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Maintaining Quality of Life for Post-Acute Care Patients Through Stimulating Activities

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ABSTRACT

The overall goal of this study is to discover what factors improve the overall quality of life and happiness for post-acute care patients, and to use the results to help patients at Citadel implement these factors in their daily lives. After volunteering at Citadel for several months, the author noticed that many patients were unsatisfied and was inspired to determine if participation in stimulating activities allowed patients to have a better quality of life. The initial hypothesis was that physical activity, cognitive stimulation, and interactive socialization improve the quality of life for Citadel patients. This is a correlational research study with a survey-based methodology presented in an interview format. Citadel patients were asked a series of IRB approved questions regarding their daily activities and overall happiness. The data was then analyzed to identify correlations and patterns highlighting the relationship between participation in stimulating activities and quality of life. The value of this study lies in further improving the quality of life for post-acute care patients and implementing activities for patients in post-acute facilities to boost patients' morale. There are also no previous studies conducted about this specific topic (relating activities to quality of life in a post-acute care setting), as validated by the Arizona State University research librarians, so it brings a new aspect to the healthcare research community. This research can be used by future patients going into post-acute care to determine how they can have the best experience while receiving care.

Introduction

Post-Acute care is an essential component of healthcare that allows patients to receive care in a more independent environment while promoting the functional recovery of older adults (typically over 50), preventing unnecessary hospital readmission, and avoiding premature admission to a long-term care facility (Wang et al., 2019). However, many residents receiving post-acute care feel a disparity in their quality of life and do not receive as much stimulation as they would if they were living independently (Wang et al., 2019). In post-acute care facilities, this creates a sense of urgency to implement different factors into their care to provide patients with a greater quality of life. Unfortunately, it is often unclear what factors and activities promote patients' quality of life and overall happiness.

Typically, older adults who have recently been discharged from a general hospital but still need professional care to remain healthy and regain function are sent to a post-acute care facility. Post-acute patients typically "are more likely to have various comorbidities and disabilities and typically require a longer time to recover from acute illness" (Moore et al., 2007). Because patients typically remain in post-acute care for a significant amount of time, these facilities are not only responsible for maintaining patients' physical health, but mental as well.

Post-acute care is significant because these particular care facilities focus on helping patients to regain functional abilities. However, personal needs and happiness are often ignored. Because of this, many care facilities have implemented activity departments that aim to keep patients engaged. However, "Despite these efforts, few studies have examined the efficacy of these activities on increasing quality-of-life measures"

(Moore et al., 2007). Because of the gap in studies conducted on how activities and other stimulating factors influence post-acute patients' quality of life, this study seeks an answer to the question, "What are the factors and activities influencing the quality of life for long-term Citadel Post-Acute Care patients?"

Literature Review

Although there are no studies conducted on how stimulating activities affect the quality of life of post-acute care patients, studies showing how activities in other care centers that are similar to post-acute centers affect patients were located. These findings allow for a working hypothesis by comparing findings from nursing homes, skilled nursing facilities, independent living, etc., and applying them to possible outcomes for post-acute care. The initial hypothesis was that Long-term Citadel Post-Acute care patients who regularly participate in stimulating activities have a better quality of life than patients who do not.

Search Strategies

Sources were found using several databases that provide scholarly sources provided by the Arizona State University Research Library. This ensured credibility and refined results. Keywords included: Post-Acute Care, stimulation activities, activities in care centers, cognitive stimulation, interactive socialization, physical activity, and quality of life.

Significance of Post-Acute Care

Research shows that post-acute care is vital for older adults as it allows them to regain functional abilities after their discharge from a general hospital. Tailored care plans are essential for post-acute care as well as assessments to thoroughly evaluate patients' needs (Wang et al., 2019). This specific study focuses on post-acute care in Taiwan, The United Kingdom, and the United States of America to compare the different modes of post-acute care and analyze what works best for patients. Results showed that the United Kingdom uses community-based care, whereas the United States uses advanced nursing facilities.

