

## **The Effect of Dissociative Identity Disorder and Daily Life Routines**

A thesis submitted in partial fulfillment of the requirements

for the degree of

Master of Science in Psychology

BreAna Eckman

Purdue University Global

2022

### **Author Note**

BreAna Eckman, Department of Graduate Psychology, Purdue University Global.

The author wishes to express appreciation to Dr. Blackman for helping me as much as possible in every step of the way in completing this thesis. She was so patient and kind and assured me every time that I was questioning myself, that it would be okay. I would also like to thank my father-in-law who helped me tremendously in making sure what I was aiming for was making sense and that my approach was correct and straightforward. He helped me make sure that certain aspects of this thesis were in order. Along with this, my fiancé, mother-in-law, father-in-law, and sister in law all gave me support without question and continued to encourage me to keep going, being patient with me, and hearing my excitement for this research. PJ, who is my dachshund, was always there for emotional support. Without them, I would have been lost.

Correspondence concerning this thesis should be addressed to BreAna Eckman,

[breanaeckman@gmail.com](mailto:breanaeckman@gmail.com)

### **Abstract**

Dissociative Identity Disorder (DID) is a diagnosis that has not had much research. It has had sporadic attention in relation to treatment, memory, brain structure, and the effect on daily life. The study presented here focused on how having DID can affect one's daily life routines. Participants were recruited via a Facebook support group for those with diagnosed DID and completed a demographic questionnaire, a DID and Daily Life Routine questionnaire created by the researcher, and the World Health Organization Disability Assessment Schedule-2.0, 36-item version self-administered. There was a total of 27 people who participated, but only 11 fully completed questionnaires on SurveyMonkey. The results showed that these participants have moderate difficulty in conducting day-to-day activities of self-care, engaging with people, being productive and conducting work and/or school work, as well as maintaining relationships. There was a positive correlation between having DID and the difficulty level of being able to conduct daily life routines. The average number of days out of the last 30 days in which it was difficult to conduct any of the aforementioned activities, was 20-25 days as well as responding to how many days, out of the last 30 days, did they have to cut back or reduce usual activities, was 20 days. The average age in which one was diagnosed was 26.5 years old and the average amount of alters was 25.

*Keywords:* Dissociative Identity Disorder, memory, daily life routine, relationships, personal and household hygiene, alters

## Table of Contents

Literature Review	5
Summary and Research Question	27
Method	28
Participants	29
Measures	31
Procedures	33
Data Management	34
Statistical Analysis	34
Results	35
Discussion	42
Limitations	44
Conclusion	45
References	47-49
Appendix A: Letter of Authorization from Research Site	50
Appendix B: Research Announcement	51
Appendix B1: Research Announcement for Facebook Group posting	52
Appendix C: Informed Consent Form	53-55
Appendix D: Institutional Review Board (IRB) Final Approval	56
Appendix D1: Institutional Review Board (IRB) Revision Approval	57
Appendix E: Survey Development Plan	58
Appendix F: Measures (Screening Questionnaire)	59
Appendix F1: Demographic Questionnaire/ DID and Daily Life Routine	60-65
Appendix F2: Approval Email to use the World Health Organization Disability	66
Assessment Schedule (WHODAS) 2.0-36 item version	
Appendix F3: WHODAS 2.0-36 item version	67-70
Appendix G: Tables	71-101

### **The Effect of Dissociative Identity Disorder and Daily Life Routines**

Dissociative Identity Disorder (DID) is a mental disorder that may be misunderstood by the general population. The American Psychiatric Association (2013) defines DID as a disruption of the main identity of the individual being taken over by two or more personality and/or identity states. Identities may have different behaviors, memories of events, physical appearance, thought processes, and a different talk and walk. The American Psychiatric Association (2013) explains that the individual will have memory gaps of past events or even what happened on the same day and can state that they do not remember how they got from one place to the other on constant occasions. These memory gaps go beyond ordinary forgetfulness or “blacking out” in the face of a current event or when trying to recall an event or memory.

The definition of DID makes one wonder how individuals remember their friends and partners, where they work or live, their daily routines, and who they are. With these multiple subjects, there has not been much empirical research on the functioning of someone with DID and the effect on their daily life and routines. This mental disorder’s prevalence is only 1%-1.5% diagnosed in the global population (Mitra & Jain, 2021). The behaviors and characteristics of this mental illness include self-injurious behavior, suicide attempts, suicidal ideation, emotional dysregulation, gaps in memory, and having trouble recalling past events. The researchers suggest that it can take between 5-12.5 years in treatment before being truly diagnosed with DID.

There are not many references to gender or ethnicity in DID, but there are certain characteristics. These include childhood trauma, sexual abuse, emotional abuse, and physical abuse (Hartmann & Benum, 2019, p.213). The main dilemma with this mental disorder is that it is not recognized and diagnosed until later in life. Therefore, it can cause issues with forming relationships, working, home, self-hygiene, and remembering what was done day to day, thus

decreasing quality of life. In understanding how these individuals can function, it is imperative to determine how those diagnosed with DID are affected in their day-to-day routine. In other literature, there have been writings about the mental disorder itself, a case study of 1-2 participants (Trifu, 2019), and how the brain is altered in its form. Along with this, there have been gaps in research on DID in which were reported sporadically in the 1990s and early-mid 2000s thus far. In the approach I am presenting, researchers have rarely investigated my angle on the correlation of DID and functionality. This paper is intended to shed more light on individuals with DID and how it affects their daily lives.

### **Literature Review**

Dissociative Identity Disorder (DID) is a mental illness that is understudied and one that needs more understanding. This literature review reflects the minimum basis of research covered for DID and why the mental health community needs to look into it more. The sections covered are daily life, memory, brain structure, and treatment approaches.

#### **Daily Life**

The daily life of someone living with any illness, physical or mental, is one that no one can truly understand without consistent and constant research. In this section, the reviews show that although there are different ways to look into DID, only a few topics have been covered. These include different personality traits within one person, sleep disturbances that can affect dissociative disorders, how one defines themselves over time, and how DID can impair one's cognitive function and daily routine.

Dorahy et al. (2021) studied how those with DID identify their constant sense of self over time (diachronicity) and how they compare to those with psychosis and healthy control groups. To start, diachronicity, or diachronic unity, is defined as "The bringing together of disparate

elements over time into a sense of oneself persisting from past to present (and future)” (Dorhay et al., 2021, para. 1). These elements include autobiographical memory, awareness of the body belonging to oneself, engagement representation(s) of characteristics of the person, and ways of narration that allow different experiences to determine self-representation. The researchers aimed to assess whether those with dissociative illnesses, such as DID, have difficulty identifying themselves over time and whether they are likely to mistakenly claim that an event happened to someone else and not them. The researchers reference that since the sense of self is developed over a certain period, diachronic unity is a more in-depth description of the sense of self-development over childhood and early teenage years. Its continuous development shows that diachronic unity should be more present in adults than children. The researchers used this reference in their study. Comparing child and adult diachronicity allowed them to find any indication of the onset of diachronic unity and set a base pattern to compare to those with DID child and adult personality states. The researchers chose five groups of participants and were divided into DID diagnosed adults that had adult and child identity states, adults with a psychotic illness, adults from the general population, children from the general population, and adults imagining themselves as children. This totaled 137 participants, comprised of men and women, and the average age varied per group. The participants with DID averaged their adult identity states at 45.57 years old and the child identity states at 8.92 years old and were New Zealand and European Australian. Adults with schizophrenia and/or schizoaffective disorder averaged 32.68 years old and were New Zealand European. The general population adults averaged 31 years old and were New Zealand European. Adults imagining themselves as children averaged at 37.78 years old and were asked to imagine themselves at the ages between 6-12 to place in comparison to the DID group, and were New Zealand European and New Zealand Asian. The child group

ranged between the ages of 6-12 years old and included people of New Zealand European, Maori, Asian, and European descent (Dohay et al., 2021, para. 7-8).

The tools that were used to collect a census of how each group identifies their sense of self were the Diachronic Disunity Scale (DDS), the Dissociative Experiences Scale (DES) and the MINI-International Neuropsychiatric Interview (MINI), which were only used for those with DID and psychosis, the Self-Concept Clarity Scale (SCCS), and the Dissociative Disorders Interview Schedule (DDIS), which were only given to those with D.I.D (Dohay et al., 2021. para. 10). To briefly explain all of the self-reporting questionnaires, the DDS is directly measuring diachronicity unity or disunity in that there are two poles with four quadrants; the first pole is agreeing with the statements “I am the same person” (unity) or “I am not the same person” (disunity). The second pole has the sayings “I have changed a great deal over time” or “I have not changed at all over time”. The DES is a 28-item self-reporting questionnaire related to dissociative experiences, on an 11-point Likert scale going from 0 (never) to 100 (always). The MINI is a 7-item structured interview for those experiencing hallucinations (3 items) and/or delusions (4 items) with yes or no answers. The SCCS is a 12-item self-reporting questionnaire concerning their clarity on themselves, with a Likert scale ranging from “strongly disagree” to “strongly agree.” The higher scores represent a great self-understanding. The DDIS is a 4 item structured clinical interview specifically for those diagnosed with dissociative disorder by the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-V), in answering yes or no questions.

This research showed that psychosis and DID groups experienced more self-confusion than the child samples, adult samples, and adults pretending to be in the child state. The healthy controls showed the diachronic disunity was more evident in children than in adults but was still

evident in all samples. The DID group had more evidence of less diachronicity unity in their child identity state than the healthy children group. There was a 50% record of the DID participants stating that they felt like they changed a lot but were still the same person, but when switched to their child identity states, it was mostly stated that they changed a lot but were a different person. This showed an unequal level of diachronicity between the adult and child states and was confirmed more when compared to the four other groups.

Overall, one-third of the participants proved that “a discontinuous sense of self over time is not limited to psychiatrically disordered individuals. Rather, disunity in this study was evident in just under a quarter to just over a half of participants in all groups” (Dohay et al., 2021, para. 33-34). Disunity was present in about half of the child health controls, a third of the adult healthy controls, and a quarter of the psychosis patients in the past five years. Although this study showed the diachronic disunity is not only shown in those with DID, it shows that in switching identities in the same body, the individual will give different results when asked about their sense of self and if they feel they are the same as they were in the past. This shows how truly differentiated one is within themselves and how the brain can separate identities and switch. This goes into detail using the Rorschach assessment to show the differences between personalities.

Hartmann and Benum (2019) studied how the Rorschach Assessment may contribute to a better understanding of the different personality types one has in those diagnosed with DID. This study was based on one woman with different identities, and the personality test was used to determine which personality was responsible for which aspect of the patients' life. The patient was a 50-year-old woman who survived an assault rape by several offenders, and the psychotherapy lasted 10 years (Hartmann & Benum, 2019, p.214). Interestingly, the interview process was that the researchers found that the different personalities were not aware of what



was done or said to the other personalities. One personality was responsible for daily life and work, while the other was responsible for personal hygiene and home care. The latter personality was more willing to come forward and speak with the therapist when it was time for a session.

The tools used in this research were the Rorschach Performance Assessment System (R-PAS) and the Inventory of Interpersonal Problems–Circumplex (IIP-64). These were used on two personalities named Ann and Ben and were assessed in different sessions, which lasted three months. Once the responses were recorded, the researchers used an R-PAS coding group and the IIP-64 interpreter to give their thoughts on the results. The coding group and interpreter were under the impression that they were scoring two separate people in being one male and one female, not realizing that it was one person with two personalities. Testing the two personalities showed how the mind can split into different responsibilities and how memory can be given to the other personalities. For example, when it was Ben’s turn to take the R-PAS a month after Ann presented herself, and when asked if he remembered taking it before, he had no recollection of it being administered.

In looking at the results of the IIP-64 test, Ann’s personality showed that she could handle relationships, be open-minded, and function properly in daily life. Ben’s personality presented the opposite in that he had many signs of not being personable in holding relationships and is a closed-off individual. The R-PAS showed that he was very anxious and suspicious and had trauma-related personality traits that made him feel lonely. He needed to shield the participant from any bad feeling triggering a past memory. Ann was the “frontman” in the participant’s life, while Ben was the “trauma holder.” This study showed that personalities could have different responsibilities regarding daily life. To delve further into the daily life of those

with DID, another researcher focused on one man who has been newly diagnosed and treated, and how his thought process is switched in between the identities he has.

