12	4	18
		% within Current_Weight_Training	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.650[a]	6	.589	.692
Likelihood Ratio	6.682	6	.351	.593
Fisher-Freeman-Halton Exact Test	4.728			.774
N of Valid Cases	18			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .22.

Current Throwing x Depression Crosstabulation

Current_Throwing * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
Current_Throwing	More	Count	0	5	2	7
		% within Current_Throwing	0.0%	71.4%	28.6%	100.0%
	Same	Count	2	7	1	10
		% within Current_Throwing	20.0%	70.0%	10.0%	100.0%
	Somewhat Less	Count	0	0	1	1
		% within Current_Throwing	0.0%	0.0%	100.0%	100.0%
Total		Count	2	12	4	18
		% within Current_Throwing	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	5.829[a]	4	.212	.258
Likelihood Ratio	6.141	4	.189	.258
Fisher-Freeman-Halton Exact Test	5.359			.258
N of Valid Cases	18			

a. 8 cells (88.9%) have expected count less than 5. The minimum expected count is .11.

Current Fielding x Depression Crosstabulation

Current_Fielding * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
Current_Fielding	Less	Count	0	0	1	1
		% within Current_Fielding	0.0%	0.0%	100.0%	100.0%
	More	Count	0	3	1	4
		% within Current_Fielding	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	5	2	9
		% within Current_Fielding	22.2%	55.6%	22.2%	100.0%
	Somewhat Less	Count	0	3	0	3
		% within Current_Fielding	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	1	0	1
		% within Current_Fielding	0.0%	100.0%	0.0%	100.0%
Total		Count	2	12	4	18
		% within Current_Fielding	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.167[a]	8	.519	.554
Likelihood Ratio	8.144	8	.420	.529
Fisher-Freeman-Halton Exact Test	7.186			.767
N of Valid Cases	18			

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .11.

Current Batting x Depression Crosstabulation

Current_Batting * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
Current_Batting	Less	Count	0	2	1	3
		% within Current_Batting	0.0%	66.7%	33.3%	100.0%
	More	Count	0	3	1	4
		% within Current_Batting	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	6	2	10
		% within Current_Batting	20.0%	60.0%	20.0%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within Current_Batting	0.0%	100.0%	0.0%	100.0%
Total		Count	2	12	4	18
		% within Current_Batting	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.300[a]	6	.890	.953
Likelihood Ratio	3.230	6	.780	.953
Fisher-Freeman-Halton Exact Test	3.325			1.000
N of Valid Cases	18			

a. 11 cells (91.7%) have expected count less than 5. The minimum expected count is .11.

Current CV Training x Sleep Crosstabulation

Current_CV_Training * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_CV_Training	Less	Count	0	1	1	1	3
		% within Current_CV_Training	0.0%	33.3%	33.3%	33.3%	100.0%
	More	Count	1	0	1	0	2
		% within Current_CV_Training	50.0%	0.0%	50.0%	0.0%	100.0%
	Same	Count	1	1	3	5	10
		% within Current_CV_Training	10.0%	10.0%	30.0%	50.0%	100.0%
	Somewhat Less	Count	0	0	1	1	2
		% within Current_CV_Training	0.0%	0.0%	50.0%	50.0%	100.0%
	Somewhat More	Count	0	0	1	0	1
		% within Current_CV_Training	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_CV_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	8.186[a]	12	.770	.844
Likelihood Ratio	8.520	12	.743	.935
Fisher-Freeman-Halton Exact Test	9.899			.830
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current Weight Training x Sleep Crosstabulation

Current_Weight_Training * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Weight_Training	More	Count	0	0	2	0	2
		% within Current_Weight_Training	0.0%	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	0	2	3	6
		% within Current_Weight_Training	16.7%	0.0%	33.3%	50.0%	100.0%
	Somewhat Less	Count	1	2	0	2	5
		% within Current_Weight_Training	20.0%	40.0%	0.0%	40.0%	100.0%
	Somewhat More	Count	0	0	3	2	5
		% within Current_Weight_Training	0.0%	0.0%	60.0%	40.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Weight_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	11.957[a]	9	.216	.209
Likelihood Ratio	14.607	9	.102	.188
Fisher-Freeman-Halton Exact Test	10.190			.260
N of Valid Cases	18			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .22.

Current Fielding x Sleep Crosstabulation

Current_Fielding * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Fielding	Less	Count	0	0	1	0	1
		% within Current_Fielding	0.0%	0.0%	100.0%	0.0%	100.0%
	More	Count	0	1	3	0	4
		% within Current_Fielding	0.0%	25.0%	75.0%	0.0%	100.0%
	Same	Count	1	1	1	6	9
		% within Current_Fielding	11.1%	11.1%	11.1%	66.7%	100.0%
	Somewhat Less	Count	1	0	1	1	3
		% within Current_Fielding	33.3%	0.0%	33.3%	33.3%	100.0%
	Somewhat More	Count	0	0	1	0	1
		% within Current_Fielding	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Fielding	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	12.464[a]	12	.409	.530
Likelihood Ratio	14.883	12	.248	.288
Fisher-Freeman-Halton Exact Test	14.820			.154
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current Batting x Sleep Crosstabulation

Current_Batting * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Batting	Less	Count	1	0	2	0	3
		% within Current_Batting	33.3%	0.0%	66.7%	0.0%	100.0%
	More	Count	0	1	2	1	4
		% within Current_Batting	0.0%	25.0%	50.0%	25.0%	100.0%
	Same	Count	0	1	3	6	10
		% within Current_Batting	0.0%	10.0%	30.0%	60.0%	100.0%
	Somewhat Less	Count	1	0	0	0	1
		% within Current_Batting	100.0%	0.0%	0.0%	0.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Batting	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	15.364[a]	9	.081	.098
Likelihood Ratio	13.927	9	.125	.170
Fisher-Freeman-Halton Exact Test	11.902			.136
N of Valid Cases	18			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current CV Training x Energy Level Concerns Crosstabulation

Current_CV_Training * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_CV_Training	Less	Count	1	1	0	1	3
		% within Current_CV_Training	33.3%	33.3%	0.0%	33.3%	100.0%
	More	Count	0	0	1	1	2
		% within Current_CV_Training	0.0%	0.0%	50.0%	50.0%	100.0%
	Same	Count	0	1	4	5	10
		% within Current_CV_Training	0.0%	10.0%	40.0%	50.0%	100.0%
	Somewhat Less	Count	1	0	1	0	2
		% within Current_CV_Training	50.0%	0.0%	50.0%	0.0%	100.0%
	Somewhat More	Count	0	0	1	0	1
		% within Current_CV_Training	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_CV_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	11.229[a]	12	.509	.571
Likelihood Ratio	13.019	12	.368	.516
Fisher-Freeman-Halton Exact Test	12.671			.420
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current Weight Training x Energy Level Concerns Crosstabulation

Current_Weight_Training * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Weight_Training	More	Count	0	0	1	1	2
		% within Current_Weight_Training	0.0%	0.0%	50.0%	50.0%	100.0%
	Same	Count	0	1	2	3	6
		% within Current_Weight_Training	0.0%	16.7%	33.3%	50.0%	100.0%
	Somewhat Less	Count	1	1	1	2	5
		% within Current_Weight_Training	20.0%	20.0%	20.0%	40.0%	100.0%
	Somewhat More	Count	1	0	3	1	5
		% within Current_Weight_Training	20.0%	0.0%	60.0%	20.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Weight_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.757[a]	9	.855	.917
Likelihood Ratio	6.289	9	.711	.949
Fisher-Freeman-Halton Exact Test	6.032			.943
N of Valid Cases	18			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .22.