In a study conducted in Romania, the focus was set on the importance of care providers and social service workers and how their actions affect older patients' quality of life. Results showed that there is a large significance of social service workers especially on more dependent patients. The study employs a qualitative methodology, utilizing focus groups with care providers. Ultimately, the study highlights the importance of quality social service and care providers in maintaining the quality of life for older patients. There was also an emphasis on the disparities in funding, further exemplifying the need for proper and well-developed care (Ghenta 2022).

Stimulating Activities

A key component of this research is the stimulating activities presented at Citadel. Citadel activities department offers a wide variety of activities such as games (uno, skip bo, bingo, etc.), creative activities (paint by number, jewel by number, drawing, etc.), outings (walmart, bowling, restaurants, Arizona State Fair, etc.), events (ice-cream parties, barbeques, fundraisers, etc.), and opportunities for physical exercise inside and outside.

One study with a focus on activities showed that the elderly population often face challenges with cognitive decline and require help in long term care facilities. It has been found that stimulating activities, such as bingo (as described in this study) can help to reduce the cognitive decline in these patients. Conversely, residents in these facilities who do not participate in these stimulating activities require more help from care

workers, which can be difficult especially with the healthcare worker shortage. This study then employed assisted robots that help residents with cognitive functions. These robots run bingo games for residents to improve their cognitive function (Louie 2013). However, a varying perspective can be seen in a study where thirty one nursing home residents with dementia participated in interviews where it was largely found that residents felt like there was limited opportunity for activities and there was a lack of accommodation present (Tak et al., 2014).

For this study, it was decided to determine whether a patient is active in participating in stimulating activities by dividing "stimulating activities" into three major categories that encompass the full spectrum of stimulating activities: Cognitive Stimulation, Interactive Socialization, and Physical Activity.

Cognitive Stimulation

Although there are limited studies conducted about quality of life in post-acute care, conclusions drawn from studies that hold findings about cognitive stimulation for patients in long-term care facilities can be translated to quality of life in post-acute care.

One specific study conducted with cognitive stimulation in long-term care focused on looking at the extent to which cognitive stimulation helped nursing home patients with dementia. Participants in this study participated in an 8-week cognitive stimulation program and results were measured in cognitive function, quality of life, behavior, and daily activities. Results ultimately showed that the cognitive stimulation program overall improved the lives of these patients (Middelstädt 2016).

Another study that looks into effects of cognitive stimulation on long-term care patients involved using volunteers to help patients implement a cognitive stimulation program in long- term care homes. The study describes how professional cognitive stimulation for patients is effective yet expensive and in many cases, inaccessible. The study involved a control group and a cognitive stimulation group. The group that received cognitive stimulation showed improved communication and memory, further proving the benefits of cognitive stimulation. Results showed that these volunteer programs are able to help maintain and improve cognitive ability in long-term care patients (Zon 2016).

Ultimately, cognitive stimulation is proven to have many benefits, hence why it was included as a component to determine the level of participation in stimulating activities. At Citadel, cognitive stimulation commonly takes form in puzzles, art (such as paint by number, gem by number, coloring pages, etc.), and games (such as UNO, Rummikub, Bingo, etc.). When interviewing patients, it was essential to analyze whether or not patients participated in these cognitive stimulation activities in order to see this component of participation in stimulating activities.

Interactive Socialization

A key component of stimulating activities that is proven to impact quality of life is socialization. It is increasingly important to ensure that people in long-term care facilities are socializing properly, seeing as "There is plenty of scientific evidence to support the fact that socialization in nursing homes is critical for the livelihood and well-being of residents" (Bryant 2022). Studies such as one performed by the University of Texas at Austin have found that the people who were more socially interactive were more likely to be healthy physically and mentally as their emotional and social well being were found to be better as a result of socialization" (Bryant 2022). Therefore, not only does socialization impact a patients mental well being, but also their physical health, further emphasizing the importance of including socialization into the lives of long-term care patients, specifically long-term post-acute care patients as seen in this study.