Trifu (2019) studied dissociative identity disorder and the thought process that goes with it. The researcher references that dissociation is a split into parts of oneself and each part has a purpose in performing a specific function. To make a clearer definition of DID, the researcher stated that the diagnosis is a way in which it is too overwhelming for the “original identity” to talk about personal information in the right state of mind. To elaborate further, this is why different identities are created, to speak on the specific information that the “original identity” cannot handle to relive. The framework of this study involved a psychiatrist who has been treating a 42-year-old Romanian man for four months and has been diagnosed with DID. Additionally, the psychiatrist was treating him with a medication called Ziprasidone. Trifu aimed to see how the patient’s thought process could switch, such as how the patient spoke from general to particular or moved from abstract thinking to concrete thinking over a 4-month observation in interviews.

The researcher stayed in constant contact with the participant’s psychiatrist, specialists that the participant saw, and the participant’s older sister. The researcher mentions that from speaking with the participants’ mental health team, he has four personalities representing his history, mental state, and outlook on life. The instruments used for this participant were psychiatric and psychological examinations of his current mental disorder, and naturalistic observation of four months of the patients’ progress under the treatment of medication and psychoanalytic psychotherapy (Trifu, 2019, p.104). The author notes that the use of DID in this participant is to create memory gaps. The patient failed to keep his memories away from his consciousness, and this is why his identities were created - to hold on to the memories that his

brain failed to keep from the forefront of his mind. Trifu breaks down 10 areas in his observations for the procedure to get a full understanding of DID.

Trifu concluded that the main goal of psychotherapy for DID is to get the identities to integrate and work together. The researcher observed that this disorder is maintained through inner monologue when speaking about himself in the third person. It is also compared to the sister's metaphor of moving from one chair to another, meaning that the participant is taking on multiple roles in his mind. The researcher makes a notation of the participant in that he can willingly forget everything he knows about himself and what has just happened when switching identities. If integration can occur, it can subside the illogical thinking and the abstract thought process between the identities and oneself. Trifu hints that although this is not a cure, it could help the participant control his personality and self. In a similar study to this one, the researchers took a total of five male participants to study the daily life of living with DID and how they are perceived.

Zeligman et al. (2017) studied how men live with dissociative identity disorder (DID) and its effect on their daily lives. As a preface to this study, it is mentioned that women are nine times more likely than men to live with DID and therefore decided to focus only on the male gender to see how they live with the mental disorder. An unfortunate common theme among men diagnosed with DID founded by the researchers is that they experience childhood trauma, but it is mostly sexual abuse. The researchers did a qualitative study of an interview of five men diagnosed with DID, and this study lasted for two months. The participants were located throughout the country, in which four were in the country and one was international. The phone interviews lasted 30-60 minutes for each participant and were recorded so that data could be placed down verbatim.

The tools used in the data collection process were a demographic questionnaire and the Dissociative Experiences Scale-II (DES-II). The DES-II is a scale set from 0%-100% of how often something happens to them concerning their experiences of dissociation in their daily lives. The demographic questionnaire contained subjects of “sexual orientation, length of time since DID diagnosis, intimate relationship status, income, highest completed level of education, current employment status, presence of social support, ethnicity, age, type of professional who diagnosed the individual with DID, co-occurring diagnoses, number of known alters, number of years in treatment for DID, and medication history” (Zelgiman et al., 2017, p.67). The participants included were Caucasian, married, had an average age of 56, and each participant reported having 5-15 known alters.

The results of gathering the qualitative data identified that there are five common themes in which the participants reported: history, alters, male gender expectations/identity, challenges such as interpersonal relationships, and strength and support of their diagnosis and treatment. In the history theme, there was a commonality of “personal trauma history” in that it is difficult to face the trauma that happened while having DID. Another part mentioned in this section is memory loss, fragmentation of memories, dissociations, and emotional control. Along with this, the diagnosis of DID came late in life due to incorrect diagnoses such as bipolar disorder and major depressive disorder to mention a few. In the alters theme, there are 3 common sub-themes highlighted: the communication between alters, female alters, and the roles of alters. The participants report that their alters will have dramatic differences in talent, intelligence, age, physicality, and illnesses. They also have alter protectors, gatekeepers, and are responsible for certain relationships. The communication between alters determines what facade to put on in the face of a certain event or even a person, such as the recorded response of sexuality. Regarding

the female alters, these could be powerful alters in that they were presented more so in front of their wives and can seem to be a dominating personality for certain things. In the male gender expectations and identity theme, there is a constant in all 5 participants that mentioned an expectation and stigma in being identified as a male that they feel is pressured onto them just because of that. Gender identity is also difficult for them in that having the female alter can confuse the participant more in that it is not just switching to a different personality, but a gender altogether, and the researchers states that “the gender and sexuality of men with DID is oftentimes fluid rather than static” (Zelgiman et al., 2017, p.73). In the challenges theme, this highlights the difficulty in being placed from one diagnosis to another until it was late in life that it was determined that they have DID. The participants reported that they have trouble with relationships (i.e., personal, work, romantic), stigma, and roadblocks referring to the inexperience of their mental health professional and them not being able to at least guide them in the right direction of what to do for treatment. Although mentioned in the challenges section, the last theme of strength and support is that interpersonal relationships and therapy help with even a little progress. It helped the participants feel supported and cared for since this is confusing to those close to them and themselves. Another subject included in support was those who went to support groups for men who experienced childhood trauma, specifically sexual abuse, and support from the DID groups they found.

This research truly showed the different subjects in which those with DID, specifically men in this study, face many challenges every day, how they live, and how they can cope with the trauma that caused this mental disorder. It is also pointed out how important education in dissociative identity disorder needs to be known and looked into to build knowledge and understanding for the general population. The importance of learning and understanding the life

of someone living with DID is important and needs more coverage in the mental health world. Along with this, memory is a big symptom of DID. The memory can be lost in translation, how a certain event was remembered, and how dissociative amnesia comes to be. Daily life can be difficult to keep track of, especially for those with this mental illness. This is why memory is an important aspect to cover and integrate with daily life to show how each identity is assigned in protecting and keeping memories away from the main personality.

### **Memory**

Memory is an important aspect in life of how to recall events that have happened to an individual. In those with DID, it can be difficult to describe or recall the correct memory of what happened to them and how it was perceived, thus bringing about communication between identities. Each identity will remember it differently, or the certain identity does not recall the memory at all. In this section, the studies cover what could cause the failed memory recall in having DID, how dissociative amnesia affects the individual in remembering certain events, and how self-referential information affects the individual in real-time with communication between identities.

Dimitrova et al. (2020) studied and replicated how sleep disturbances are connected to dissociation, the onset of fantasy, and failed memory recall. These researchers replicated this study originally conducted by Van Der Kloet et al. in 2012, and they discovered that sleep disturbances might lead to slowed cognitive efficiency. This could result from not getting enough consistent sleep through the night, reducing attention control and memory while strengthening fantasy and vivid imagination throughout the day (Dimitrova et al., 2020, p.3). This led to the possibility that sleep disturbances are a determinant of DID. Dimitrova et al. (2020) replicated this study with added objectives such as traumatization and memory with the hypothesis that

sleep disturbances are not a determination of DID. The subjects for this study included those with diagnosed DID, Post-Traumatic Stress Disorder (PTSD), and healthy controls (HC) to compare.

The researchers placed together questionnaires for the participants to answer, which were the Dissociative Experiences Scale (DES), the Traumatic Experiences Checklist (TES), Childhood Trauma Questionnaire (CTQ), the Iowa Sleep Experiences Survey (ISES), and the Creative Experiences Questionnaire (CEQ). To summarize, all of the questionnaires used, the DES is used to measure the severity of dissociative symptoms; the TES is used to rate types of different experiences, how long they lasted, and the age in which it started; the ISES is used to measure sleep disturbances; and the CEQ is used to measure events leading up to “fantasy proneness,” how involved they are in the fantasy, as well as daydreaming (Dimitrova et al., 2020, p.4). In regard to testing memory capacity, this was done through the N-back test which tests reaction times to a condition-specific instruction. In short, this test showed capital letters, one after the other, on a screen and were instructed to respond by pressing a key which were 1-3 meaning “back” and 0 meaning “back/baseline”. The first letter comes up and then when the second letter comes up and if it is the same as the first, they press one; if the third letter is the same as the last shown letter, they press two and so on and so forth. They were also instructed that once they saw the letter “X”, to press 0 (Dimitrova et al., 2020, p.4). The 49 participants that responded were all female, between the ages of 18-65, and Dutch was the native language needed to communicate properly since this was conducted in the Netherlands.

The results showed a 32% correlation between individuals with DID, PTSD, and HC that sleep disturbances related to dissociative symptoms, but only a 7% correlation between individuals with DID and PTSD, meaning that sleep disturbances are a weak predictor of

dissociative symptoms. Traumatic experiences predicted dissociative symptoms more so than sleep disturbances or fantasy proneness. The researchers highlighted that this replicated study showed that the latter mentioned factors with the prediction of dissociative symptoms, skewed the correlation results when the increased percentage introduced the HC. This proved that these factors were not a predictor of DID. Another interesting find in this study was that there was no difference in cognition from the N-back test, and this is a contrast finding from the initial study results. The reason for this is the current researchers made sure to use a neutral personality state with those who have DID to ensure correct replication of the 2012 study. However, they mention that it would be beneficial to use trauma-personality states to get more comparison results for cognition function, sleep disturbances, daydreaming, and fantasy proneness.

This study rules out that sleep disturbances are not a factor or symptom of DID. This only showed a glimpse into the memory problem that those with this mental illness have. However, when the event is of self-reference, memory works in communicating between identities that can be altered or forgotten.

Marsh et al. (2018) studied how memory and communication are affected between the identities in those diagnosed with Dissociative Identity Disorder (DID), and if it was apparent to “self-referential information” between identities. This study focused on episodic autobiographical memory and how those diagnosed with DID related to the statements tested. The researchers took a population from a hospital program in Australia who were females diagnosed with DID and reporting amnesia in certain events. The total recruited number for this study was 19, but dwindled to 12 due to some outliers. To note, the researchers had the participants select one trauma-focused identity and one avoidant identity. The researchers recruited collegiate actors who learned how to simulate interidentity amnesia, and the general



population of New Zealand and Australia, for comparison. The total number of participants in the study was 16 simulators and 41 participants of the general population. They were separated into non-amnesic and amnesic control groups. The genders were more female than male in these groups. There was no set age range, but the age range was 31-39 years old in the table layout. There were 69 participants, and the ethnicities presented were New Zealand European, Maori, Australian European, and others.

The researchers used the Autobiographical Implicit Association Test. It measures how the content presented to the person affected them emotionally when self-referencing the scenario, stating true or false. Each participant listened to the stories through headphones and was asked to say each sentence aloud and replace “you” with “I” to evoke self-referential quality. They then rated embarrassment on a Likert scale from 0 (not embarrassed at all) to 100 (extremely embarrassed) while recalling details of the story in 2 minutes.

The results specified that between the two scenarios given to identity A and B, the simulated DID participants and the DID patients were very different. The non-amnesic comparison in DID patients and the simulated actors was that they experienced both scenarios to be true. The amnesic comparison, from identity A to identity B, only recalls 1 of 2 embarrassing events. The events that occurred with Identity A were not considered true as those occurring in Identity B. The actor’s fake identities A and B experienced both scenarios in the same way. The DID trauma model showed that traumatic events are solely placed with the trauma identities, while the avoidant identities are kept from these events, and their main role is to be in charge of the day-to-day routine. This study showed that memory and communication could be affected by the different personalities for this with DID. When switching personalities/identities, one personality can be responsible for one event, while the other(s) are responsible for other events.

This study shows how the event that happens to one identity is not exactly experienced by the other. This brings on the study of dissociative amnesia between identities and how this affects memory.

Patrichi et al. (2021) studied the aspect of dissociative amnesia in DID and how it affects the participants in memory and daily life. The researchers identify dissociative amnesia as a part of DID in which is “an inability to remember important personal information, usually of a traumatic or stressful nature, which is too broad to be explained by the normal process of forgetting” (Patrichi et al., 2021, p.207). The researchers continue to explain the beginning of DID in that it was looked at as hysteria before the development of certain psychodynamic approaches. The researchers did not have set criteria of participants for the study, but did pull six case studies in relation to dissociative amnesia and how it varies. Three of these case studies are summarized.