Current Throwing x Energy Level Concerns

Current_Throwing * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Throwing	More	Count	0	0	4	3	7
		% within Current_Throwing	0.0%	0.0%	57.1%	42.9%	100.0%
	Same	Count	2	1	3	4	10
		% within Current_Throwing	20.0%	10.0%	30.0%	40.0%	100.0%
	Somewhat Less	Count	0	1	0	0	1
		% within Current_Throwing	0.0%	100.0%	0.0%	0.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Throwing	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	11.112[a]	6	.085	.123
Likelihood Ratio	8.865	6	.181	.206
Fisher-Freeman-Halton Exact Test	7.389			.248
N of Valid Cases	18			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current Fielding x Energy Level Concerns Crosstabulation

Current_Fielding * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Fielding	Less	Count	0	0	1	0	1
		% within Current_Fielding	0.0%	0.0%	100.0%	0.0%	100.0%
	More	Count	0	0	3	1	4
		% within Current_Fielding	0.0%	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	2	3	2	9
		% within Current_Fielding	22.2%	22.2%	33.3%	22.2%	100.0%
	Somewhat Less	Count	0	0	0	3	3
		% within Current_Fielding	0.0%	0.0%	0.0%	100.0%	100.0%
	Somewhat More	Count	0	0	0	1	1
		% within Current_Fielding	0.0%	0.0%	0.0%	100.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Fielding	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	13.000[a]	12	.369	.459
Likelihood Ratio	14.883	12	.248	.288
Fisher-Freeman-Halton Exact Test	12.988			.384
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current Batting x Energy Level Concerns Crosstabulation

Current_Batting * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
Current_Batting	Less	Count	0	0	2	1	3
		% within Current_Batting	0.0%	0.0%	66.7%	33.3%	100.0%
	More	Count	0	0	3	1	4
		% within Current_Batting	0.0%	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	2	2	4	10
		% within Current_Batting	20.0%	20.0%	20.0%	40.0%	100.0%
	Somewhat Less	Count	0	0	0	1	1
		% within Current_Batting	0.0%	0.0%	0.0%	100.0%	100.0%
Total		Count	2	2	7	7	18
		% within Current_Batting	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.629[a]	9	.572	.615
Likelihood Ratio	9.061	9	.432	.585
Fisher-Freeman-Halton Exact Test	7.872			.736
N of Valid Cases	18			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Current CV Training x Travel Concerns Crosstabulation

Current_CV_Training * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
Current_CV_Training	Less	Count	3	0	3
		% within Current_CV_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within Current_CV_Training	100.0%	0.0%	100.0%
	Same	Count	9	1	10
		% within Current_CV_Training	90.0%	10.0%	100.0%
	Somewhat Less	Count	2	0	2
		% within Current_CV_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within Current_CV_Training	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_CV_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.847[a]	4	.932	1.000
Likelihood Ratio	1.222	4	.874	1.000
Fisher-Freeman-Halton Exact Test	3.717			1.000
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

Current Weight Training x Travel Concerns Crosstabulation

Current_Weight_Training * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
Current_Weight_Training	More	Count	2	0	2
		% within Current_Weight_Training	100.0%	0.0%	100.0%
	Same	Count	5	1	6
		% within Current_Weight_Training	83.3%	16.7%	100.0%
	Somewhat Less	Count	5	0	5
		% within Current_Weight_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	5	0	5
		% within Current_Weight_Training	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Weight_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.118[a]	3	.548	1.000
Likelihood Ratio	2.317	3	.509	1.000
Fisher-Freeman-Halton Exact Test	2.713			1.000
N of Valid Cases	18			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .11.

Current Throwing x Travel Concerns Crosstabulation

Current_Throwing * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
Current_Throwing	More	Count	7	0	7
		% within Current_Throwing	100.0%	0.0%	100.0%
	Same	Count	9	1	10
		% within Current_Throwing	90.0%	10.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within Current_Throwing	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Throwing	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.847[a]	2	.655	1.000
Likelihood Ratio	1.222	2	.543	1.000
Fisher-Freeman-Halton Exact Test	2.037			1.000
N of Valid Cases	18			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .06.

Current Fielding x Travel Concerns Crosstabulation

Current_Fielding * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
Current_Fielding	Less	Count	1	0	1
		% within Current_Fielding	100.0%	0.0%	100.0%
	More	Count	4	0	4
		% within Current_Fielding	100.0%	0.0%	100.0%
	Same	Count	8	1	9
		% within Current_Fielding	88.9%	11.1%	100.0%
	Somewhat Less	Count	3	0	3
		% within Current_Fielding	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within Current_Fielding	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Fielding	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.059[a]	4	.901	1.000
Likelihood Ratio	1.445	4	.836	1.000
Fisher-Freeman-Halton Exact Test	4.033			1.000
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

Current Batting x Travel Concerns Crosstabulation

Current_Batting * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
Current_Batting	Less	Count	3	0	3
		% within Current_Batting	100.0%	0.0%	100.0%
	More	Count	4	0	4
		% within Current_Batting	100.0%	0.0%	100.0%
	Same	Count	9	1	10
		% within Current_Batting	90.0%	10.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within Current_Batting	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Batting	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.847[a]	3	.838	1.000
Likelihood Ratio	1.222	3	.748	1.000
Fisher-Freeman-Halton Exact Test	2.607			1.000
N of Valid Cases	18			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

Current CV Training x Locker Room Concerns Crosstabulation

Current_CV_Training * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
Current_CV_Training	Less	Count	3	0	3
		% within Current_CV_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within Current_CV_Training	100.0%	0.0%	100.0%
	Same	Count	9	1	10
		% within Current_CV_Training	90.0%	10.0%	100.0%
	Somewhat Less	Count	2	0	2
		% within Current_CV_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within Current_CV_Training	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_CV_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.847[a]	4	.932	1.000
Likelihood Ratio	1.222	4	.874	1.000
Fisher-Freeman-Halton Exact Test	3.717			1.000
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

Current Weight Training x Locker Room Concerns Crosstabulation

Current_Weight_Training * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
Current_Weight_Training	More	Count	2	0	2
		% within Current_Weight_Training	100.0%	0.0%	100.0%
	Same	Count	6	0	6
		% within Current_Weight_Training	100.0%	0.0%	100.0%
	Somewhat Less	Count	5	0	5
		% within Current_Weight_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	4	1	5
		% within Current_Weight_Training	80.0%	20.0%	100.0%
Total		Count	17	1	18
		% within Current_Weight_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.753[a]	3	.431	.667
Likelihood Ratio	2.720	3	.437	.667
Fisher-Freeman-Halton Exact Test	3.077			.667
N of Valid Cases	18			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .11.

Current Throwing x Locker Room Concerns Crosstabulation

Current_Throwing * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
Current_Throwing	More	Count	6	1	7
		% within Current_Throwing	85.7%	14.3%	100.0%
	Same	Count	10	0	10
		% within Current_Throwing	100.0%	0.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within Current_Throwing	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Throwing	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.664[a]	2	.435	.444
Likelihood Ratio	1.983	2	.371	.444
Fisher-Freeman-Halton Exact Test	2.750			.444
N of Valid Cases	18			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .06.