While there are many benefits stemming from socialization such as improved physical and mental well-being, there are also severe negative consequences from not socializing enough. Particularly in elderly patients. Cardiovascular conditions, depression, anxiety, insomnia, weight gain, weakened immune systems,

and neurological diseases are all possible results of elderly patients not having enough interactive socialization (Bryant 2022).

It is also important to recognize the limitations of interactive socialization. Factors such as cognitive impairment can make it extremely difficult for anyone, let alone long-term post-acute care patients, to socialize properly with others (Hawkins et al. 2012). However, when in a care facility, even those with cognitive impairments are able to socialize, although it might look differently. Patients without cognitive impairments are able to socialize with other patients, residents, and caregivers alike whereas those with cognitive impairments may focus their socialization on family or medical professionals, physical therapists, occupational therapists, psychologists, and other professionals who understand how to properly socialize with patients that have cognitive impairments. Ultimately, "It is essential that social integration and, subsequently, social bonds develop in order to reinforce a sense of person, confidence, and hope" (Hawkins et al. 2012).

Physical Activity

Alongside cognitive stimulation and interactive socialization, physical activity is another significant component in the realm of stimulating activities. Typically patients who are placed in post-acute care have loss of certain functional abilities. These can range from "cognitively complex tasks like dialing a telephone and functional tasks requiring gross motor function, such as walking and getting up out of a chair" (Lorenz et al. 2012). Implementing physical activity in the lives of post-acute patients specifically targets improving gross motor function. By participating in more physical activity, patients have the opportunity to achieve a fuller recovery and regain motor function. It can also be said that "while inactivity may increase your risk of health complications and lead to additional muscle loss, staying active can help improve muscle memory, increase strength, and reduce fall risk by up to 40%" (Pannkuk 2024). Therefore, not only does physical activity have many associated benefits, especially for people in post-acute care, but not participating in physical activity can have serious negative effects, potentially leading to a lower quality of life.

Methods

Study Design

This study employed a survey-based methodology in an interview format. When researching possible methods, it was learned that "Interviews may be conducted by phone, computer, or in person and have the benefit of visually identifying the nonverbal response(s) of the interviewee and subsequently being able to clarify the intended question" helping me to decide on employing a survey as an in person interview (Ponto, 2015). It was essential to read the survey questions to the participants as if it were an interview because, due to medical conditions, many patients would be unable to complete the survey on their own. A list of questions were composed using a Google Form asking about what the patients do during the day and then asking them to self-report their overall happiness and satisfaction on a scale from 1-10. The decision was made to use the Google Form application because it was easy to create the questions and answer selections, leave places to write down additional information expressed by each patient, review each patient's responses, and compile the results into graphs and visuals. By doing this, there was the ability to look back on the responses to record what each patient does during the day and if they participate in stimulating activities or not. A total of eight questions were asked regarding participation in stimulating activities, six of which were "yes or no" questions where it was clear that an answer of "yes" showed signs of activity and "no" showed signs of inactivity. These six questions are as follows: "Do you regularly participate in activities such as games, outings, and bingo at Citadel?", "Do you regularly spend time out of bed?", "Do you regularly spend time socializing with other residents or

nurses/cnas?", "Do you regularly spend time outside?", "Do you exercise at least once a week?", and "Have you ever been on an Outing with the activities department? If so, where?". These "yes or no" questions made it very clear that an answer of "yes" implied activity and an answer of "no" implied inactivity. One of the remaining two questions asked "During the day time (8am-5pm), what do you spend most of your time doing?" and although it is not a "yes or no" question, the patient's answer makes it very clear whether they are active or inactive. For example, if they answered "watching television" it was deemed inactive whereas if they answered "socializing" it was deemed active. The other question similar to this was 'Where do you usually go during meal times? i.e. (dining room, bedroom, outside, rec room)". It was deemed that any response other than "bedroom" was considered active. The decision was made to ask these questions because they encompass the full spectrum of stimulating activities including cognitive stimulation, interactive socialization, and physical activity. By asking these questions, I was able to gain a deep understanding of each patient's lifestyle, and use their responses to determine if they are active in stimulating activities or not. The final question of the survey (not one of the eight regarding activity) asked "How would you rate your overall happiness/satisfaction with life at Citadel on a scale from 1 to 10?" Because "quality of life" is fairly subjective, the decision was made to determine it through overall happiness and satisfaction. The only way to determine this is by asking the patient about how they feel, which is a valid method because each patient has their own emotions and gratifications.