The researchers showcase these case studies to explain dissociative amnesia in different ways. In the first case study, a bank manager who was “well-off”, had gotten into a financial situation where he could no longer control it and burn out from his job. In his state of emotion and panic, his dissociative amnesia took over in that it was on impulse that the man took the money he had left, moved across the world, and started a whole new career. After this, he was searched for continuously, and once he was found, he claimed to have no recollection of himself or what happened. The researchers dwindled this down to the subject having dissociative amnesia from the burnout from his bank job and stated that since he could not handle it consciously, this is when the dissociative amnesia took over.

In a second case study, there is an adopted boy and girl who were taken in 2 years apart from a woman whose personality was that of “I adopted you, so I saved you and you owe me”

(Patrichi et al., 2021, p.212). The woman was dissatisfied with the boy more than the girl since the boy had psychomotor development problems when taken in at 8 months old and the girl had none. The woman emotionally abused the boy and started to physically abuse him in the 4th grade all the way into the 10th grade and this was even with the complete progress of his psychomotor development. This was also after the woman and her husband divorced. Although he was in the international Olympics, she was still dissatisfied with him. To step away from the subject of the mother, the researchers state that the boy and girl fell in love, but the girl felt that this was wrong since they were brother and sister and when she told him that she found a boyfriend, he did not react well. In seeing that he has trauma from when he was a child along with this news of the girl having a boyfriend, he did not react well in that he experienced dissociative fugue. With this, he developed multiple personalities in which was in survival mode of getting a fake id, any jobs he could, and the researchers called this “personality disharmony” in which he was not experiencing any hallucinations or delusions but was essentially opposite of himself and at one point, he was roaming the streets for a week until he passed out and was admitted to the psychiatric hospital. It was determined by the staff that he truly could not function normally anymore.

The final case study presented is of a male patient diagnosed with DID who had four different personalities. The patient stated that the personalities communicate with each other about memory and events and take turns being “in control” of the patient. Along with this, the patient's sister would not let him go to any session alone as if to hint that he could not care for himself or make decisions without her. She stated how her brother was like an actor in that he had different roles he could play and did not label him as crazy or unwell. The interesting point

is that the patient was over 40 years old, which seems to be the common age at which most patients are diagnosed with DID.

In the discussion section, the researchers immediately mention that dissociative amnesia can be partial or full in that “there can be one or more amnesia episodes in which they can recall part or all of the journey, loses his identity, or forms new identities once he leaves his home” (Patrichi et al., 2021, p.214). The researchers say that this happens due to childhood trauma and is a way in which the brain is in defense mode of keeping the traumatic memory (-ies) away from the forefront. Dissociative amnesia occurs when the main personality cannot handle the events that have happened, and therefore unknowingly create a new personality in which has not gone through any experience of abuse in order to protect the main psyche of the individual. This research article gives a look into how dissociative amnesia is considered and shown in different aspects with DID and how it can affect someone’s in completely forgetting or partially remembering certain memories. Memories in those with DID can be confusing for the individual but are somewhat organized in between identities. Although it is an outlier subject of the thesis presented, the brain structure is something that can also help the general population understand more about DID and why they have these identities.

### **Brain Structure**

The brain structure of those with traumatic brain injuries, and mental illnesses such as depression and anxiety, has been extensively studied. Dissociative identity disorder has been studied regarding memory and how that memory can be forgotten or “protected” by different identities. This study here is different because it shows how those with DID have a different brain structure than those with healthy controls. This study shows that DID affects not only daily life but also the brain's formation.

Reinders et al. (2018) studied how the brain can change, specifically in the cortical thickness and surface area, for those with DID. The researchers state that “ It is thus crucial for our understanding of the effects that early onset and chronic interpersonal traumatization has on the brain, and which particular aspects of the cortical architecture are most vulnerable” (Reinders et al., 2018, p.158). As a part of this study, it was also found that those with DID have reduced gray matter in reduced gray matter volume in 5 areas which are the “medial and dorsolateral prefrontal cortex, the anterior cingulate, the insular cortex, inferior parietal areas, and in several regions within the temporal lobe” (Reinders et al., 2018, p.158). The 75 participants in the study included were all female, and it had a split category of those diagnosed with DID, which were 32, and healthy controls, which were 43. The women were pulled from three centers: two from the Netherlands and 1 from Switzerland. To delve even further, out of the 32 women diagnosed with DID, 29 had a comorbid diagnosis of Post-Traumatic Stress Disorder (PTSD).

The tools used in this study were the Dissociative Experience Scale (DES) and the Somatoform Dissociation Questionnaire (SDQ) which measured psychoform dissociative symptoms and somatoform dissociative symptoms, respectively. The Cambridge Scale (CSD) was used to measure depersonalization symptoms, the Traumatic Experiences Checklist (TEC) which measures potentially traumatizing events in 5 categories in 3 different age ranges being 0-6, 7-12, and 13-18 years old, and an MRI to show brain formations.

In looking at the scales that were used, those with DID scored higher in being a criteria for their DID on the DES and SDQ compared to the healthy controls group. The DID patients also scored higher in all 5 categories on the TEC compared to the healthy controls. It is also important to mention that for the age ranges of 7-12 and 13-18 years old, there was not a significant difference. When it came to comparing the MRI, it was shown that those with DID

had a significant reduction in gray matter volume in comparison to the healthy controls as well as in cortical thickness and surface area. In the cortical thickness area, there was a significant difference in “several spatially distributed clusters across the cortex” and 4 areas with reduced surface area which are “left superior temporal sulcus (STS), the cingulate sulcus, extending into the medial superior frontal lobe (BA 6/8), and in the right dorsolateral orbital prefrontal cortex” (Reinders et al., 2018, p.162). Another interesting point that the researchers made from their findings is that DID is a development of non-genetic environmental factors that affect brain development and is not connected to a specific molecular and/or developmental pathway. This study showed that DID not only affect relationships and living in general but truly changes the person's brain formation, especially considering that DID is a product of childhood trauma. In all the subjects presented, the one subject that all of these can relate to is to find treatment approaches that work for those with this mental illness. Finding something that works and takes less time for those affected by DID can help manage symptoms, memory, and daily life.

### **Treatment Approaches**

Treatment approaches regarding DID do not have much coverage, but some have greatly succeeded in decreasing dissociative symptoms, emotional control, and improvement in relationships. This part of DID can take some time but may be improved in the future by applying other treatment options. In this section, two approaches have been researched and have had positive results on the participants: an online educational program and schema therapy.

Brand et al. (2019) studied how an online educational program helped those with dissociative disorders (DD), including dissociative identity disorder (DID), in their treatment with follow-ups in years 1 and 2. The study was meant to highlight the positives in effective treatment for those with DID and how it can help reduce the cost of treatment and patient

suffering. It is mentioned by Brand et al. (2019) that there is an average of 5-12.4 years that these patients are receiving treatment before they are truly diagnosed with DID. To delve further, DID is part of DDs with the highest impairment level. With this being stated, the researchers created a website based on “psychoeducational materials that included trauma, including symptoms of PTSD, complex trauma reactions, and DDs; symptom and emotion management techniques; and the nature and functions of NSSI (non-suicidal self-injury), suicidal, and risky behaviors (henceforth referred to collectively as “unsafe” or “unhealthy” behaviors) among traumatized people” (Brand et al., 2019, p.158). The recruitment process included those with high and low dissociative experiences diagnosed with DID, Dissociative Disorders not otherwise specified (DDNOS), and other specified Dissociative Disorders (OSDD) as deemed by the therapist.

In an international study, the total number of participants was 111, with the majority being female (88.3%) and Caucasian (86.5%) (Brand et al., 2019, p.158). Other participants represented were male and transgender for gender; for ethnicity, there were Latino or Hispanic, Black, Asian, and other. The average age reported was between 41 and 43 years old. The therapist and participants were both involved in the treatment program to keep track of the progress.

In reading this research, participants were encouraged to complete assignments outside of the therapy sessions to promote individualism and control. This was after watching each video that was included in this treatment program. This longitudinal study showed significant change and control in emotional regulation, risky behaviors, and decreased hospitalizations. At the one year mark, mid intervention, there were small improvements in emotional regulation, dissociation, adaptive changes, hospitalizations, and PTSD symptoms. At the two year mark, there were large improvements in the aforementioned subjects. For example, regarding

hospitalizations for NSSI, at baseline the average report was 13.75 times in the 6 months prior to intake and dropped to 1.96 times and 1.74 times by Years 1 and 2, respectively. In regard to suicide attempts, at baseline there was a reported 22.27 days that patients needed to be hospitalized 6 months prior to starting the study, and decreased by half in being 11.5 days of hospitalizations after the study was complete in year 2. This study showed that this is at least one inexpensive and beneficial way to help treat those with DID and a way in which can help those with this mental disorder gain control of their true selves and use the tools provided long term. Although this study was one that took a total of 2 years, there was no strain in financial cost and one that helped the participants understand their illness a little more and how to control it. Another effective treatment approach is schema therapy.

Hunjens et al. (2019) studied the effect of schema therapy (ST) and the benefits for treatment for DID. The basis for this research was that at the time this was written, there have been no evidence-based treatments dedicated to DID with the exception of psychodynamic psychotherapy. To briefly summarize this, this approach is done in 3 phases; phase 1 is to establish safety and emotional regulation; phase 2 is when traumatic experiences are brought to the surface and processed; phase 3 is to help the identities integrate and start utilizing tools to keep control of one's identity after integration. Although this is a way of helping the patient ease into processing trauma and integrating their identities, it is said by the researchers that the patient can be in phase 1 for long periods of time up to the whole course of treatment. As an alternative treatment, the researchers propose to test schema therapy which is used in those with personality disorders. Schema therapy is defined as a "blending traditional cognitive behavioral treatment with experiential and interpersonal elements (Young, 1990; Young & Gluhoski, 1996; Young, Klosko, & Weishaar, 2003), and using the therapeutic relationship as an important vehicle to



bring about corrective emotional experiences (see Nordahl & Nysæter, 2005; Young et al., 2003)” (Huntjens et al., 2019, p.4). This therapy aims to help the patient identify their identities as “modes” and amnesic barriers, or memory blocks, are not assumed when discussing the patient’s history. The reason why this was chosen for this research is because the therapy focuses on childhood trauma and gives guidance on the patient’s shifts between states and how to deal with the trauma as an integrated individual.

The participants of this study included 10 outpatients from community mental health centers in the Netherlands. The criteria that needed to be met are being diagnosed with Dissociative Identity Disorder (DID), being between 18-60 years old, male or female, and must be able to have Dutch language understanding as that is the primary language in the Netherlands. The researchers had ST applied to the participants split into 2 individual sessions, for 50 minutes a session, a week for a total of 160 sessions. Thereafter, they decreased the treatment to 40 individual sessions once a week with the same amount of time. This then dwindles down to the participants receiving 6 once a month follow-up sessions. This took place over a time period of 1 ½ years.

At baseline, the researchers conducted a 28-item brief Childhood Trauma Questionnaire (CTQ) which determines the severity of childhood trauma with a 5-point Likert scale of never true to very often true. When starting the implementation of ST, the researcher then had the therapist apply the Dissociation Tension Scale (DTS) which measures dissociative symptoms experienced in the past week. Along the timeline of ST being implemented, the researchers also had secondary outcome measures which were self-reported answers from PTSD Symptom Scale Self-Report (PSS-SR), Multidimensional Inventory of Dissociation (MIID), World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0), Schema Mode Inventory

(SMI), Dissociative Beliefs about Memory Questionnaire (DBMQ), and Progress in Treatment Questionnaire (PITQ). To briefly summarize each scale, PSS-SR is measured every 2 weeks and records comorbid PTSD symptoms experienced in the past week; MIID assesses pathological dissociation; WHODAS 2.0 assesses functioning and disability in daily life which are specified to understanding and communication, self-care, mobility, interpersonal relationships, work and household roles, and community and civic roles; SMI measures the different modes (identities) that one experiences; DBMQ measures metacognition and memory functioning; PITQ, which is split into PITQ-t (therapist) and -p (patient) respectively, measures the way in which the patient is progressing in the ability to safely and effectively manage their emotions, relationships, and symptoms.