Current Fielding x Locker Room Concerns Crosstabulation

Current_Fielding * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
Current_Fielding	Less	Count	1	0	1
		% within Current_Fielding	100.0%	0.0%	100.0%
	More	Count	3	1	4
		% within Current_Fielding	75.0%	25.0%	100.0%
	Same	Count	9	0	9
		% within Current_Fielding	100.0%	0.0%	100.0%
	Somewhat Less	Count	3	0	3
		% within Current_Fielding	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within Current_Fielding	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Fielding	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.706[a]	4	.447	.500
Likelihood Ratio	3.225	4	.521	.500
Fisher-Freeman-Halton Exact Test	5.655			.500
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

Current Batting x Locker Room Concerns Crosstabulation

Current_Batting * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
Current_Batting	Less	Count	3	0	3
		% within Current_Batting	100.0%	0.0%	100.0%
	More	Count	3	1	4
		% within Current_Batting	75.0%	25.0%	100.0%
	Same	Count	10	0	10
		% within Current_Batting	100.0%	0.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within Current_Batting	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within Current_Batting	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.706[a]	3	.295	.444
Likelihood Ratio	3.225	3	.358	.444
Fisher-Freeman-Halton Exact Test	4.440			.444
N of Valid Cases	18			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

September 2020 – December 2020 CV Training x Anxiety Crosstabulation

O9.20_12.20_CV_Training * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_CV_Training	Less	Count	0	0	1	1
		% within O9.20_12.20_CV_Training	0.0%	0.0%	100.0%	100.0%
	More	Count	0	1	1	2
		% within O9.20_12.20_CV_Training	0.0%	50.0%	50.0%	100.0%
	Same	Count	1	5	2	8
		% within O9.20_12.20_CV_Training	12.5%	62.5%	25.0%	100.0%
	Somewhat Less	Count	0	1	2	3
		% within O9.20_12.20_CV_Training	0.0%	33.3%	66.7%	100.0%
	Somewhat More	Count	1	2	1	4
		% within O9.20_12.20_CV_Training	25.0%	50.0%	25.0%	100.0%
Total		Count	2	9	7	18
		% within O9.20_12.20_CV_Training	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.506[a]	8	.809	.909
Likelihood Ratio	5.174	8	.739	.916
Fisher-Freeman-Halton Exact Test	5.851			.883
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 – December 2020 Weight Training x Anxiety Crosstabulation

O9.20_12.20_Weight_Training * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Weight_Training	Less	Count	0	1	0	1
		% within O9.20_12.20_Weight_Training	0.0%	100.0%	0.0%	100.0%
	More	Count	0	2	0	2
		% within O9.20_12.20_Weight_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	0	4	3	7
		% within O9.20_12.20_Weight_Training	0.0%	57.1%	42.9%	100.0%
	Somewhat Less	Count	1	1	2	4
		% within O9.20_12.20_Weight_Training	25.0%	25.0%	50.0%	100.0%
	Somewhat More	Count	1	1	2	4
		% within O9.20_12.20_Weight_Training	25.0%	25.0%	50.0%	100.0%
Total		Count	2	9	7	18
		% within O9.20_12.20_Weight_Training	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	6.520[a]	8	.589	.700
Likelihood Ratio	8.292	8	.406	.659
Fisher-Freeman-Halton Exact Test	7.294			.659
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 – December 2020 Throwing x Anxiety Crosstabulation

O9.20_12.20_Throwing * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Throwing	More	Count	1	1	2	4
		% within O9.20_12.20_Throwing	25.0%	25.0%	50.0%	100.0%
	Same	Count	0	5	4	9
		% within O9.20_12.20_Throwing	0.0%	55.6%	44.4%	100.0%
	Somewhat More	Count	1	3	1	5
		% within O9.20_12.20_Throwing	20.0%	60.0%	20.0%	100.0%
Total		Count	2	9	7	18
		% within O9.20_12.20_Throwing	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.363[a]	4	.499	.594
Likelihood Ratio	4.302	4	.367	.463
Fisher-Freeman-Halton Exact Test	3.830			.485
N of Valid Cases	18			

a. 9 cells (100.0%) have expected count less than 5. The minimum expected count is .44.

September 2020 – December 2020 Fielding x Anxiety Crosstabulation

O9.20_12.20_Fielding * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Fielding	Less	Count	0	0	1	1
		% within O9.20_12.20_Fielding	0.0%	0.0%	100.0%	100.0%
	More	Count	1	2	3	6
		% within O9.20_12.20_Fielding	16.7%	33.3%	50.0%	100.0%
	Same	Count	1	3	3	7
		% within O9.20_12.20_Fielding	14.3%	42.9%	42.9%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O9.20_12.20_Fielding	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	3	0	3
		% within O9.20_12.20_Fielding	0.0%	100.0%	0.0%	100.0%
Total		Count	2	9	7	18
		% within O9.20_12.20_Fielding	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	6.425[a]	8	.600	.671
Likelihood Ratio	8.292	8	.406	.606
Fisher-Freeman-Halton Exact Test	7.423			.647
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 – December 2020 Batting x Anxiety Crosstabulation

O9.20_12.20_Batting * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Batting	Less	Count	0	0	2	2
		% within O9.20_12.20_Batting	0.0%	0.0%	100.0%	100.0%
	More	Count	1	3	1	5
		% within O9.20_12.20_Batting	20.0%	60.0%	20.0%	100.0%
	Same	Count	1	5	3	9
		% within O9.20_12.20_Batting	11.1%	55.6%	33.3%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O9.20_12.20_Batting	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	0	1	1
		% within O9.20_12.20_Batting	0.0%	0.0%	100.0%	100.0%
Total		Count	2	9	7	18
		% within O9.20_12.20_Batting	11.1%	50.0%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	6.756[a]	8	.563	.656
Likelihood Ratio	8.121	8	.422	.643
Fisher-Freeman-Halton Exact Test	7.731			.604
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 – December 2020 CV Training x Depression Crosstabulation

O9.20_12.20_CV_Training * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_CV_Training	Less	Count	1	0	0	1
		% within O9.20_12.20_CV_Training	100.0%	0.0%	0.0%	100.0%
	More	Count	0	2	0	2
		% within O9.20_12.20_CV_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	0	6	2	8
		% within O9.20_12.20_CV_Training	0.0%	75.0%	25.0%	100.0%
	Somewhat Less	Count	0	2	1	3
		% within O9.20_12.20_CV_Training	0.0%	66.7%	33.3%	100.0%
	Somewhat More	Count	1	2	1	4
		% within O9.20_12.20_CV_Training	25.0%	50.0%	25.0%	100.0%
Total		Count	2	12	4	18
		% within O9.20_12.20_CV_Training	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	11.375[a]	8	.181	.209
Likelihood Ratio	9.418	8	.308	.456
Fisher-Freeman-Halton Exact Test	8.232			.419
N of Valid Cases	18			

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Weight Training x Depression Crosstabulation

O9.20_12.20_Weight_Training * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Weight_Training	Less	Count	0	1	0	1
		% within O9.20_12.20_Weight_Training	0.0%	100.0%	0.0%	100.0%
	More	Count	0	2	0	2
		% within O9.20_12.20_Weight_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	4	2	7
		% within O9.20_12.20_Weight_Training	14.3%	57.1%	28.6%	100.0%
	Somewhat Less	Count	0	3	1	4
		% within O9.20_12.20_Weight_Training	0.0%	75.0%	25.0%	100.0%
	Somewhat More	Count	1	2	1	4
		% within O9.20_12.20_Weight_Training	25.0%	50.0%	25.0%	100.0%
Total		Count	2	12	4	18
		% within O9.20_12.20_Weight_Training	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.161[a]	8	.924	1.000
Likelihood Ratio	4.356	8	.824	.971
Fisher-Freeman-Halton Exact Test	4.705			1.000
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Throwing x Depression Crosstabulation

O9.20_12.20_Throwing * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Throwing	More	Count	0	2	2	4
		% within O9.20_12.20_Throwing	0.0%	50.0%	50.0%	100.0%
	Same	Count	1	7	1	9
		% within O9.20_12.20_Throwing	11.1%	77.8%	11.1%	100.0%
	Somewhat More	Count	1	3	1	5
		% within O9.20_12.20_Throwing	20.0%	60.0%	20.0%	100.0%
Total		Count	2	12	4	18
		% within O9.20_12.20_Throwing	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.067[a]	4	.547	.617
Likelihood Ratio	3.197	4	.525	.819
Fisher-Freeman-Halton Exact Test	3.203			.638
N of Valid Cases	18			

a. 8 cells (88.9%) have expected count less than 5. The minimum expected count is .44.