There were also additional questions included in the survey such as "Do you have any hobbies? If so, do you regularly participate in them?" which was not included in the 8 questions that determined activity or inactivity because there were only 4 patients that said they had a hobby. It was discovered that even active patients do not have hobbies, and they are still able to participate in many stimulating activities, leading me to exclude this question from the data analysis because it was deemed irrelevant. Another question included in the survey that was not included in the data analysis was "Are there any other activities you regularly participate in that I should know about? If so, what?" It was decided not to include this question in the data analysis because all patients except for 3 answered "no" which did not give me any important data to analyze as this was common between both active and inactive patients, mainly showing that they did not have anything to add to the responses they had previously provided. Additionally, after the patients were asked to self-report their overall happiness and satisfaction on a scale from 1-10, they were asked "If you didn't answer 10 for the previous question, what would make life at Citadel more fulfilling?" This question is not relevant to the research question but it did provide a new perspective on possible reasons other than a lack of activity that made patients unhappy. The responses to this question are as follows: people paying more attention to [patient], friendlier nurses, better food, more visitors, better care, more therapy, for their life to go back to normal, and "to get out of [the center]".

By using an interview approach, data was able to be collected in-person. The interview approach was the best method of surveying the patients because many of them are unable to use the Google Form survey due to medical conditions or do not have appropriate access to technology. This approach allowed me to record their responses on their behalf so that there were no technological obstacles.

Ethical Considerations

My research design was approved by an Institutional Review Board (IRB) in order to ensure there were no ethical liabilities or HIPAA violations within my methodology. An oral consent form was also included in the survey so that each patient would be well informed about the study (see Appendix B: Consent Form).

Participant Selection

Originally, the methodology included interviewing both long-term and short-term post-acute care patients. However, after conducting the interviews, only one short-term patient was accessed due to inaccessibility and medical conditions so the decision was made to exclude that interview from the study and narrow the topic to

only focus on long-term post-acute patients. My expert advisor, [redacted], of the Citadel activities department advised me to make this adjustment as well, seeing as there are several limiting factors surrounding the short-term patients. This decision immensely transformed the research because the short-term patients usually only reside in the center for 2-3 weeks, meaning that this study is more meaningful if it is targeted towards long-term care patients who oftentimes reside at the center for years. It was deemed more accurate to only include the long-term care patients as well because many of the short-term patients have not been at Citadel long enough to collect accurate data about their daily lives. A total of 16 interviews were collected from long-term patients which is an adequate number because every available long-term patient was interviewed and the results are defined enough that 16 interviews were effective in drawing conclusions.

Analysis

Initial Steps

Before the main data analysis process began, baselines were set for both independent and dependent variables. For the independent variable of participation in stimulating activities, the baseline was set halfway at 4, stating that patients that answered "yes" (or some other response indicating activity) to more than 4 of the 8 questions regarding activity were deemed active whereas patients that answered "no" (or some other response indicating inactivity) to more than 4 questions were deemed inactive. For the dependent variable of quality of life, the baseline was set halfway at 5, stating that patients reporting a quality of life greater than 5/10 were satisfied, and patients who reported a rating less than 5/10 were unsatisfied. The decision was made to set the baselines at the halfway point for each variable because it was determined that it was a fair and unbiased way of measuring activity and satisfaction.