The results of this study showed that schema therapy is highly effective in those with DID and has shown a great improvement in controlling emotion, lessening of the dissociative episodes, and memory. The main goal of this study was to show the approach of this therapy in difference from psychodynamic psychotherapy. ST is a therapy approach that “considers the personality states in DID as different emotional, behavioral, and cognitive states of one underlying unified identity” and “whereas the patient’s experience of fragmentation is acknowledged and validated, we start from the premise of a single person with subjectively divided self-aspects” (Huntjens et al., 2019, p.9). The researchers were successful in showing that the schema therapy evidence-based treatment is one of effectiveness in helping those with DID gain control of themselves as a sole individual while working through emotions through their modes. Treatment approaches like this and the online educational program, as well as matching an approach with how the patient is living their daily life, could help with improvement efforts in DID therapy and continued education.

### **Summary and Research Question**

To summarize all the subjects presented, the important aspects in understanding dissociative identity disorder are daily life, memory, effective treatment approaches, and as an outlier, the brain structure. These subjects combined will help toward the strength of my thesis in understanding how having DID can affect one's daily life and their routines. Dorhay et al. (2021) found that those with DID identify their sense of self over time differently when switching between child and adult identities. Marsh et al. (2018) found that in using the Autobiographical Implicit Association Test, the avoidant and trauma identities have roles. The avoidant identity represses events and memories of traumatic events, while trauma identities hold onto them, showing dissociative amnesia. Patrichi et al. (2021) found that dissociative amnesia is highly present in those with DID. The brain creates a new personality that has not gone through any experience of abuse to protect the main identity of the individual. Reinders et al. (2018) found that those with DID have less gray matter, surface area, and cortical thickness in their brains and is a development of childhood abuse. Hartmann et al. (2019) found that the Rorschach personality test can show different personalities and their roles in one person. Dimitrova et al. (2020) replicated a study to determine if sleep disturbances are an early sign of DID. They found that it is not a sign, but did discover that traumatic experiences predicted dissociative symptoms and memory recall more so than sleep disturbances. These studies show the general overview of DID, but the following other studies present a more personal view.

In a singular study of one man with DID who was in therapy for 4 months at the time, Trifu et al. (2019) found that integration of the personalities can help the individual go from abstract to concrete thinking, as well as help them deal with trauma. In a small study of 5 men, Zeligman et al. (2017) found that alters communicate to help the individual achieve their daily

routine, but that there needs to be more exposure and education in the mental health field to determine diagnosis earlier on in the patient's life. Brand et al. (2019) found that an online educational program targeted to those diagnosed with dissociative identity disorder (DID) showed significant improvement in their emotional control, personal relationships, and dissociative symptoms over a 1 and 2 year follow up. Huntjens et al. (2019) found that schema therapy is an effective evidence-based treatment approach in those with DID. It recognizes each personality as a "mode" and promotes integration and recognizes themselves as a sole individual.

The presented literature reviews show some angles of those with dissociative identity disorder and what they experience, as well as how it affects them emotionally and physically. This, along with a minimal amount of therapy approaches that have shown promise in the treatment and control of DID, are presented. In seeing all of these research subjects, only 2 studies exist that touch on how an individual with DID can function in daily life with routines and how their memory is affected daily. The present study asks: How do those diagnosed with DID function normally in their daily lives?

### **Method**

The present study collected data on how having Dissociative Identity Disorder (DID) affects the participants' daily lives and routine. This study is a collection of the participants' personal experiences with DID and how it affects their quality of life regarding relationships, personal hygiene, working, and conducting their daily routine. In using the qualitative method of questionnaires, I have gained knowledge about the quality of life of these participants and have been able to apply the findings to the general population of DID.

## Participants

Participants were recruited from a Facebook Dissociative Identity Disorder support group. The clinic that I reached out to that had 7 diagnosed individuals with DID, let me know that none of the participants wanted to answer the questionnaires. I was able to reach my data collection amount being between 10 and 15.

In taking to Facebook, I contacted the Facebook support groups' moderators and/or administrators that manage the page for Dissociative Identity Disorder. These groups' total members ranged from 1,000 to 13,000, but my target number is 10-15 people to respond to the research announcement post. To get approval to join the group, the administrator and/or moderators were contacted first by directly messaging them the summarization of what the research is about, why it is being researched, and if it would be approved to post the research announcement on the page with the link to the informed consent form and survey monkey link (See Appendix B1). Once this was approved via direct messaging on Facebook, the request to join the group was placed. Once access was granted to join, the research announcement, SurveyMonkey link, and informed consent link were posted and approved by the administrators. The links followed each other one after the other to show that they understand what the research is about, why it is important, and why they are being asked. Once the participants read the linked informed consent, they can answer the questionnaires. There was a screening method of yes or no questions to ensure that they qualify to take the survey. Facebook's terms of service can be located at: [terms of use of Facebook](#) .

In regard to the participant parameters, these will be for those who are 18-60 years old and of any gender identity. Educational background will range from less than a high school degree to a doctoral degree or technical college. They may have been in treatment for 3-6 months

and must have an established daily routine. There is an included parameter of race, but there is no set race upon which this study is focused on. Exclusion criteria include those who are under the age of 18, over the age of 60, and those who are not clinically diagnosed with Dissociative Identity Disorder.

Potential participants were given the research announcement (See Appendix B) by their mental health professional in the clinical environment and would have been used in conjunction with the Facebook posting, for research. If they were interested in answering the questionnaires, the mental health professional would have sent them the informed consent form to sign (See Appendix C1). Once that signed document was received in agreeing to participate in the questionnaires, the mental health professional would have given the questionnaires to the participants to complete. The turnaround time for the completed questionnaires would have been 2 weeks starting from when the signed informed consent is sent back to ensure an ample amount of time to have answered the questions truthfully and in full. A screening method was put in place using the Facebook route in that I had 2 questions reflecting my exclusion and inclusion criteria.

If the clinical aspect of this research was included, the participants would have completed the questionnaires at the beginning of a session with their mental health professional. This is so that it would not be forgotten at home or lost. However, if it did get lost, another one would have been sent to them. The mental health professional would have given them 10-20 minutes alone to answer the questions how they see fit and once done, they would have sent it back to the mental health professional and would have scanned it and sent it back via email.

**Measures**

The variables of this study include the independent variable of the participants diagnosed with DID and how they answered the questionnaires presented. The dependent variable is the demographic questionnaire and the self-administered World Health Organization Disability Assessment Schedule (WHODAS) 2.0-36 item version. The participants' answers showed how they function in their daily lives and other personal aspects of their lives.

***Demographics Questionnaire***

The demographics questionnaire is split into two sections. The first section includes questions about their age, education level, gender, marital status, and employment status. See Appendix E for the full questionnaire and Appendix D for the survey development plan. The questions then flow into more detail about their diagnosis of Dissociative Identity Disorder (DID), which include asking about the number of alters they have, naming them, what age they were diagnosed with DID, when and if they started treatment, and for how long they have been in treatment. These questions will help determine the general outlook on what population has this diagnosis, the average number of alters amongst the participants, and if treatment has been applied. Participants are not required to answer any of the questions to proceed with the rest of the survey.

The second section of the demographic questionnaire focuses on how the participants remember where they live, work, and how they maintain and remember relationships. There is a table in which the participants can place the name of their alters and the role they may or may not play in their daily routine in the subjects I have mentioned above. At the end of the questionnaire is an open-ended question that would be applied as part of the discussion portion of the thesis.

***World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0-36 item version, self administered)***

To measure how DID affects the participants' daily lives, the World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0)-36 item version, self-administered, will be used. This assessment aims to determine the level of disability one's diagnosis, whether physical or mental, and how it affects their everyday routine over the past 30 days. See Appendix E1 for the WHODAS 2.0-36 item version, self-administered, and the permissions to use the questionnaire from the World Health Organization. This scale has six domains, and it ranges from “none” to “extreme or cannot do.” The mobility domain will not be included in the study’s final results as this is not being examined for this study.

At the end of the questionnaire, there are three questions asking to account for out of the last 30 days, how many days have the difficulties been present. This is referring to whether they were unable to carry out their usual activities and if they have had to reduce their daily routine due to their health condition. This does not include the days recognized as “totally unable”. This questionnaire is brief, and the exact parameters being researched are reflected in the measure. More specifically, it measures how possibly debilitating DID can be on an individual when going through the daily routine of work, hygiene, relationships, and socialization. This questionnaire has demonstrated high test-retest reliability and internal consistency in that at the item level, there was a coefficient of .69–.89, .93–.96 at the domain level, and .98 at the overall level (Ustun et al., 2010, p.19). Additionally, Cronbach’s alpha showed that the set of questions for each domain had high internal consistency ranging from 0.94-0.98 and has strong construct validity in that it can pick up on improvements from treatment for the individual and show a difference from when initially administered.



## **Procedures**

The first step in conducting this research was to contact clinics via email summarizing the research, why it is being conducted, and if they would like to collaborate with me to collect the data. Once there is a “yes” response from a collaborator, the informed consent and questionnaires will be sent via email to the mental health professional. The directions for the mental health professional stated via email to give the research announcement first to see if the participants are interested. If they were interested, the mental health professional would have given the informed consent form to ensure that the participant understood what is being researched and why. If they would have signed the informed consent form agreeing to participate, this is when the mental health professional would have given the questionnaires to the participant for them to answer and would have given them 15-20 minutes to complete it. Once the participants completed it, the mental health professional would have scanned it back to the student email where it would have been examined in order to put the data together. In order to ensure that the N number of 10-15 participants is achieved, a Facebook support group was used to help reach the total number of participants needed to collect a sufficient amount of data.

The second part in conducting this research was to contact Dissociative Identity Disorder Facebook support groups’ moderators and/or administrators for approval to post on the page. This was used since none of the clinical patients wanted to participate. This approach was more successful in responsiveness. With this being said, the first step in conducting this research was to reach out to the administrator and/or moderators by directly messaging them the summarization of what the research was about, why it was being researched, and if it would be approved to post the research announcement on the page. Once this was approved via direct messaging on Facebook, the request to join the group was placed. When access was granted, the

research announcement was posted along with another with two links. The two links were the informed consent form and the survey monkey link with the screening questions and the questionnaires. The links followed each other to show that they understood what the research was about, why it is important, and why they were being asked. Once the participants answered yes in the SurveyMonkey link to agreeing to consent and answering the screening questions for the audience I was looking for, they were able answer the questionnaires.

### **Data Management**

To ensure the anonymity of the survey participants, in using SurveyMonkey, I will not collect IP addresses. For this study, I keyed the data from SurveyMonkey into an SPSS database for analysis. I will present all of the results in aggregate form to protect participants' identities. I will have access to the data only in the form of physical completed surveys that I will maintain on an encrypted flash drive, kept in a locked file cabinet in my home. The thesis advisor and I will be the only parties accessing the strong password that protected the SPSS dataset. The dataset will contain no coded identifiers and, as such, will be completely anonymous.

I will also store all electronic data on an encrypted flash drive and not on any computer hard drive. I will retain the data set and related files for a minimum of five years after the study completion, in case questions arise about the analyses. After five years, I will destroy the data using the current Department of Defense data destruction standards. I will likely choose an affordable technique, such as encryption, pending technology at the time.

### **Statistical Analysis**

A method of “simple scoring” was used to determine the severity in which DID affected their daily functioning in relation to the domains from the WHODAS-2.0. Simple scoring is defined as “the scores assigned to each of the items – “none” (1), “mild” (2) “moderate” (3),

“severe” (4) and “extreme” (5) – are summed” (Ustun et al., 2010, p.41). It is important to note that the mobility domain was not included in the study as this is not a part of the research that was being looked into. Simple scoring takes the referenced worded difficulty chosen, and translates to the numerical level for the difficulty in conducting certain tasks, adds it together, and gives an average score for that domains’ listed items. This type of scoring made it easier to describe exactly how severe of an impact that DID has on each item. There are six domains which are cognition, mobility, self-care, getting along, life activities, and participation (Ustun et al., 2010, p.4). Each subscale has 4-8 items to answer and 3 extra questions at the very end. In order to capture the subjects being focused on in the research, the findings are presented at the item-level to make more of an impact of how DID affects day-to-day life.