September 2020 – December 2020 Fielding x Depression Crosstabulation

O9.20_12.20_Fielding * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Fielding	Less	Count	0	0	1	1
		% within O9.20_12.20_Fielding	0.0%	0.0%	100.0%	100.0%
	More	Count	0	4	2	6
		% within O9.20_12.20_Fielding	0.0%	66.7%	33.3%	100.0%
	Same	Count	2	4	1	7
		% within O9.20_12.20_Fielding	28.6%	57.1%	14.3%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O9.20_12.20_Fielding	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	3	0	3
		% within O9.20_12.20_Fielding	0.0%	100.0%	0.0%	100.0%
Total		Count	2	12	4	18
		% within O9.20_12.20_Fielding	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	8.714[a]	8	.367	.439
Likelihood Ratio	9.535	8	.299	.402
Fisher-Freeman-Halton Exact Test	8.182			.486
N of Valid Cases	18			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Batting x Depression Crosstabulation

O9.20_12.20_Batting * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O9.20_12.20_Batting	Less	Count	0	1	1	2
		% within O9.20_12.20_Batting	0.0%	50.0%	50.0%	100.0%
	More	Count	0	4	1	5
		% within O9.20_12.20_Batting	0.0%	80.0%	20.0%	100.0%
	Same	Count	2	6	1	9
		% within O9.20_12.20_Batting	22.2%	66.7%	11.1%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O9.20_12.20_Batting	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	0	1	1
		% within O9.20_12.20_Batting	0.0%	0.0%	100.0%	100.0%
Total		Count	2	12	4	18
		% within O9.20_12.20_Batting	11.1%	66.7%	22.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.200[a]	8	.515	.584
Likelihood Ratio	7.500	8	.484	.667
Fisher-Freeman-Halton Exact Test	7.915			.628
N of Valid Cases	18			

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 CV Training x Sleep Crosstabulation

O9.20_12.20_CV_Training * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_CV_Training	Less	Count	0	0	0	1	1
		% within O9.20_12.20_CV_Training	0.0%	0.0%	0.0%	100.0%	100.0%
	More	Count	1	0	1	0	2
		% within O9.20_12.20_CV_Training	50.0%	0.0%	50.0%	0.0%	100.0%
	Same	Count	1	1	3	3	8
		% within O9.20_12.20_CV_Training	12.5%	12.5%	37.5%	37.5%	100.0%
	Somewhat Less	Count	0	0	1	2	3
		% within O9.20_12.20_CV_Training	0.0%	0.0%	33.3%	66.7%	100.0%
	Somewhat More	Count	0	1	2	1	4
		% within O9.20_12.20_CV_Training	0.0%	25.0%	50.0%	25.0%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_CV_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	8.143[a]	12	.774	.889
Likelihood Ratio	9.026	12	.701	.937
Fisher-Freeman-Halton Exact Test	9.300			.940
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Weight Training x Sleep Crosstabulation

O9.20_12.20_Weight_Training * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_Weight_Training	Less	Count	0	0	1	0	1
		% within O9.20_12.20_Weight_Training	0.0%	0.0%	100.0%	0.0%	100.0%
	More	Count	0	0	1	1	2
		% within O9.20_12.20_Weight_Training	0.0%	0.0%	50.0%	50.0%	100.0%
	Same	Count	1	0	3	3	7
		% within O9.20_12.20_Weight_Training	14.3%	0.0%	42.9%	42.9%	100.0%
	Somewhat Less	Count	1	1	0	2	4
		% within O9.20_12.20_Weight_Training	25.0%	25.0%	0.0%	50.0%	100.0%
	Somewhat More	Count	0	1	2	1	4
		% within O9.20_12.20_Weight_Training	0.0%	25.0%	50.0%	25.0%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_Weight_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.577[a]	12	.817	.927
Likelihood Ratio	10.555	12	.567	.846
Fisher-Freeman-Halton Exact Test	10.224			.839
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 CV Training x Energy Level Concerns Crosstabulation

O9.20_12.20_CV_Training * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_CV_Training	Less	Count	1	0	0	0	1
		% within O9.20_12.20_CV_Training	100.0%	0.0%	0.0%	0.0%	100.0%
	More	Count	0	0	0	2	2
		% within O9.20_12.20_CV_Training	0.0%	0.0%	0.0%	100.0%	100.0%
	Same	Count	0	0	5	3	8
		% within O9.20_12.20_CV_Training	0.0%	0.0%	62.5%	37.5%	100.0%
	Somewhat Less	Count	1	0	1	1	3
		% within O9.20_12.20_CV_Training	33.3%	0.0%	33.3%	33.3%	100.0%
	Somewhat More	Count	0	2	1	1	4
		% within O9.20_12.20_CV_Training	0.0%	50.0%	25.0%	25.0%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_CV_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	22.071[a]	12	.037	.029
Likelihood Ratio	18.528	12	.101	.100
Fisher-Freeman-Halton Exact Test	15.291			.094
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Weight Training x Energy Level Concerns

Crosstabulation

O9.20_12.20_Weight_Training * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_Weight_Training	Less	Count	0	0	0	1	1
		% within O9.20_12.20_Weight_Training	0.0%	0.0%	0.0%	100.0%	100.0%
	More	Count	0	0	2	0	2
		% within O9.20_12.20_Weight_Training	0.0%	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	0	3	3	7
		% within O9.20_12.20_Weight_Training	14.3%	0.0%	42.9%	42.9%	100.0%
	Somewhat Less	Count	1	0	1	2	4
		% within O9.20_12.20_Weight_Training	25.0%	0.0%	25.0%	50.0%	100.0%
	Somewhat More	Count	0	2	1	1	4
		% within O9.20_12.20_Weight_Training	0.0%	50.0%	25.0%	25.0%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_Weight_Training	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	13.362[a]	12	.343	.399
Likelihood Ratio	13.328	12	.346	.559
Fisher-Freeman-Halton Exact Test	11.610			.598
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Throwing x Energy Level Concerns Crosstabulation

O9.20_12.20_Throwing * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_Throwing	More	Count	0	0	3	1	4
		% within O9.20_12.20_Throwing	0.0%	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	0	3	4	9
		% within O9.20_12.20_Throwing	22.2%	0.0%	33.3%	44.4%	100.0%
	Somewhat More	Count	0	2	1	2	5
		% within O9.20_12.20_Throwing	0.0%	40.0%	20.0%	40.0%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_Throwing	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	9.343[a]	6	.155	.167
Likelihood Ratio	9.879	6	.130	.261
Fisher-Freeman-Halton Exact Test	6.697			.314
N of Valid Cases	18			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .44.

September 2020 - December 2020 Fielding x Energy Level Concerns Crosstabulation

O9.20_12.20_Fielding * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_Fielding	Less	Count	0	0	1	0	1
		% within O9.20_12.20_Fielding	0.0%	0.0%	100.0%	0.0%	100.0%
	More	Count	0	1	3	2	6
		% within O9.20_12.20_Fielding	0.0%	16.7%	50.0%	33.3%	100.0%
	Same	Count	2	1	2	2	7
		% within O9.20_12.20_Fielding	28.6%	14.3%	28.6%	28.6%	100.0%
	Somewhat Less	Count	0	0	0	1	1
		% within O9.20_12.20_Fielding	0.0%	0.0%	0.0%	100.0%	100.0%
	Somewhat More	Count	0	0	1	2	3
		% within O9.20_12.20_Fielding	0.0%	0.0%	33.3%	66.7%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_Fielding	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.867[a]	12	.795	.882
Likelihood Ratio	9.142	12	.691	.904
Fisher-Freeman-Halton Exact Test	9.882			.921
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 Batting x Energy Level Concerns Crosstabulation