Organizing Patient Responses

After interviewing the 16 long-term patients included in this study, I reflected on their responses, which were recorded using the Google Form application. The process began by recording all of the patient's room numbers, which was the only identifying information used in this study. At Citadel, there are four branches of care (100, 200, 300, and 400). Long-term patients reside in the 100 and 200s halls, so all of their bed numbers, as seen in *figure 1*, are in the 100s or 200s, and because all patients share a room with one other patient, they also have either a 1 or a 2 following their number, indicating which side of the room and bed they have. Therefore, a typical bed number may look like: 102-1 or 208-2. Using Google Sheets, each cell was filled with each participant's bed number and then paired with their responses.

Analyzing Survey's Data

Looking at the eight questions regarding participation in stimulating activities, the labels: $p>4$, $p<4$, $p=4$ were created. These essentially state if a patient responses indicate a participation (p) response of "yes" (or some other response indicating activity) to more than four of the eight participation questions ($p>4$), "no" (or some other response indicating inactivity) to more than four of the eight participation questions ($p<4$), or responded evenly between active and inactive responses to the eight questions ($p=4$). I initially went through each of the patient's responses and determined if they were $p>4$, $p<4$, or $p=4$, and then paired it with their bed number in a new cell of the Google Sheet, seen in *figure 1*. Looking at the question asking patients to self-report their overall happiness and life satisfaction, the labels: $s<5$, $s>5$, $s=5$ were created. These labels essentially state how a patient rated their satisfaction (s) on a scale of 1 to 10. $s<5$ being a score of less than five out of ten, $s>5$ being a score

of more than five out of ten, and s=5 being a score of exactly five out of ten. I again went through each patient's response to this question and determined if they were s<5, s>5, or s=5, and paired their label with their bed number in a new cell of the Google Sheet, as seen in *figure 1*.

The Google Sheet was then analyzed to see if there was any correlation between participation in stimulating activities and quality of life. Of the sixteen participants, seven reported being active (p>4), seven reported being inactive (p<4), and two reported scores of exactly four (p=4). Of the sixteen participants, ten reported being satisfied (s>5), five reported being unsatisfied (s<5), and two reported scores of exactly five (s=5). Of the seven active participants (p>4), six reported being satisfied (s>5) and one reported being unsatisfied (s<5). Of the seven inactive participants, four reported being unsatisfied (s<5), two reported being satisfied (s>5), and one reported a score of exactly five (s=5). Of the two participants who reported scores of exactly four (p=4), one reported being satisfied (s>5), and one reported a score of exactly five (s=5).

Additionally, the average self-reported quality of life score for both active and inactive groups were calculated. This was done by adding each patient's quality of life score (out of 10) and then dividing by seven (the number of participants in both active and inactive groups).

Analysis also included looking at which participants reported the minimum and maximum quality of life scores, and which group they belonged to. This consisted of looking at each response, and identifying which ones reported a score of the minimum, 1/10, and the maximum, 10/10.

These three methods of analyzing the collected data were the most appropriate for this study because they correlated patients' responses, identified quantitative results in the form of average scores, and found significant patterns in the data in the form of minimum and maximum quality of life scores.

Results

Results are broken up into three different categories based on the different ways the data was analyzed: correlation between independent and dependent variables, average self-reported quality of life scores for both active and inactive groups, and patterns involving minimum and maximum quality of life scores.

Looking at this data, it is shown that there is a correlation between participation in stimulating activities and quality of life for long-term Citadel Post-Acute Care patients. Because all but one participant who was deemed active reported to be satisfied, it can be inferred that it is likely related to their participation in stimulating activities. Additionally, for the participants that were deemed inactive, all but two reported dissatisfaction or a score of exactly five.

The average self-reported quality of life scores from both active and inactive groups showed even more defined results. The average self-reported quality of life score for the seven active participants was 8/10. The average self-reported quality of life score for the seven inactive participants was 4.143/10. The average self-reported quality of life score for the two participants who responded with a score of exactly four (p=4) was 7.5/10, (however this does not give much insight seeing as there were only two participants who reported participation scores of exactly four). This result is perhaps the most important in informing a new understanding seeing as it holds undeniable evidence that active patients, on average, had a better quality of life than inactive patients, almost doubling the inactive patients' satisfaction score.