A correlation analysis will be run to see how those with DID are affected in conducting the everyday routine and if it is constant. The researcher will first begin with descriptive statistics, such as frequencies, means, ranges, standard deviations, skewness, and kurtosis. The researcher will further conduct correlational analyses and regression analyses where applicable.

## **Results**

For this study, I conducted a survey and gathered the participants’ responses. I exported the data from SurveyMonkey into IBM’s SPSS statistical software, version 28.0 standard. Using the data, I gathered statistics about their demographics, how they function in their daily lives, along with their WHODAS 2.0-36 item version, self-administered answers. The data analysis determined frequencies, means, ranges, standard deviations, skewness, and kurtosis.

### **Participant and Demographic Characteristics**

There were a total of 27 respondents for the questionnaires on SurveyMonkey, but only 11 completed the entirety of the questionnaire. Along with this, I sent these questionnaires out to

a mental health professional who had patients with DID, but unfortunately none of them wanted to participate. I will only be including the 11 participants who completed the entirety of the survey to capture the full data of one who has been diagnosed with DID. Since this was a post on a Facebook group that only included those with DID and had 1,100 members, there were questions from group members on the posts that I would post weekly starting on May 26, 2022, about the questionnaires who were concerned how the question: cognition may be a factor in why the total number of responses collected were not completed responses. Although all 27 participants agreed to consent, there was a screening questionnaire (see Appendix E) that would determine if they were eligible to take part in the survey. In the screening questionnaire, for question 1, 26 respondents selected yes and 1 selected no to being between the ages of 18-60. For question 2, 24 respondents selected yes and 3 selected no for being clinically diagnosed with DID. If they answered no to both questions, they would not be able to advance to the questionnaires.

Participants were between the ages of 18-60, with an average age of 30.5 years old. The outliers include one 18-year-old and one 59-year-old. The average age for an official diagnosis was 26.5 years old. The participants identified as 55% female (6 out of 11), 18% non-binary/non-conforming (2 out of 11), and 9% each of transgenderless, genderfluid, and prefer not to answer (1 each out of 11). For race/ethnicity, participants answered as 55% White/Caucasian, 27% mixed, including 1 Moroccan-Irish and 1 Asian, African American and Hispanic, and 18% preferred not to answer. Regarding educational background, 45% have some college experience, but no degree, 27% have a high school degree or GED, and 9% each have an Associate's Degree, Master's Degree, and Doctorate Degree. Regarding employment status, 36% are receiving assistance such as disability and social security, 55% reported being unemployed, employed full-

time, and 9 reported being employed part-time. The other was reported as “side jobs” and “private teacher”. Regarding marital status, 64% reported being single, and 36% reported being divorced or in a domestic partnership. What is also important to note is the amount of time that these participants mostly answered that 45% have been in treatment for more than 6 months, and 55% answered that they are currently not in treatment. Additional information can be found in Appendix G Table 1.

### **DID and Daily Life Routines Questionnaire**

In variable one, this is a questionnaire that I created that was specific to the diagnosis of DID and how they conduct certain daily life functions and routines such as working, maintaining relationships, remembering where they work, and conducting personal and household hygiene. This questionnaire also includes questions on how they remember who they are, and where they live, along with open-ended questions to see if they assign their “alters” for different functions. Some of the answers also come from the demographic questionnaire. In one question, it is asked how many alters one has in their system. The average number of the 11 participants was approximately 25 alters with 2 participants stating 8 alters on the low end and one participant stating 52 on the high end. The average age in which these participants were diagnosed was 26 years old, with 18 years old on the low end and 57 on the high end. For treatment, 45% of the participants have been receiving treatment for more than 6 months, the other 45% are currently not in treatment, and 9% stated they never had any specific treatment available.

In the next set of questions, it is related to how they can function in their daily life relating to how they can keep track of where they work, who they are and where they live, how they remember their relationships and open ended questions about whether they assign alters to different functions. These are included in a separate table in Appendix G, Table 2 to show how

one disperses certain life functions onto their alters. Participants were asked to mark all that apply in selecting how they remember the above-mentioned functions. Regarding remembering who they are and where they live, the majority of the respondents being 45%, use daily written notes. In addition to this, another 45% of respondents do not use reminders, 36% use calendar reminders and designated person(s), 27% use phone alarms, and 9% use text reminders. In the question of how do they remember where they work, the majority do not use reminders, being 64% of respondents. Other reminders selected were 27% calendar and phone alarms and 9% daily written and text reminders. The one that was very interesting to me from the results was how they remember who their friends and family are and how they remember and maintain work and romantic relationships. Forty-five percent of respondents use daily written reminders and calendar reminders, while 36% use text reminders, 27% use phone alarms and a designated person, and 18% do not use reminders.

### **WHODAS 2.0**

The World Health Organization Disability Assessment Scale 2.0 (WHODAS 2.0)--36 item, self-administered questionnaires were used to measure how difficult their disability has made it conduct day-to-day tasks such as working, personal and household hygiene, physical activity, and maintaining relationships. The 36-item questionnaire requires participants to respond by selecting only one of the options presented for each question. These options are “1=None”, “2=Mild”, “3=Moderate”, “4=Severe”, or “5=Extreme or cannot do”. Six categories are on this scale, but I am excluding one category. which is the mobility category as that is not a parameter I am measuring. The five categories included are understanding and communicating, self-care, getting along with people, life activities which are split into household and school/work, and participation in society. In the category of understanding and communicating,

the overall mean difficulty score was 3.1, which translates to moderate difficulty for things such as learning a new task, concentrating on doing something for 10 minutes, and starting and maintaining a conversation. In the category of performing self-care (personal hygiene), the overall mean difficulty score was 2.6, which translates to the higher end of mild to almost moderate. In the category of getting along with people, the overall mean difficulty score was 3.2, which translates to moderate difficulty for things such as maintaining a friendship, dealing with people they do not know, and making new friends. In the category of life activities of household hygiene and school and/or work, this is a combination overall mean difficulty score of 3.5 translating to moderate difficulty for performing tasks such as household chores, getting all household responsibilities completed, getting all of the work and/or school work done, and getting the work and/or school work done as quickly as need be. In the category of participation in society, the overall mean difficulty score was 3.3, which translates to overall moderate difficulty. This includes joining in community activities, how having a health condition, DID in this case, affected one emotionally, and doing things that promoted relaxation or pleasure. In the last three questions of this assessment scale, the question asked, over the past 30 days, how many days were the difficulties present as a whole, the respondents overall responded with 20-25 days. In the next question, it asks how many days, in the past 30 days, were unable to carry out the task, which came with a mean of 7-15 days. In the last question of how many days, in the past 30 days, did they have to cut back or reduce usual activities, the majority answered with an average of 20 days. This shows that they can carry out the task they need to take care of, but most days, it's difficult. To see the full statistics and frequency of answers to the questions in these categories, please refer to Appendix G Table 4.

To determine the skewness, kurtosis, and standard deviations of the answers to these questions, I used IBM's SPSS application. The skewness of the questions ranged from -.903 to .536. Since the skewness is set between -0.5 and 0.5, this shows as a negative skew since the values are higher in the negative. The kurtosis reading of the questions ranged from -2.069 to 1.657, showing a negative platykurtic kurtosis. This is in comparison to the overall mean being 3.18. Since the nominal scales translated to numerical data as aforementioned, the scale ranged from 1-5 for each question, and the standard deviation ranged from .69-1.47. This shows that there was not a significant difference in answers for each question. Four questions, however, had a high selection of moderate difficulty: remembering to do important things, learning a new task, dealing with people they do not know, and day-to-day work/school. Please refer to Appendix G Table 4 for the histograms of each question.

### **DID and Daily Life Routine Questionnaire Open-Ended Question**

In the DID and Daily Life Questionnaire I created, I thought it was important to let the participants let the general population know at least one thing about what it is like to live with DID. The question asked, "If there is one thing you would like to share about living with DID for the general population to understand, please comment below. You may put N/A if you do not want to share:". Of the 11 respondents, only 9 answered this question. Still, there are some responses which I believe are beneficial to highlight as there was no one theme:

- "There are big leaps in our knowledge - one day we may remember exactly how we met people just a few times looked like and another day not remember our parents' faces. But nobody should take it as a reason to avoid or hate us."
- "We are not to be feared, we are benign".



- “It is far less about alters and outlandish behaviour than what you see on social media or tv. The bulk of living with DID is severe amnesia, memory loss, brain fog, inability to hold onto one thread long enough to accomplish anything, long enough to truly participate in a life. We're always playing catch up, covering up what we don't remember and trying to pass as being singular, NT. I wish it was as fun as it looks on social media but we don't have the energy to shower regularly let alone dress/ style/ makeup each of us as we switch.”
- “It is NOT fun, but it doesn't necessarily ruin your life. Having DID has definitely saved my life, but it has also almost ended it. It's a double edged sword of sorts.”

These statements show that those with DID struggle daily with tasks and remembering certain things, unlike normal forgetting or misplacing. Those with DID want to be understood, taken seriously, and want the diagnosis to be taken more time on with patience. In putting these statements and messaging with the administrators of the Facebook group that this came from, this insight was truly eye-opening. Please refer to Appendix G, Table 3 for all of the statements.

### **Correlational Analyses**

The Pearson's  $r$  correlation was used for the WHODAS-2.0, 36 item version, self-administered questionnaire. Upon data completion, there was statistical significance at the 0.05 level and the 0.01 level. There were 8 non-correlations reported between questions and there were 2 total negative linear correlations. The 8 non-correlated questions were 5 and 24, 6 and 27, 19 and 29, 24 with 5 and 29, 27 and 6, 29 and 18, and 31 and 24. The two that are negatively correlated are questions 6 and 7 which were both at -0.1 with each other. The correlations show that each question in regard to how debilitating it can be to conduct certain tasks, that it is in relation to the participants' DID diagnosis. This along with the mean overall score of the

questionnaire being at moderate difficulty shows that their answer is dependent on how hard it was for them to conduct a certain action in the last 30 days. Please refer to Appendix G, Table 5 for the rest of the correlation results.

### **Discussion**

The results gathered from this research fully support and validate the question of “How do those diagnosed with DID function normally in their daily lives?” The results show that in aspects of self-care, remembering people, where they live and work as well as taking care of the household, it presents at a moderately difficult level overall to conduct day-to-day tasks. It shows how DID can affect one’s daily life routine, especially when switching alters to perform certain tasks and be in certain social situations.

### **Implications**

The WHODAS-2.0, 36-item version showed how debilitating it could be for those with DID to function normally in their day-to-day lives and memory recall. The WHODAS-2.0 presented is beneficial to show how it can be difficult to keep up with and start something new in each aspect of daily life routines. In the open-ended questions, it puts into perspective how difficult it can be to conduct the daily tasks all together. In the question of “Overall, in the past 30 days, how many days were these difficulties present?”, the mean was 20-25 days. The next question asked, “In the past 30 days, for how many days were you totally unable to carry out your usual activities or work because of any health condition?”, the mean was 7-15 days, and in the question of “In the past 30 days, not counting the days that you were totally unable, for how many days did you cut back or reduce your usual activities or work because of any health condition?”, the mean was 20 days. This highlights that this mental illness can be debilitating for most days in trying to conduct a daily life

routine. Along with this, the questions from the DID and daily life routine questionnaire show that there are methods that the participants use to keep themselves organized and focused daily. The researcher believes that what was the most surprising was that they did not use just one method for remembering and maintaining relationships and where they live. However, most participants reported that they did not need to set reminders of where they work. Practitioners may use these results in my population of interest to help them understand how DID affects their patient's life. This can help them try different treatment approaches and understand this population more.