O9.20_12.20_Batting * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O9.20_12.20_Batting	Less	Count	0	0	1	1	2
		% within O9.20_12.20_Batting	0.0%	0.0%	50.0%	50.0%	100.0%
	More	Count	0	0	4	1	5
		% within O9.20_12.20_Batting	0.0%	0.0%	80.0%	20.0%	100.0%
	Same	Count	2	1	2	4	9
		% within O9.20_12.20_Batting	22.2%	11.1%	22.2%	44.4%	100.0%
	Somewhat Less	Count	0	0	0	1	1
		% within O9.20_12.20_Batting	0.0%	0.0%	0.0%	100.0%	100.0%
	Somewhat More	Count	0	1	0	0	1
		% within O9.20_12.20_Batting	0.0%	100.0%	0.0%	0.0%	100.0%
Total		Count	2	2	7	7	18
		% within O9.20_12.20_Batting	11.1%	11.1%	38.9%	38.9%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	15.600[a]	12	.210	.255
Likelihood Ratio	13.332	12	.345	.421
Fisher-Freeman-Halton Exact Test	13.088			.417
N of Valid Cases	18			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

September 2020 - December 2020 CV Training x Travel Concerns Crosstabulation

O9.20_12.20_CV_Training * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O9.20_12.20_CV_Training	Less	Count	1	0	1
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	Same	Count	8	0	8
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	Somewhat Less	Count	3	0	3
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	3	1	4
		% within O9.20_12.20_CV_Training	75.0%	25.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_CV_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.706[a]	4	.447	.556
Likelihood Ratio	3.225	4	.521	.556
Fisher-Freeman-Halton Exact Test	5.080			.556
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 - December 2020 Weight Training x Travel Concerns Crosstabulation

O9.20_12.20_Weight_Training * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O9.20_12.20_Weight_Training	Less	Count	1	0	1
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	Same	Count	7	0	7
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat Less	Count	4	0	4
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	3	1	4
		% within O9.20_12.20_Weight_Training	75.0%	25.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Weight_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.706[a]	4	.447	.611
Likelihood Ratio	3.225	4	.521	.611
Fisher-Freeman-Halton Exact Test	4.925			.611
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 - December 2020 Throwing x Travel Concerns Crosstabulation

O9.20_12.20_Throwing * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O9.20_12.20_Throwing	More	Count	4	0	4
		% within O9.20_12.20_Throwing	100.0%	0.0%	100.0%
	Same	Count	9	0	9
		% within O9.20_12.20_Throwing	100.0%	0.0%	100.0%
	Somewhat More	Count	4	1	5
		% within O9.20_12.20_Throwing	80.0%	20.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Throwing	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.753[a]	2	.252	.500
Likelihood Ratio	2.720	2	.257	.500
Fisher-Freeman-Halton Exact Test	2.479			.500
N of Valid Cases	18			

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .22.

September 2020 - December 2020 Fielding x Travel Concerns Crosstabulation

O9.20_12.20_Fielding * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O9.20_12.20_Fielding	Less	Count	1	0	1
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
	More	Count	6	0	6
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
	Same	Count	6	1	7
		% within O9.20_12.20_Fielding	85.7%	14.3%	100.0%
	Somewhat Less	Count	1	0	1
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
	Somewhat More	Count	3	0	3
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Fielding	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.664[a]	4	.797	1.000
Likelihood Ratio	1.983	4	.739	1.000
Fisher-Freeman-Halton Exact Test	4.382			1.000
N of Valid Cases	18			

a. 8 cells (80.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 - December 2020 Batting x Travel Concerns Crosstabulation

O9.20_12.20_Batting * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O9.20_12.20_Batting	Less	Count	2	0	2
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
	More	Count	5	0	5
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
	Same	Count	8	1	9
		% within O9.20_12.20_Batting	88.9%	11.1%	100.0%
	Somewhat Less	Count	1	0	1
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Batting	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.059[a]	4	.901	1.000
Likelihood Ratio	1.445	4	.836	1.000
Fisher-Freeman-Halton Exact Test	4.215			1.000
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 – December 2020 CV Training x Locker Room Concerns Crosstabulation

O9.20_12.20_CV_Training * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O9.20_12.20_CV_Training	Less	Count	1	0	1
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	Same	Count	7	1	8
		% within O9.20_12.20_CV_Training	87.5%	12.5%	100.0%
	Somewhat Less	Count	3	0	3
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	4	0	4
		% within O9.20_12.20_CV_Training	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_CV_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.324[a]	4	.857	1.000
Likelihood Ratio	1.696	4	.791	1.000
Fisher-Freeman-Halton Exact Test	3.693			1.000
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 – December 2020 Weight Training x Locker Room Concerns Crosstabulation

O9.20_12.20_Weight_Training * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O9.20_12.20_Weight_Training	Less	Count	1	0	1
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	Same	Count	7	0	7
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat Less	Count	4	0	4
		% within O9.20_12.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	3	1	4
		% within O9.20_12.20_Weight_Training	75.0%	25.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Weight_Training	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.706[a]	4	.447	.611
Likelihood Ratio	3.225	4	.521	.611
Fisher-Freeman-Halton Exact Test	4.925			.611
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 - December 2020 Throwing x Locker Room Concerns Crosstabulation

O9.20_12.20_Throwing * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O9.20_12.20_Throwing	More	Count	3	1	4
		% within O9.20_12.20_Throwing	75.0%	25.0%	100.0%
	Same	Count	9	0	9
		% within O9.20_12.20_Throwing	100.0%	0.0%	100.0%
	Somewhat More	Count	5	0	5
		% within O9.20_12.20_Throwing	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Throwing	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.706[a]	2	.157	.222
Likelihood Ratio	3.225	2	.199	.222
Fisher-Freeman-Halton Exact Test	2.925			.222
N of Valid Cases	18			

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .22.

September 2020 – December 2020 Fielding x Locker Room Concerns Crosstabulation

O9.20_12.20_Fielding * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O9.20_12.20_Fielding	Less	Count	1	0	1
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
	More	Count	5	1	6
		% within O9.20_12.20_Fielding	83.3%	16.7%	100.0%
	Same	Count	7	0	7
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
	Somewhat More	Count	3	0	3
		% within O9.20_12.20_Fielding	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Fielding	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.118[a]	4	.714	.611
Likelihood Ratio	2.317	4	.678	.611
Fisher-Freeman-Halton Exact Test	4.690			.611
N of Valid Cases	18			

a. 8 cells (80.0%) have expected count less than 5. The minimum expected count is .06.

September 2020 – December 2020 Batting x Locker Room Concerns

O9.20_12.20_Batting * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O9.20_12.20_Batting	Less	Count	2	0	2
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
	More	Count	4	1	5
		% within O9.20_12.20_Batting	80.0%	20.0%	100.0%
	Same	Count	9	0	9
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within O9.20_12.20_Batting	100.0%	0.0%	100.0%
Total		Count	17	1	18
		% within O9.20_12.20_Batting	94.4%	5.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.753[a]	4	.600	.500
Likelihood Ratio	2.720	4	.606	.500
Fisher-Freeman-Halton Exact Test	5.391			.500
N of Valid Cases	18			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

April 2020 - August 2020 CV Training x Anxiety

O4.20_8.20_CV_Training * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_CV_Training	Less	Count	0	1	1	2
		% within O4.20_8.20_CV_Training	0.0%	50.0%	50.0%	100.0%
	More	Count	0	0	1	1
		% within O4.20_8.20_CV_Training	0.0%	0.0%	100.0%	100.0%
	Same	Count	2	4	3	9
		% within O4.20_8.20_CV_Training	22.2%	44.4%	33.3%	100.0%
	Somewhat More	Count	0	2	2	4
		% within O4.20_8.20_CV_Training	0.0%	50.0%	50.0%	100.0%
Total		Count	2	7	7	16
		% within O4.20_8.20_CV_Training	12.5%	43.8%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.048[a]	6	.803	.868
Likelihood Ratio	4.052	6	.670	.868
Fisher-Freeman-Halton Exact Test	3.772			1.000
N of Valid Cases	16			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Weight Training x Anxiety Crosstabulation