In terms of minimum and maximum quality of life scores, the results show that of all sixteen participants, there were two responses of a satisfaction score of the minimum, 1/10. Both responses came from participants in the inactive group. Of the sixteen participants, four responded with a satisfaction score of the maximum, 10/10. Three of these responses came from participants in the active group, and one had a participation score of exactly four. None came from the inactive group.

Patient #	Participation	satisfaction
201-1	p<4	s<5
202-1	p>4	s>5
203-1	p<4	s>5
204-2	p<4	s=5
214-1	p<4	s<5
214-2	p<4	s<5
213-1	p>4	s>5
215-2	p>4	s>5
110-2	p>4	s<5
115-1	p>4	s>5
104-1	p<4	s<5
105-2	p<4	s>5
114-1	p=4	s>5
113-1	p>4	s>5
112-1	p>4	s>5
109-2	p=4	s=5

Figure 1. The data table shows (from left to right) the patient's bed number, and their corresponding participation and satisfaction scores. p>4 being active, p<4 being inactive, p=4 being a score of 4, s<5 being unsatisfied, s>5 being satisfied, and s=5 being a score of 5. Gray boxes represent each patient's bed number, pink boxes represent responses less than the baseline (i.e. p<4, s<5), blue boxes represent responses above the baseline (i.e. p>4, s>5), green boxes represent responses exactly at the baseline (i.e. p=4, s=5).

Patient #	Participation	satisfaction
201-1	p<4	s<5
202-1	p>4	s>5
203-1	p<4	s>5
204-2	p<4	s=5
214-1	p<4	s<5
214-2	p<4	s<5
213-1	p>4	s>5
215-2	p>4	s>5
110-2	p>4	s<5
115-1	p>4	s>5
104-1	p<4	s<5
105-2	p<4	s>5
114-1	p=4	s>5
113-1	p>4	s>5
112-1	p>4	s>5
109-2	p=4	s=5

Figure 2. The data table (same format as Figure 1) shows the consistency of the results. All purple rows show responses that are consistent with the findings (i.e. p<4 s<5, p>4 p>5). All orange rows show responses that have at least one variable exactly at the baseline (i.e. p=4, s=5). All white rows show outliers that are not consistent with the results (i.e. p<4 p>5, p>4 p<5).

Patient #	Participation	satisfaction
201-1	p<4	s<5
202-1	p>4	s>5
203-1	p<4	s>5
204-2	p<4	s=5
214-1	p<4	s<5
214-2	p<4	s<5
213-1	p>4	s>5
215-2	p>4	s>5
110-2	p>4	s<5
115-1	p>4	s>5
104-1	p<4	s<5
105-2	p<4	s>5
114-1	p=4	s>5
113-1	p>4	s>5
112-1	p>4	s>5
109-2	p=4	s=5

Figure 3. The data table (same format as Figures 1 and 2) shows the maximum and minimum quality of life scores. Red rows represent participants with a quality of life score of the maximum, 10/10. Blue rows represent participants with a quality of life score of the minimum, 1/10.

Discussion

Ultimately, by correlating the independent variable of participation in stimulating activities to the dependent variable of quality of life, by taking the average self-reported quality of life scores from both active and inactive groups, and looking at who reported the minimum and maximum quality of life scores, the data could be accurately interpreted and be used to answer the research question.

Correlation Between Variables

By simply looking at the number of active patients who reported satisfaction and the number of inactive patients who reported dissatisfaction, it was already quite clear that there was some type of correlation. More noticeably in the active group, six of the seven participants reported quality of life scores greater than five (s>5). Because only one participant from this group reported a score less than five (s<5), it is reasonable to assume that this was simply an outlier, especially considering that this particular participant reported a satisfaction score of four, which is relatively close to an average score of 5/10. The inactive group shows more of an even spread of responses than the active group seeing as four of the seven participants reported being unsatisfied (s<5), two reported being satisfied (s>5), and one reported a score of exactly five (s=5). However, there is still a correlation seen here seeing as the majority of inactive participants reported being unsatisfied.