### **Similarities and Differences**

In looking at the literature review and comparing the approaches, there are two researches that stand out and that is from Patrichi et al. (2021) and Zeligman et al. (2017). These two articles delved into how people with DID can live daily. Zeligman et al. focused on men who live with this mental illness and covered similar parameters. These include diagnosis; alters and their roles; how in being a male it can be difficult to express what they are going through because of the stigmatization of being a male; and maintaining relationships. Patrichi et al. focused on dissociative amnesia and how it affected the case studies lives and how they can live day to day with this amnesia from one personality to another. In the first 2 presented cases, it was not confirmed that they had DID, but in the 3rd one mentioned, the patient had 4 personalities in which it was discovered that they all do communicate to each other about memory and events in between being the "front" personality of the patient. This is similar to what the researcher has discovered in that they were able to point out that this symptom of DID can affect someone's recall of completely forgetting or partially remembering certain memories. The differences in the other articles

presented is that they have focused on how the brain structure is affected by having DID, how certain treatment approaches such as schema therapy, and an education online program in which the patient would complete at home outside of therapy sessions, how those with DID identify themselves over time, how the Rorschach Personality Test was used with those in having DID can present as more than one, how the thought process can switch between identities, how disturbances in sleep are not a strong factor of DID, but fantasy is, and how self-referential information between identities can be skewed and be experienced differently by each one. In going back to the approach of schema therapy research by Huntjens et al. (2019), the parameters they used are similar to my parameters, excluding the language parameter for which they were looking. They also used the WHODAS-2.0-36 item version as a variable but did not use this as a main variable to determine the effect that DID has on people's daily life. The data that the researcher has presented takes the WHODAS-2.0 into consideration of how having DID can affect them in routine.

### **Limitations**

In limitations, the one thing that could not be included is the mental health professional's patients that did not agree to consent to the study. She had seven patients with DID; unfortunately, none wanted to participate. If that data was able to be presented since it was from a clinical standpoint, it is believed that the scale of disability in each section may have had a higher mean. Along with this, what may have caused the limitation was that the questionnaire would have been given in a clinical and closed environment, compared to the posted link where the participants could do it in the comfort of their own home, but this is something that is hypothesized. This study is strictly for those diagnosed with DID and cannot be used for other mental illnesses. However, the researcher believes this would be

useful for other dissociative disorders if the DID and Daily Life Routine questionnaire questions can be revised to open up the target audience. Along with this, although SurveyMonkey recorded 27 responses, only 11 of them were completed in full. Some were considered disqualified from the screening questionnaire, and some started the survey, but never finished. The external validity of the WHODAS-2.0, 36-item version can be applied to all populations, settings, and situations. The DID and Daily Life Routine questionnaire are not as generalizable as it is limited to the population diagnosed with DID.

## **Conclusions**

The findings in this research can help the general population understand how those with Dissociative Identity Disorder (DID) live their daily lives and see the impact it has on the individual. The results of this study show that it is indeed difficult to conduct daily tasks and how it can prevent them from completing what they need to complete with work, school, personal and household tasks, as well as remembering and maintaining relationships. It is strongly believed that more research needs to be done on this mental illness as there have been years of research gaps in subjects relating to this diagnosis. The WHODAS-2.0 can be used in future studies to determine before and after treatment to see if it had a positive impact in improvement of the disability scale. Although not mentioned in this research, but in the literature review, the childhood traumatic questionnaire (CTQ) can be used to diagnose sooner and start treatment before the illness can take over and become debilitating. This study shows that the mean age of diagnosis was 26.5 years old, which means that the diagnosis is identified in the beginning of adulthood and not sooner. The sooner the diagnosis, the more successful the individual could be in control of themselves and taking care of themselves with little to no debilitation. It can help the individual understand

themselves more and live more freely. Although my research covered only a fraction of what needs to be understood, this diagnosis needs more attention for treatment approaches, symptoms, and overall knowledge and education.

### References

- American Psychiatric Association. (2017). Dissociative Disorders. In *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed.)  
<https://cdn.website-editor.net/30f11123991548a0af708722d458e476/files/uploaded/DSM%2520V.pdf>
- Brand, B. L., Lanius, R. A., Schielke, H. J., Putnam, K. T., Putnam, F. W., Loewenstein, R. J., Myrick, A., Jepsen, E. K. K., Langeland, W., Steele, K., & Classen, C. C. (2019). An online educational program for individuals with dissociative disorders and their clinicians: 1-year and 2-year follow-up. *Journal of Traumatic Stress*, 32(1), 156–166.  
<https://doi.org/10.1002/jts.22370>
- Dimitrova, L., Fernando, V., Vissia, E. M., Nijenhuis, E. R. S., Draijer, N., & Reinders, A. A. T. S. (2020). Sleep, trauma, fantasy and cognition in dissociative identity disorder, post-traumatic stress disorder and healthy controls: a replication and extension study. *European Journal of Psychotraumatology*, 11(1), 1–11.  
<https://doi.org/10.1080/20008198.2019.1705599>
- Dorahy, M. J., Huntjens, R. J. C., Marsh, R. J., Johnson, B., Fox, K., & Middleton, W. (2021). The sense of self over time: Assessing diachronicity in dissociative identity disorder, psychosis and healthy comparison groups. *Frontiers in Psychology*, 12, 620063.  
<https://doi.org/10.3389/fpsyg.2021.620063>
- Hartmann, E., & Benum, K. (2019). Rorschach assessment of two distinctive personality states of a person with Dissociative Identity Disorder. *Journal of Personality Assessment*, 101(2), 213–228. <https://doi.org/10.1080/00223891.2017.1391273>

- Huntjens, R. J. C., Rijkeboer, M. M., & Arntz, A. (2019). Schema therapy for Dissociative Identity Disorder (DID): rationale and study protocol. *European Journal of Psychotraumatology*, 10(1), 1–11. <https://doi.org/10.1080/20008198.2019.1571377>
- Marsh, R. J., Dorahy, M. J., Verschuere, B., Butler, C., Middleton, W., & Huntjens, R. J. C. (2018). Transfer of episodic self-referential memory across amnesic identities in dissociative identity disorder using the Autobiographical Implicit Association Test. *Journal of Abnormal Psychology*, 127(8), 751–757. <https://doi.org/10.31219/osf.io/cq4bx>
- Mitra, P., & Jain, A. (2021, November 21). *Dissociative identity disorder*. StatPearls [Internet]. Retrieved February 21, 2022, from <https://www.ncbi.nlm.nih.gov/books/NBK568768/>
- Patrichi, B. E., Ene, C., Rîndașu, C., & Trifu, A. C. (2021). Dissociative Amnesia and Dissociative Identity Disorder. *Journal of Educational Sciences & Psychology*, 11(1), 207–216. doi:10.51865/JESP.2021.1.18.
- Reinders, A. A. T. S., Chalavi, S., Schlumpf, Y. R., Vissia, E. M., Nijenhuis, E. R. S., Jäncke, L., Veltman, D. J., & Ecker, C. (2018). Neurodevelopmental origins of abnormal cortical morphology in dissociative identity disorder. *Acta Psychiatrica Scandinavica*, 137(2), 157–170. <https://doi.org/10.1111/acps.12839>
- Trifu, S. (2019). Dissociative identity disorder. psychotic functioning and impairment of growing-up processes. *Journal of Educational Sciences and Psychology*, 9(2), 102-108. <https://libauth.purdueglobal.edu/login?url=https://www.proquest.com/scholarly-journals/dissociative-identity-disorder-psychotic/docview/2371947189/se-2?accountid=34544>
- Ustun, TB, Kostanjsek, N., Chatterji, S., & Rehm, J. (Eds.). (2010). *Measuring Health and Disability : Manual for WHO disability assessment schedule (WHODAS 2.0)*. World



Health Organization. Retrieved March 30, 2022, from

[https://www.who.int/publications/i/item/measuring-health-and-disability-manual-for-who-disability-assessment-schedule-\(-whodas-2.0\)](https://www.who.int/publications/i/item/measuring-health-and-disability-manual-for-who-disability-assessment-schedule-(-whodas-2.0))

Zeligman, M., Greene, J. H., Hundley, G., Graham, J. M., Spann, S., Bickley, E., & Bloom, Z. (2017). Lived experiences of men with Dissociative Identity Disorder. *Adultspan Journal*, 16(2), 65–79. <https://doi.org/10.1002/adsp.12036>

**Appendix A**

Redacted for Privacy/Copyright Reasons.

## **Appendix B**

### Research Announcement

My name is BreAna Eckman.

I am conducting research through Purdue University Global to obtain a Master's Degree in Psychology.

The purpose of the research is to help expand knowledge on how those with Dissociative Identity Disorder are able to function normally in their daily lives. This includes maintaining and remembering relationships, daily routine, work, personal and household hygiene.

Participants must be between the ages of 18-60 and have been clinically diagnosed with Dissociative Identity Disorder.

If you are interested in answering this questionnaire, please sign the informed consent form.

The survey will take 15-20 minutes of your time.

This study will be confidential, so your personal information will be protected securely according to all applicable laws and regulations.

Thank you for your participation!

**Appendix B1**

## Research Announcement-Facebook Group

My name is BreAna Eckman.

I am conducting research through Purdue University Global to obtain a Master's Degree in Psychology.

The purpose of the research is to help expand knowledge on how those with Dissociative Identity Disorder are able to function normally in their daily lives. This includes maintaining and remembering relationships, daily routine, work, personal and household hygiene.

Participants must be between the ages of 18-60 and have been clinically diagnosed with Dissociative Identity Disorder.

Please note that I have been given approval to post this announcement in this group by the administrators of this group.

If you are interested in taking the survey, please click here for more information and to electronically sign the informed consent form:

[informed consent form link]

The survey will take 15-20 minutes of your time.

This study will be confidential, so your personal information will be protected securely according to all applicable laws and regulations.

Click here to participate! [link to survey monkey]

Thank you for your participation!

## Appendix C

### Purdue University Global Consent for Participation in Research

#### *“The Effect of Dissociative Identity Disorder and Daily Life Routines”*

#### CONCISE SUMMARY

The purpose of this study is to grasp and share a more understanding of dissociative identity disorder and its effect on everyday life. This includes daily routine, relationships, work, and hygiene (house and personal). The duration of this study will take approximately 15-20 minutes. The study involves filling out questionnaires pertaining to everyday life, demographics, and how this mental illness disables them in conducting certain cognitive functions. There are no significant risks to this study, but the benefit of gaining answers from participants will provide clearer understanding of dissociative identity disorder and what one goes through daily. More details pertaining to this study can be found below. Before continuing on, please review below for the inclusion and exclusion criteria for this study:

Participants must be between the ages of 18-60 and have been clinically diagnosed with Dissociative Identity Disorder.

#### **Why am I being asked?**

You are being asked to be a participant in a research study about dissociative identity disorder and its effect on daily life routines. This research study is being conducted by BreAna Eckman, a Master's of Science in Psychology student at Purdue University Global. You have been asked to participate in the research because you are a part of the diagnosed dissociative identity disorder community and may be eligible to participate. We ask that you read this form and ask any questions you may have before agreeing to be in the research.

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with Purdue University Global or your mental health professional. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

#### **What is the purpose of this research?**

The purpose of this research is:

To grasp a better understanding of how dissociative identity disorder has an effect on remembering daily routine, personal relationships, work, and personal and house hygiene.

**What procedures are involved?**

If you agree to be in this research, we would ask you to do the following things:

Fill out 2 questionnaires to the best of your ability in choosing and writing down the best answers that relate to your daily life.

Approximately 10-15 participants may be involved in this research at Purdue University Global.

**What are the potential risks and discomforts?**

The research may:

- Bring about past traumatic experiences and relationships
- Include sensitive topics regarding mental and physical ability

**Are there benefits to taking part in the research?**

The benefit that will be gained from this research, is being able to obtain more information in understanding dissociative identity disorder and its effect on an individual.

**What about privacy and confidentiality?**

The only people who will know that you are a research subject are members of the research team. No information about you, or provided by you during the research, will be disclosed to others without your written permission. When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity.

The only personal information that will only be available to the researchers' eyes is the first name of each identity that the participant has as well as the gender identity, if they feel comfortable in disclosing that information, and age of each identity. The names of the identities will be given a different name as to not share the real names when the results are published. As soon as the data is collected from the needed number of participants, the questionnaires will be shredded.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law.

**Will I be reimbursed for any of my expenses or paid for my participation in this research?**

At this time, no reimbursement is available for participation in this research.

**Can I withdraw from the study?**

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study.

**Whom should I contact if I have questions?**

The researcher conducting this study is BreAna Eckman. You may ask any questions you have now. If you have questions later, you may contact the researchers at: Phone: 352-223-9043 or Email: BreAnaEckman@student.purdueglobal.edu. You may also contact the researcher's thesis adviser, Dr. Gabrielle Blackman PhD, at gblackman@purdueglobal.edu.