O4._8.20_Weight_Training * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O4._8.20_Weight_Training	Less	Count	0	1	1	2
		% within O4._8.20_Weight_Training	0.0%	50.0%	50.0%	100.0%
	More	Count	0	0	2	2
		% within O4._8.20_Weight_Training	0.0%	0.0%	100.0%	100.0%
	Same	Count	1	4	2	7
		% within O4._8.20_Weight_Training	14.3%	57.1%	28.6%	100.0%
	Somewhat Less	Count	1	0	1	2
		% within O4._8.20_Weight_Training	50.0%	0.0%	50.0%	100.0%
	Somewhat More	Count	0	2	1	3
		% within O4._8.20_Weight_Training	0.0%	66.7%	33.3%	100.0%
Total		Count	2	7	7	16
		% within O4._8.20_Weight_Training	12.5%	43.8%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.483[a]	8	.486	.647
Likelihood Ratio	8.721	8	.366	.666
Fisher-Freeman-Halton Exact Test	7.104			.666
N of Valid Cases	16			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

April 2020 – August 2020 Throwing x Anxiety Crosstabulation

O4.20_8.20_Throwing * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_Throwing	Less	Count	0	0	1	1
		% within O4.20_8.20_Throwing	0.0%	0.0%	100.0%	100.0%
	More	Count	1	2	2	5
		% within O4.20_8.20_Throwing	20.0%	40.0%	40.0%	100.0%
	Same	Count	0	5	3	8
		% within O4.20_8.20_Throwing	0.0%	62.5%	37.5%	100.0%
	Somewhat More	Count	1	0	1	2
		% within O4.20_8.20_Throwing	50.0%	0.0%	50.0%	100.0%
Total		Count	2	7	7	16
		% within O4.20_8.20_Throwing	12.5%	43.8%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	6.400[a]	6	.380	.451
Likelihood Ratio	7.558	6	.272	.409
Fisher-Freeman-Halton Exact Test	6.570			.368
N of Valid Cases	16			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Fielding x Anxiety Crosstabulation

O4.20_8.20_Fielding * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_Fielding	Less	Count	0	1	2	3
		% within O4.20_8.20_Fielding	0.0%	33.3%	66.7%	100.0%
	More	Count	1	1	1	3
		% within O4.20_8.20_Fielding	33.3%	33.3%	33.3%	100.0%
	Same	Count	1	3	4	8
		% within O4.20_8.20_Fielding	12.5%	37.5%	50.0%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O4.20_8.20_Fielding	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	1	0	1
		% within O4.20_8.20_Fielding	0.0%	100.0%	0.0%	100.0%
Total		Count	2	7	7	16
		% within O4.20_8.20_Fielding	12.5%	43.8%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.714[a]	8	.788	1.000
Likelihood Ratio	5.465	8	.707	1.000
Fisher-Freeman-Halton Exact Test	6.026			1.000
N of Valid Cases	16			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Batting x Anxiety Crosstabulation

O4.20_8.20_Batting * Anxiety Crosstabulation

			Anxiety			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_Batting	Less	Count	0	1	3	4
		% within O4.20_8.20_Batting	0.0%	25.0%	75.0%	100.0%
	More	Count	1	2	1	4
		% within O4.20_8.20_Batting	25.0%	50.0%	25.0%	100.0%
	Same	Count	1	3	3	7
		% within O4.20_8.20_Batting	14.3%	42.9%	42.9%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O4.20_8.20_Batting	0.0%	100.0%	0.0%	100.0%
Total		Count	2	7	7	16
		% within O4.20_8.20_Batting	12.5%	43.8%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.878[a]	6	.693	.829
Likelihood Ratio	4.589	6	.598	.829
Fisher-Freeman-Halton Exact Test	4.510			.792
N of Valid Cases	16			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 CV Training x Depression Crosstabulation

O4.20_8.20_CV_Training * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_CV_Training	Less	Count	1	1	0	2
		% within O4.20_8.20_CV_Training	50.0%	50.0%	0.0%	100.0%
	More	Count	0	1	0	1
		% within O4.20_8.20_CV_Training	0.0%	100.0%	0.0%	100.0%
	Same	Count	1	5	3	9
		% within O4.20_8.20_CV_Training	11.1%	55.6%	33.3%	100.0%
	Somewhat More	Count	0	3	1	4
		% within O4.20_8.20_CV_Training	0.0%	75.0%	25.0%	100.0%
Total		Count	2	10	4	16
		% within O4.20_8.20_CV_Training	12.5%	62.5%	25.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.333[a]	6	.632	.710
Likelihood Ratio	4.673	6	.586	.849
Fisher-Freeman-Halton Exact Test	4.560			.769
N of Valid Cases	16			

a. 11 cells (91.7%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Weight Training x Depression Crosstabulation

O4._8.20_Weight_Training * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O4._8.20_Weight_Training	Less	Count	0	2	0	2
		% within O4._8.20_Weight_Training	0.0%	100.0%	0.0%	100.0%
	More	Count	1	1	0	2
		% within O4._8.20_Weight_Training	50.0%	50.0%	0.0%	100.0%
	Same	Count	1	4	2	7
		% within O4._8.20_Weight_Training	14.3%	57.1%	28.6%	100.0%
	Somewhat Less	Count	0	0	2	2
		% within O4._8.20_Weight_Training	0.0%	0.0%	100.0%	100.0%
	Somewhat More	Count	0	3	0	3
		% within O4._8.20_Weight_Training	0.0%	100.0%	0.0%	100.0%
Total		Count	2	10	4	16
		% within O4._8.20_Weight_Training	12.5%	62.5%	25.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	11.886[a]	8	.156	.139
Likelihood Ratio	12.656	8	.124	.190
Fisher-Freeman-Halton Exact Test	9.035			.242
N of Valid Cases	16			

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

April 2020 – August 2020 Throwing x Depression Crosstabulation

O4.20_8.20_Throwing * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_Throwing	Less	Count	0	0	1	1
		% within O4.20_8.20_Throwing	0.0%	0.0%	100.0%	100.0%
	More	Count	0	3	2	5
		% within O4.20_8.20_Throwing	0.0%	60.0%	40.0%	100.0%
	Same	Count	1	6	1	8
		% within O4.20_8.20_Throwing	12.5%	75.0%	12.5%	100.0%
	Somewhat More	Count	1	1	0	2
		% within O4.20_8.20_Throwing	50.0%	50.0%	0.0%	100.0%
Total		Count	2	10	4	16
		% within O4.20_8.20_Throwing	12.5%	62.5%	25.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.580[a]	6	.271	.330
Likelihood Ratio	7.536	6	.274	.437
Fisher-Freeman-Halton Exact Test	6.911			.346
N of Valid Cases	16			

a. 11 cells (91.7%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Fielding x Depression Crosstabulation

O4.20_8.20_Fielding * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_Fielding	Less	Count	0	2	1	3
		% within O4.20_8.20_Fielding	0.0%	66.7%	33.3%	100.0%
	More	Count	0	2	1	3
		% within O4.20_8.20_Fielding	0.0%	66.7%	33.3%	100.0%
	Same	Count	2	4	2	8
		% within O4.20_8.20_Fielding	25.0%	50.0%	25.0%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O4.20_8.20_Fielding	0.0%	100.0%	0.0%	100.0%
	Somewhat More	Count	0	1	0	1
		% within O4.20_8.20_Fielding	0.0%	100.0%	0.0%	100.0%
Total		Count	2	10	4	16
		% within O4.20_8.20_Fielding	12.5%	62.5%	25.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.333[a]	8	.912	.950
Likelihood Ratio	4.534	8	.806	.950
Fisher-Freeman-Halton Exact Test	4.949			1.000
N of Valid Cases	16			

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Batting x Depression Crosstabulation

O4.20_8.20_Batting * Depression Crosstabulation

			Depression			
			>Half of the days	Never	Some of the days	Total
O4.20_8.20_Batting	Less	Count	0	2	2	4
		% within O4.20_8.20_Batting	0.0%	50.0%	50.0%	100.0%
	More	Count	0	3	1	4
		% within O4.20_8.20_Batting	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	4	1	7
		% within O4.20_8.20_Batting	28.6%	57.1%	14.3%	100.0%
	Somewhat Less	Count	0	1	0	1
		% within O4.20_8.20_Batting	0.0%	100.0%	0.0%	100.0%
Total		Count	2	10	4	16
		% within O4.20_8.20_Batting	12.5%	62.5%	25.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.600[a]	6	.596	.700
Likelihood Ratio	5.385	6	.496	.745
Fisher-Freeman-Halton Exact Test	4.617			.813
N of Valid Cases	16			