Average Quality of Life Scores

By looking at the average self-reported quality of life scores for both active and inactive groups, it is even more clear that the seven active participants have, on average, a much greater quality of life than the seven inactive participants. Because the active group's score is nearly double the inactive groups (8/10 compared to 4.143/10), it can be reasonably concluded that there is a correlation between participation in stimulating activities and quality of life for long-term Citadel Post-Acute Care patients. This method of analyzing data was also very fair and unbiased seeing as both active and inactive groups had the same number of participants (seven).

Maximum and Minimum Quality of Life Scores

It is also important to address a distinct pattern in the data. When asked the question, "How would you rate your overall happiness and life satisfaction at Citadel on a scale from 1-10?" the minimum response a participant could provide was a one (meaning extremely unsatisfied), and the maximum response a participant could provide was a ten (meaning extremely satisfied). Of all sixteen participants, there were two responses of a satisfaction score of the minimum, 1/10. Both responses came from participants in the inactive group, one participant had responded "yes" (or some other response indicating activity) to only one of the eight questions regarding activity. The other participant who gave a satisfaction score of 1/10 did not respond "yes" (or some other response indicating activity) to any of the eight questions regarding activity. Of the sixteen participants, four responded with a satisfaction score of the maximum, 10/10. Three of these responses came from participants in the active group, and one had a participation score of exactly four (p=4). None came from the inactive group. Of the three from the active group that reported a satisfaction score of 10/10, two responded with "yes" (or some other response indicating activity) to all eight questions regarding activity, and the other responded with "yes" (or some other response indicating activity) to six of the eight questions regarding activity. This pattern between which participants reported the minimum and maximum satisfaction scores strengthens the conclusion that there is a correlation between participation in stimulating activities and quality of life for Citadel Post-Acute Care patients.

Importance of Findings

All three of the different types of results are extremely significant because they all lead to the same conclusion and show similar patterns. They prove the initial hypothesis to be true, however build upon the initial hypothesis with a more in-depth understanding based on the mass of evidence indicating that participation in stimulating activities lead to an improved quality of life.

Conclusion

All of the results drawn from the data lead to the ultimate conclusion that participation in stimulating activities such as cognitive stimulation, interactive socialization, and physical activity, lead long-term Citadel Post-Acute Care Patients to have an improved quality of life. On average, patients who showed higher levels of activity self-reported higher levels of happiness, satisfaction, and quality of life than patients who showed lower levels of activity. This answers the research question "What are the factors and activities influencing the quality of life for long-term Citadel Post-Acute Care patients?" by showing how implementing different activities and elements that involve cognitive stimulation, interactive socialization, and physical activity positively impact quality of life.

Limitations

The main limitation of this study revolved around having a sample size of sixteen. Although sixteen participants is relatively proportionate to the number of long-term patients at Citadel, future researchers should consider sampling from a larger post-acute care center in order to have fewer outliers in the data. Outliers include that of the seven participants deemed inactive, two reported satisfaction ($p<4$, $s>5$) and of the seven participants deemed active, one reported dissatisfaction ($p>4$, $s<5$). By surveying a larger post-acute care center, it is likely that based on the results found in this study, many results will be consistent compared to just a few outliers.

Implications-Current and Future Use

This study holds great value seeing as the findings have been communicated with the activities directors at Citadel Post-Acute Care Center, and the activities department is now working on implementing more stimulating activities in the lives of patients. Not only does this study benefit Citadel patients, but it can also be translated to all post-acute individuals to help them determine what they can do in order to have the best experience while receiving care. This study also serves as inspiration for more studies involving post-acute care, seeing as currently there are very few studies that take place in a post-acute care setting.

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