**What are my rights as a research subject?**

If you feel you have not been treated according to the descriptions in this form, or you have any questions about your rights as a research subject, you may contact the Institutional Review Board (IRB) at Purdue University Global through the following representative:

Susan Pettine, IRB Chair  
Email: spettine@purdueglobal.edu

**Remember:** Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with Purdue University Global or your mental health professional. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

**You may keep a copy of this form for your information and your records.**

**Signature of Subject**

I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I have been given a copy of this form.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date (must be same as subject's)

## Appendix D



---

### Expedited Review – Final Approval

May 13, 2022

Ms. BreAna Eckman  
Purdue University Global  
[breanaeckman@student.purdueglobal.edu](mailto:breanaeckman@student.purdueglobal.edu)

Re: Protocol #22-28 – “The Effect of Dissociative Identity Disorder and Daily Life Routines.”

Dear Ms. Eckman:

Your proposed project was reviewed by the Purdue University Global Institutional Review Board (IRB) for the protection of human subjects under an Expedited Category. It was determined that your project activity meets the expedited criteria as defined by the DHHS Regulations for the Protection of Human Subjects (45 CFR 46), and is in compliance with this institution's Federal Wide Assurance 00010056.

Please notify the IRB immediately of any proposed changes that may affect the expedited status of your project. You should report any unanticipated problems involving risks to human subjects or others to the IRB.

If you have any questions or need additional information, please contact feel free to contact me at [spettine@purdueglobal.edu](mailto:spettine@purdueglobal.edu). I wish you well with your project!

Sincerely,

*Susan B. Pettine*

Susan B. Pettine, Ph.D., CBM  
IRB Chair  
Purdue University Global

cc: Dr. Gabrielle Blackman



## Appendix D1



---

**IRB Approval (for Revision)**

June 28, 2022

Ms. BreAna Eckman  
Purdue University Global  
[breanaeckman@student.purdueglobal.edu](mailto:breanaeckman@student.purdueglobal.edu)

Re: Protocol #22-28 "The Effect of Dissociative Identity Disorder and Daily Life Routines."

Dear Ms. Eckman:

Thank you for submitting the above entitled research project revision for review by the Purdue University Global Institutional Review Board (IRB) for the protection of human subjects. After careful review of the materials you submitted, the IRB has **approved** this revised project.

You are authorized to implement this study as of the Date of Approval: May 13, 2022 (original start date). This approval is valid until June 27, 2023 (this is an extended approval deadline now in place).

You should notify the IRB immediately of any proposed changes to your research project. You should report any unanticipated problems involving risks to human subjects or others to the IRB. For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review on the date indicated above. You must also advise the Board when this study is finished or discontinued.

If you have any questions or need additional information, please contact the IRB Chair, Dr. Susan Pettine, at 772-607-1944.

Sincerely,

*Susan B. Pettine*

Susan B. Pettine, Ph.D., CBM  
IRB Chair  
Purdue University Global

Cc: Dr. Gabrielle Blackman

## Appendix E

**Table 1.***Survey Development Plan*

<b>Objective</b>	<b>Operational Definition</b>	<b>Number and Type of Items</b>
To assess how daily routine is executed	<p>I define the daily routine as the way in which the participant executes daily functioning:</p> <ul style="list-style-type: none"> <li>-working</li> <li>- getting to and from work</li> <li>-personal hygiene (feeding, bathing, brushing teeth, clothing, hair, and/or makeup).</li> <li>- house hygiene</li> </ul>	I will measure this objective using a table with options in which they can place the name of the alter and the role they are assigned to. This is in Q4 (open ended question) under the section "DID and Daily Routine".
To assess how relationships are maintained and remembered	<p>I define relationships as:</p> <ul style="list-style-type: none"> <li>-work relationships</li> <li>- friendships</li> <li>-romantic relationships</li> <li>-family</li> </ul>	I will measure this objective by open ended questioning in Q3 under the section "DID and Daily Routine".
To assess how they remember who they are, where they live, and where they work.	<p>I define remembering as:</p> <ul style="list-style-type: none"> <li>-memory, in general, but specifically where they live and who they identify as.</li> <li>-memory of where they work</li> </ul>	I will measure this objective by an open ended question in Q1-Q2 under the section "DID and Daily Routine".

**Appendix F*****Screening Questionnaire***

Before beginning the questionnaire for Dissociative Identity Disorder and Daily Routine, please answer the following screening questions to qualify for the survey:

1. Have you been clinically diagnosed with Dissociative Identity Disorder?

Yes

No

2. Are you between the ages of 18 and 60?

Yes

No

**Appendix F1****Demographic Questionnaire**

1. What is your first name?
2. What is your age?
3. What is your gender identity?
  - Woman
  - Man
  - Transgender
  - Non-binary/non-conforming
  - Other (please specify): \_\_\_\_\_
  - Prefer not to answer
4. What is your race/ethnicity?
  - American Indian or Alaskan Native
  - Asian/Pacific Islander
  - Black or African American
  - Hispanic
  - White/Caucasian
  - Multiple ethnicity/Other (please specify): \_\_\_\_\_
  - Prefer Not to Answer
5. What is the highest level of education you have attained?
  - Less than a high school degree
  - High School degree or equivalent (GED)
  - Some college, but no degree
  - Associate degree
  - Bachelor degree
  - Masters degree
  - Doctoral degree
  - Other (please specify): \_\_\_\_\_
6. What is your current employment status? (if applicable, mark all that apply)
  - Employed, Full-Time

- Employed, Part-Time
- Self Employed

○ If self-employed, what is your title? \_\_\_\_\_

- Unemployed

○ If unemployed, is this in relation to your diagnosis? (Please circle yes or no)

Yes    No

- Receiving assistance (Disability, Social Security, etc.)
- Other (please specify): \_\_\_\_\_
- Prefer not to answer

7. What is your marital status?

- Single
- Married
- Separated
- Domestic Partnership
- Divorced
- Never Married
- Prefer not to answer

8. How many alters are in your system? An estimated number is okay.

9. What is/are the rest of the system(s) first name, age and gender? (you may put “prefer not to answer” for gender). If there are more than 10, please place only in the number of boxes available. (EX. Sally; 23; Female) You may use faux names.

Name	Age	Gender


10. What is the age and gender of the host(s) of the system? (you may put “prefer not to answer” for gender) (EX. Sally; 23; Female) You may use faux names.

<b>Name</b>	<b>Age</b>	<b>Gender</b>

11. What age were you diagnosed with Dissociative Identity Disorder?

12. What age did you start treatment? (if you are just now beginning treatment, or if this does not apply to you, please state that here).

13. How long have you been in treatment?

- currently not in treatment
- less than 3 months
- 3 months
- 6 months
- between 3 and 6 months
- more than 6 months

**DID and Daily Routine**

1. What method(s) do you use to remember who you are and where you live? Please check all that apply

- daily written notes (i.e. refrigerators, mirrors)
- calendar reminders
- text reminders
- phone alarms
- designated person to remind you (if so, what relation is this person to you? \_\_\_\_\_)
- Other (please specify here) \_\_\_\_\_

2. What method(s) do you use to remember where you work? (If this does not apply, please answer N/A). Please check all that apply

- daily written notes (i.e. refrigerators, mirrors)
- calendar reminders
- text reminders
- phone alarms
- designated person to remind you (if so, what relation is this person to you? \_\_\_\_\_)
- Other (please specify here) \_\_\_\_\_

- daily written notes (i.e. refrigerators, mirrors)
- calendar reminders
- text reminders
- phone alarms
- designated person to remind you (if so, what relation is this person to you? \_\_\_\_\_)
- Other (please specify here) \_\_\_\_\_

[illegible]



--	--

\*personal hygiene (includes bathing, eating, and self-care);

\*house hygiene;

\*socialization;

\*work, friend, family, and/or romantic relationships;

\*memory

5. If there is one thing you would like to share about living with DID for the general population to understand, please comment below. You may put N/A if you do not want to share:

**Appendix F2**

Redacted for Privacy/Copyright Reasons.

## Appendix F3

**WHODAS 2.0**

WORLD HEALTH ORGANIZATION  
DISABILITY ASSESSMENT SCHEDULE 2.0

**36-item version, self-administered**

This questionnaire asks about difficulties due to health conditions. Health conditions include diseases or illnesses, other health problems that may be short or long lasting, injuries, mental or emotional problems, and problems with alcohol or drugs.

Think back over the past 30 days and answer these questions, thinking about how much difficulty you had doing the following activities. For each question, please circle only one response.

In the past 30 days, how much <u>difficulty</u> did you have in:						
<b>Understanding and communicating</b>						
D1.1	<u>Concentrating</u> on doing something for <u>ten minutes</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D1.2	<u>Remembering</u> to do <u>important things</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D1.3	<u>Analysing and finding solutions to problems</u> in day-to-day life?	None	Mild	Moderate	Severe	Extreme or cannot do
D1.4	<u>Learning</u> a <u>new task</u> , for example, learning how to get to a new place?	None	Mild	Moderate	Severe	Extreme or cannot do
D1.5	<u>Generally understanding</u> what people say?	None	Mild	Moderate	Severe	Extreme or cannot do
D1.6	<u>Starting and maintaining</u> a <u>conversation</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do



# WHODAS 2.0

WORLD HEALTH ORGANIZATION  
DISABILITY ASSESSMENT SCHEDULE 2.0

36

Self

In the past 30 days, how much <u>difficulty</u> did you have in:						
<b>Self-care</b>						
D3.1	<u>Washing your whole body?</u>	None	Mild	Moderate	Severe	Extreme or cannot do
D3.2	Getting <u>dressed</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D3.3	<u>Eating</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D3.4	Staying <u>by yourself</u> for a <u>few days</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
<b>Getting along with people</b>						
D4.1	<u>Dealing with people you do not know?</u>	None	Mild	Moderate	Severe	Extreme or cannot do
D4.2	<u>Maintaining a friendship?</u>	None	Mild	Moderate	Severe	Extreme or cannot do
D4.3	<u>Getting along with people who are close to you?</u>	None	Mild	Moderate	Severe	Extreme or cannot do
D4.4	<u>Making new friends?</u>	None	Mild	Moderate	Severe	Extreme or cannot do
D4.5	<u>Sexual activities?</u>	None	Mild	Moderate	Severe	Extreme or cannot do
<b>Life activities</b>						
D5.1	Taking care of your <u>household responsibilities</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D5.2	Doing most important household tasks <u>well</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D5.3	Getting all the household work <u>done</u> that you needed to do?	None	Mild	Moderate	Severe	Extreme or cannot do
D5.4	Getting your household work done as <u>quickly</u> as needed?	None	Mild	Moderate	Severe	Extreme or cannot do

Please continue to next page ...



# WHODAS 2.0

WORLD HEALTH ORGANIZATION  
DISABILITY ASSESSMENT SCHEDULE 2.0

36

Self

If you work (paid, non-paid, self-employed) or go to school, complete questions D5.5–D5.8, below. Otherwise, skip to D6.1.

Because of your health condition, in the past <u>30 days</u> , how much <u>difficulty</u> did you have in:						
D5.5	Your day-to-day <u>work/school</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D5.6	Doing your most important work/school tasks <u>well</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do
D5.7	Getting all the work <u>done</u> that you need to do?	None	Mild	Moderate	Severe	Extreme or cannot do
D5.8	Getting your work done as <u>quickly</u> as needed?	None	Mild	Moderate	Severe	Extreme or cannot do

Participation in society						
In the past <u>30 days</u> :						
D6.1	How much of a problem did you have in <u>joining in community activities</u> (for example, festivities, religious or other activities) in the same way as anyone else can?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.2	How much of a problem did you have because of <u>barriers or hindrances</u> in the world around you?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.3	How much of a problem did you have <u>living with dignity</u> because of the attitudes and actions of others?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.4	How much <u>time</u> did <u>you</u> spend on your health condition, or its consequences?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.5	How much have <u>you</u> been <u>emotionally affected</u> by your health condition?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.6	How much has your health been a <u>drain on the financial resources</u> of you or your family?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.7	How much of a problem did your <u>family</u> have because of your health problems?	None	Mild	Moderate	Severe	Extreme or cannot do
D6.8	How much of a problem did you have in doing things <u>by yourself</u> for <u>relaxation or pleasure</u> ?	None	Mild	Moderate	Severe	Extreme or cannot do

Please continue to next page ...