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 CV Training x Sleep Crosstabulation

O4.20_8.20_CV_Training * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4.20_8.20_CV_Training	Less	Count	0	0	0	2	2
		% within O4.20_8.20_CV_Training	0.0%	0.0%	0.0%	100.0%	100.0%
	More	Count	1	0	0	0	1
		% within O4.20_8.20_CV_Training	100.0%	0.0%	0.0%	0.0%	100.0%
	Same	Count	1	1	4	3	9
		% within O4.20_8.20_CV_Training	11.1%	11.1%	44.4%	33.3%	100.0%
	Somewhat More	Count	0	1	1	2	4
		% within O4.20_8.20_CV_Training	0.0%	25.0%	25.0%	50.0%	100.0%
Total		Count	2	2	5	7	16
		% within O4.20_8.20_CV_Training	12.5%	12.5%	31.3%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	11.410[a]	9	.249	.292
Likelihood Ratio	9.655	9	.379	.564
Fisher-Freeman-Halton Exact Test	8.705			.577
N of Valid Cases	16			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Weight Training x Sleep Crosstabulation

O4._8.20_Weight_Training * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4._8.20_Weight_Training	Less	Count	1	0	0	1	2
		% within O4._8.20_Weight_Training	50.0%	0.0%	0.0%	50.0%	100.0%
	More	Count	0	0	0	2	2
		% within O4._8.20_Weight_Training	0.0%	0.0%	0.0%	100.0%	100.0%
	Same	Count	1	0	3	3	7
		% within O4._8.20_Weight_Training	14.3%	0.0%	42.9%	42.9%	100.0%
	Somewhat Less	Count	0	2	0	0	2
		% within O4._8.20_Weight_Training	0.0%	100.0%	0.0%	0.0%	100.0%
	Somewhat More	Count	0	0	2	1	3
		% within O4._8.20_Weight_Training	0.0%	0.0%	66.7%	33.3%	100.0%
Total		Count	2	2	5	7	16
		% within O4._8.20_Weight_Training	12.5%	12.5%	31.3%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	22.939[a]	12	.028	.029
Likelihood Ratio	19.189	12	.084	.104
Fisher-Freeman-Halton Exact Test	13.965			.134
N of Valid Cases	16			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

April 2020 – August 2020 Fielding x Sleep Crosstabulation

O4.20_8.20_Fielding * Sleep Crosstabulation

			Sleep				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4.20_8.20_Fielding	Less	Count	1	0	1	1	3
		% within O4.20_8.20_Fielding	33.3%	0.0%	33.3%	33.3%	100.0%
	More	Count	0	1	2	0	3
		% within O4.20_8.20_Fielding	0.0%	33.3%	66.7%	0.0%	100.0%
	Same	Count	0	1	1	6	8
		% within O4.20_8.20_Fielding	0.0%	12.5%	12.5%	75.0%	100.0%
	Somewhat Less	Count	1	0	0	0	1
		% within O4.20_8.20_Fielding	100.0%	0.0%	0.0%	0.0%	100.0%
	Somewhat More	Count	0	0	1	0	1
		% within O4.20_8.20_Fielding	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	2	5	7	16
		% within O4.20_8.20_Fielding	12.5%	12.5%	31.3%	43.8%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	18.314[a]	12	.106	.097
Likelihood Ratio	17.660	12	.126	.112
Fisher-Freeman-Halton Exact Test	16.142			.055
N of Valid Cases	16			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 CV Training x Energy Level Concerns Crosstabulation

O4.20_8.20_CV_Training * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4.20_8.20_CV_Training	Less	Count	1	0	1	0	2
		% within O4.20_8.20_CV_Training	50.0%	0.0%	50.0%	0.0%	100.0%
	More	Count	0	0	0	1	1
		% within O4.20_8.20_CV_Training	0.0%	0.0%	0.0%	100.0%	100.0%
	Same	Count	0	1	4	4	9
		% within O4.20_8.20_CV_Training	0.0%	11.1%	44.4%	44.4%	100.0%
	Somewhat More	Count	1	1	2	0	4
		% within O4.20_8.20_CV_Training	25.0%	25.0%	50.0%	0.0%	100.0%
Total		Count	2	2	7	5	16
		% within O4.20_8.20_CV_Training	12.5%	12.5%	43.8%	31.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	9.270[a]	9	.413	.469
Likelihood Ratio	11.381	9	.251	.336
Fisher-Freeman-Halton Exact Test	10.091			.337
N of Valid Cases	16			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Weight Training x Energy Level Concerns Crosstabulation

O4._8.20_Weight_Training * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4._8. 20_Weight_Training	Less	Count	0	0	1	1	2
		% within O4._8. 20_Weight_Training	0.0%	0.0%	50.0%	50.0%	100.0%
	More	Count	2	0	0	0	2
		% within O4._8. 20_Weight_Training	100.0%	0.0%	0.0%	0.0%	100.0%
	Same	Count	0	1	3	3	7
		% within O4._8. 20_Weight_Training	0.0%	14.3%	42.9%	42.9%	100.0%
	Somewhat Less	Count	0	1	0	1	2
		% within O4._8. 20_Weight_Training	0.0%	50.0%	0.0%	50.0%	100.0%
	Somewhat More	Count	0	0	3	0	3
		% within O4._8. 20_Weight_Training	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	2	7	5	16
		% within O4._8. 20_Weight_Training	12.5%	12.5%	43.8%	31.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	23.396[a]	12	.025	.025
Likelihood Ratio	20.236	12	.063	.048
Fisher-Freeman-Halton Exact Test	14.776			.069
N of Valid Cases	16			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .25.

April 2020 – August 2020 Fielding x Energy Level Concerns Crosstabulation

O4.20_8.20_Fielding * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4.20_8.20_Fielding	Less	Count	0	0	2	1	3
		% within O4.20_8.20_Fielding	0.0%	0.0%	66.7%	33.3%	100.0%
	More	Count	0	0	2	1	3
		% within O4.20_8.20_Fielding	0.0%	0.0%	66.7%	33.3%	100.0%
	Same	Count	2	2	2	2	8
		% within O4.20_8.20_Fielding	25.0%	25.0%	25.0%	25.0%	100.0%
	Somewhat Less	Count	0	0	0	1	1
		% within O4.20_8.20_Fielding	0.0%	0.0%	0.0%	100.0%	100.0%
	Somewhat More	Count	0	0	1	0	1
		% within O4.20_8.20_Fielding	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	2	7	5	16
		% within O4.20_8.20_Fielding	12.5%	12.5%	43.8%	31.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	8.457[a]	12	.748	.851
Likelihood Ratio	10.022	12	.614	.857
Fisher-Freeman-Halton Exact Test	9.915			.921
N of Valid Cases	16			

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Batting x Energy Level Concerns Crosstabulation

O4.20_8.20_Batting * Tired_Little_to_No_Energy Crosstabulation

			Tired_Little_to_No_Energy				
			>Half of the days	Nearly everyday	Never	Some of the days	Total
O4.20_8.20_Batting	Less	Count	0	1	2	1	4
		% within O4.20_8.20_Batting	0.0%	25.0%	50.0%	25.0%	100.0%
	More	Count	0	0	3	1	4
		% within O4.20_8.20_Batting	0.0%	0.0%	75.0%	25.0%	100.0%
	Same	Count	2	1	2	2	7
		% within O4.20_8.20_Batting	28.6%	14.3%	28.6%	28.6%	100.0%
	Somewhat Less	Count	0	0	0	1	1
		% within O4.20_8.20_Batting	0.0%	0.0%	0.0%	100.0%	100.0%
Total		Count	2	2	7	5	16
		% within O4.20_8.20_Batting	12.5%	12.5%	43.8%	31.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.078[a]	9	.629	.686
Likelihood Ratio	8.099	9	.524	.816
Fisher-Freeman-Halton Exact Test	7.379			.872
N of Valid Cases	16			

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 CV Training x Travel Concerns Crosstabulation

O4.20_8.20_CV_Training * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O4.20_8.20_CV_Training	Less	Count	2	0	2
		% within O4.20_8.20_CV_Training	100.0%	0.0%	100.0%
	More	Count	1	0	1
		% within O4.20_8.20_CV_Training	100.0%	0.0%	100.0%
	Same	Count	8	1	9
		% within O4.20_8.20_CV_Training	88.9%	11.1%	100.0%
	Somewhat More	Count	4	0	4
		% within O4.20_8.20_CV_Training	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_CV_Training	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.830[a]	3	.842	1.000
Likelihood Ratio	1.202	3	.752	1.000
Fisher-Freeman-Halton Exact Test	2.644			1.000
N of Valid Cases	16			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

April 2020 – August 2020 Weight Training x Travel Concerns Crosstabulation

O4._8.20_Weight_Training * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O4._8.20_Weight_Training	Less	Count	2	0	2
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	Same	Count	6	1	7
		% within O4._8.20_Weight_Training	85.7%	14.3%	100.0%
	Somewhat Less	Count	2	0	2
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	3	0	3
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4._8.20_Weight_Training	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.371[a]	4	.849	1.000
Likelihood Ratio	1.740	4	.783	1.000
Fisher-Freeman-Halton Exact Test	3.299			1.000
N of Valid Cases	16			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Throwing x Travel Concerns Crosstabulation

O4.20_8.20_Throwing * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O4.20_8.20_Throwing	Less	Count	1	0	1
		% within O4.20_8.20_Throwing	100.0%	0.0%	100.0%
	More	Count	5	0	5
		% within O4.20_8.20_Throwing	100.0%	0.0%	100.0%
	Same	Count	8	0	8
		% within O4.20_8.20_Throwing	100.0%	0.0%	100.0%
	Somewhat More	Count	1	1	2
		% within O4.20_8.20_Throwing	50.0%	50.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_Throwing	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	7.467[a]	3	.058	.187
Likelihood Ratio	4.709	3	.194	.187
Fisher-Freeman-Halton Exact Test	5.547			.187
N of Valid Cases	16			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

April 2020 – August 2020 Fielding x Travel Concerns Crosstabulation

O4.20_8.20_Fielding * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O4.20_8.20_Fielding	Less	Count	3	0	3
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
	More	Count	3	0	3
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
	Same	Count	7	1	8
		% within O4.20_8.20_Fielding	87.5%	12.5%	100.0%
	Somewhat Less	Count	1	0	1
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_Fielding	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.067[a]	4	.900	1.000
Likelihood Ratio	1.453	4	.835	1.000
Fisher-Freeman-Halton Exact Test	3.879			1.000
N of Valid Cases	16			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

April 2020 – August 2020 Batting x Travel Concerns Crosstabulation

O4.20_8.20_Batting * Travel Crosstabulation

			Travel		
			Never	Some of the days	Total
O4.20_8.20_Batting	Less	Count	4	0	4
		% within O4.20_8.20_Batting	100.0%	0.0%	100.0%
	More	Count	4	0	4
		% within O4.20_8.20_Batting	100.0%	0.0%	100.0%
	Same	Count	6	1	7
		% within O4.20_8.20_Batting	85.7%	14.3%	100.0%
	Somewhat Less	Count	1	0	1
		% within O4.20_8.20_Batting	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_Batting	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	1.371[a]	3	.712	1.000
Likelihood Ratio	1.740	3	.628	1.000
Fisher-Freeman-Halton Exact Test	2.705			1.000
N of Valid Cases	16			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

April 2020 - August 2020 CV Training x Locker Room Concerns Crosstabulation

O4.20_8.20_CV_Training * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O4.20_8.20_CV_Training	Less	Count	2	0	2
		% within O4.20_8.20_CV_Training	100.0%	0.0%	100.0%
	More	Count	1	0	1
		% within O4.20_8.20_CV_Training	100.0%	0.0%	100.0%
	Same	Count	8	1	9
		% within O4.20_8.20_CV_Training	88.9%	11.1%	100.0%
	Somewhat More	Count	4	0	4
		% within O4.20_8.20_CV_Training	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_CV_Training	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	.830[a]	3	.842	1.000
Likelihood Ratio	1.202	3	.752	1.000
Fisher-Freeman-Halton Exact Test	2.644			1.000
N of Valid Cases	16			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

April 2020 – August 2020 Weight Training x Locker Room Concerns Crosstabulation

O4._8.20_Weight_Training * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O4._8.20_Weight_Training	Less	Count	2	0	2
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	More	Count	2	0	2
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	Same	Count	7	0	7
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat Less	Count	2	0	2
		% within O4._8.20_Weight_Training	100.0%	0.0%	100.0%
	Somewhat More	Count	2	1	3
		% within O4._8.20_Weight_Training	66.7%	33.3%	100.0%
Total		Count	15	1	16
		% within O4._8.20_Weight_Training	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.622[a]	4	.328	.562
Likelihood Ratio	3.662	4	.454	.562
Fisher-Freeman-Halton Exact Test	4.994			.562
N of Valid Cases	16			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .13.

April 2020 – August 2020 Throwing x Locker Room Concerns Crosstabulation

O4.20_8.20_Throwing * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O4.20_8.20_Throwing	Less	Count	1	0	1
		% within O4.20_8.20_Throwing	100.0%	0.0%	100.0%
	More	Count	4	1	5
		% within O4.20_8.20_Throwing	80.0%	20.0%	100.0%
	Same	Count	8	0	8
		% within O4.20_8.20_Throwing	100.0%	0.0%	100.0%
	Somewhat More	Count	2	0	2
		% within O4.20_8.20_Throwing	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_Throwing	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	2.347[a]	3	.504	.500
Likelihood Ratio	2.477	3	.479	.500
Fisher-Freeman-Halton Exact Test	3.715			.500
N of Valid Cases	16			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

April 2020 – August 2020 Fielding x Locker Room Concerns Crosstabulation

O4.20_8.20_Fielding * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O4.20_8.20_Fielding	Less	Count	3	0	3
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
	More	Count	2	1	3
		% within O4.20_8.20_Fielding	66.7%	33.3%	100.0%
	Same	Count	8	0	8
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
	Somewhat More	Count	1	0	1
		% within O4.20_8.20_Fielding	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_Fielding	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	4.622[a]	4	.328	.500
Likelihood Ratio	3.662	4	.454	.500
Fisher-Freeman-Halton Exact Test	5.841			.500
N of Valid Cases	16			

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .06.

April 2020 – August 2020 Batting x Locker Room Concerns Crosstabulation

O4.20_8.20_Batting * Locker_Room_Concerns Crosstabulation

			Locker_Room_Concerns		
			Never	Some of the days	Total
O4.20_8.20_Batting	Less	Count	4	0	4
		% within O4.20_8.20_Batting	100.0%	0.0%	100.0%
	More	Count	3	1	4
		% within O4.20_8.20_Batting	75.0%	25.0%	100.0%
	Same	Count	7	0	7
		% within O4.20_8.20_Batting	100.0%	0.0%	100.0%
	Somewhat Less	Count	1	0	1
		% within O4.20_8.20_Batting	100.0%	0.0%	100.0%
Total		Count	15	1	16
		% within O4.20_8.20_Batting	93.8%	6.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	3.200[a]	3	.362	.562
Likelihood Ratio	2.983	3	.394	.562
Fisher-Freeman-Halton Exact Test	3.824			.562
N of Valid Cases	16			

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .06.

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