# WHODAS 2.0

WORLD HEALTH ORGANIZATION  
DISABILITY ASSESSMENT SCHEDULE 2.0

36

Self

H1	Overall, in the past 30 days, <u>how many days</u> were these difficulties present?	<i>Record number of days</i> ____
H2	In the past 30 days, for how many days were you <u>totally unable</u> to carry out your usual activities or work because of any health condition?	<i>Record number of days</i> ____
H3	In the past 30 days, not counting the days that you were totally unable, for how many days did you <u>cut back</u> or <u>reduce</u> your usual activities or work because of any health condition?	<i>Record number of days</i> ____

This completes the questionnaire. Thank you.

### Appendix G

**Table 1**

*Respondents' Sociodemographic Characteristics (N=11)*

Measure	All Subjects
Age	30.5
Marital Status	
Single	63.6%
Domestic Partnership	18.2%
Divorced	18.2%
Married	0%
Widowed	0%
Never Married	0%
Prefer not to answer	
Gender	
Female	55%
Non-binary/non-conforming	18%
Other (please specify)	18%
Prefer not to answer	9%
Male	0%
Transgender	0%
Race/Ethnicity	

---

White or Caucasian	55%
Multiple ethnicities/Other (please specify)	27%
Prefer not to say	18%
American Indian or Alaska Native	0%
Asian or Asian American	0%
Black or African American	0%
Hispanic or Latino	0%
Native Hawaiian or other Pacific Islander	0%

---

---

Education Level	
Have some college experience, but no degree	45%
High school degree or GED	27%
Associate's Degree	9%
Doctorate Degree	9%
Master's Degree	9%
Bachelor's Degree	0%
Less than a high school degree	0%
Other (please specify)	0%

---

---

Employment Status	
Receiving Assistance (Disability, Social Security, etc.)	36.4%
Employed, Full Time	18.2%

---



---

Unemployed	18.2%
Other (please specify)	18.2%
Employed Part Time	9%
Self-Employed	0%
Prefer not to answer	0%

---

**Table 2***Responses on the DID and Daily Life Routine Questionnaire (N=11)*


---

<b><u>Question 17:</u></b> What method(s) do you use to remember who you are and where you live? [check all that apply]	
Daily written notes (i.e. refrigerators, mirrors)	45.5%
Calendar Reminders	36.4%
Text Reminders	9.1%
Phone Alarms	27.2%
Not Applicable	45.5%
Designated person to remind you or other (if there is a designated person, what relation is this person to you?; If it is other, please state "other" and specify.)	36.4%

---

<b><u>Question 18:</u></b> What method(s) do you use to remember where you work? [check all that apply] (If this does not apply, please answer N/A)	
Daily written notes (i.e. refrigerators, mirrors)	9.1%
Calendar Reminders	27.2%
Text Reminders	9.1%
Phone Alarms	27.2%
Not Applicable	63.6%

---

Designated person to remind you or other (if there is a designated person, 18.2%  
what relation is this person to you?; If it is other, please state "other" and  
specify.)

---

**Question 19:** How do you maintain remembering who your friends and  
family are?; How do you maintain romantic and work relationships? [check  
all that apply]

---

Daily written notes (i.e. refrigerators, mirrors)	45.5%
Calendar Reminders	45.5%
Text Reminders	36.4%
Phone Alarms	27.2%
Not Applicable	18.2%
Designated person to remind you or other (if there is a designated person, what relation is this person to you?; If it is other, please state "other" and specify.)	27.2%

---

**Question 20:** Do you assign certain alters to take care of certain aspects in your everyday routine? If  
you answered yes, please list the alters' first name and choose from the following options of what best  
fits what they are responsible for\* (\*personal hygiene (includes bathing, eating, and self-care); \*house  
hygiene; \*socialization; \*work, friend, family, and/or romantic relationships; \*memory).. If it is more  
than 10, please only place that amount of information in the boxes available (EX. Alex; house and  
personal hygiene): You may use faux names.

---



---

---

**Participant 4:**

Charlie, Host, social and tends to do life things

---

Malfyr, Looks after people and cleans sometimes

Vice, Sexual Alter, helps with pain and tends to watch the front so helps with memory

Endym, Persecutor Protector - keeps others from crossing boundaries

Kaia, helps the systems emotional wellbeing

Roarke, Emotional rock, communication and memory

Robyn, personal hygiene (does a terrible job haha)

David, personal hygiene and emotional regulation

Alex, helps with mental health, depression especially.

Elijah, helps with dysphoria

---

**Participant 7:**

Sara; Sleeping

---

Mask; Pretending to be a functioning adult

Bay; Keeping safe in any romantic relationships

---

**Participant 14:**

Morgan, science

---

Dante, English class & protocols

Luoxing & Blau, cooking

---

---

Xijin, finances

Jacques, planning

Blau, German class

Morgan & Dante, Sports & drawing

Jacques & Xijin, cleaning

Demon, health admin

---

**Participant 15:**

Evangelia, work, personal hygiene, house hygiene

---

Journey, work

Bridget, work

---

**Participant 22:**

Sexy, romantic relationships

---

Candace, sports, international contacts, socialization

Canda, work, personal hygiene

Old lady, yoga, meditation

Curly, socialization

Doctor, work, finances, school

Spiral, artistic expression

---

**Participant 23:**

T normally fronts and handles friends usually

---

---

C rarely ever fronts . Will let them out in parks if alone

D if we need to do manual labor basically they enjoy working

K only fronts when there's drama or a fight somewhere

H fronts and does a lot of the house chores but anxiety doesn't let him speak to most people / will talk to host family members

K only fronts during hair appointments and self care / hygiene

V in charge of headspace and protects c from everyone

T V are only ones who will date and normally agree on who they want lately k has wanted to explore but has caused some drama in the headspace

---

**Participant 26:** Arlo (allyson), socializing and some housework

---

Clay, almost all personal hygiene

Alyx, housework and babysitting

Lillie, csa trauma holder

Rev, sexual part (holds memories of sa from older ages)

---

---

Anna, gatekeeper

Mark, anxiety holder

Sean, soother (fronts after triggers to calm body)

Alex, anxiety holder and soother (fronts during or after  
panic attacks)

Sunny, organization (keeps everything organized)

---

**Table 3**

*Responses to the open-ended question in the DID and Daily Life Routine Questionnaire (N=11)*

---

**Question 21:** If there is one thing you would like to share about living with DID for the general population to understand, please comment below. You may put N/A if you do not want to share:

**Participant 4:** It is so hard to know how to feel about someone or something because you very rarely are not being influenced. It's hard to concentrate and it's hard to be consistent. You don't have to worry about systems, just treat us like any other normal person.

**Participant 7:** There are big leaps in our knowledge - one day we may remember exactly how people we met just few times looked like and another day not remember our parents faces. But nobody should take it as a reason to avoid or hate us.

**Participant 14:** That memory is selective and you can't always retrieve on command like other people.

**Participant 15:** We want support to live like "normal" people.

**Participant 18:** It is far less about alters and outlandish behaviour than what you see on social media or tv. The bulk of living with DID is severe amnesia, memory loss, brain fog, inability to hold onto one thread long enough to accomplish anything, long enough to truly participate in a life. We're always playing catch up, covering up what we don't remember and trying to pass as



being singular, NT. I wish it was as fun as it looks on social media but we don't have the energy to shower regularly let alone dress/ style/ makeup each of us as we switch.

**Participant 20:** We are not to be feared, we are benign.

**Participant 21:** It is often covert and covert for a reason. Please don't probe and try to analyze us with basic knowledge. It is a complex, magnificent system that helped us survive and we know ourselves best. We are not monsters.

**Participant 22:** We don't do this cause we want to ... I honestly wish I could remember everything we have blocked out but don't know if I could survive without the group they've been together for as long as any of us can remember.

**Participant 26:** It is NOT fun, but it doesn't necessarily ruin your life. Having DID has definitely saved my life, but it has also almost ended it. It's a double edged sword of sorts.

---

**Table 4**

*Responses on the WHODAS-2.0, 36 item version, self-administered (N=11)*

*\*The Getting Around section is not included since that was not a main focus of the study\**

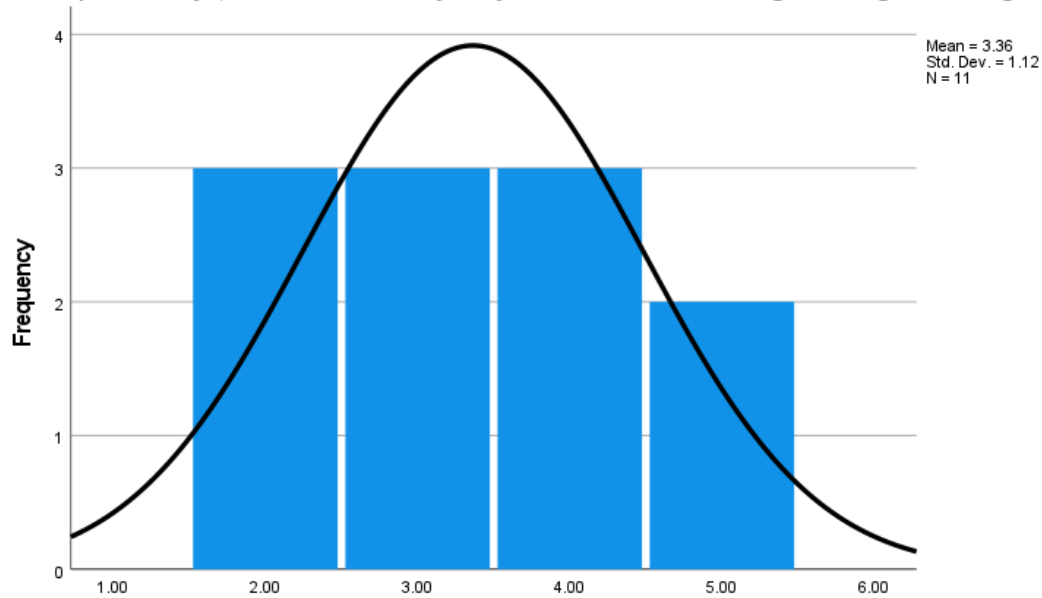
Items (include each question/item below)		
<b>Understanding and Communicating</b>		
In the past 30 days, how much difficulty did you have in:	Mean	SD
1. concentrating on doing something for ten minutes?	3.36	1.12
2. remembering to do important things?	3.45	.69
3. analyzing and finding solutions to problems in day-to-day life?	2.91	1.30
4. learning a new task, for example, learning how to get to a new place?	3.27	1.19
5. generally understanding what people say?	2.82	.98
6. starting and maintaining a conversation?	2.91	1.14
<b>Self-Care</b>	Mean	SD
7. washing your whole body?	2.64	1.21
8. getting dressed?	2.45	1.13
9. in eating?	2.82	1.25
10. staying by yourself for a few days?	2.55	1.51
<b>Getting Along with People</b>	Mean	SD
11. dealing with people you do not know?	3.09	1.04
12. maintaining a friendship?	3.09	0.94

13. getting along with people who are close to you?	3.18	1.25
14. making new friends?	3.09	1.45
15. sexual activities?	3.36	1.50
<b>Life Activities (Household and School/Work)</b>	<b>Mean</b>	<b>SD</b>
16. taking care of your household responsibilities?	3.45	0.93
17. doing most important household tasks well?	3.64	0.92
18. getting all the household work done that you needed to?	3.82	1.08
19. getting your household work done as quickly as needed?	3.91	0.83
Because of your health condition, in the past 30 days, how much difficulty have you had in:	<b>Mean</b>	<b>SD</b>
20. your day-to-day work/school?	3.27	1.19
21. doing your most important work/school tasks well?	2.91	1.38
22. getting all the work done that you need to do?	3.27	1.10
23. getting your work done as quickly as needed?	3.55	1.13
<b>Participation in Society</b>	<b>Mean</b>	<b>SD</b>
In the past 30 days:		
24. How much of a problem did you have in joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?	4	.77

25. How much of a problem did you have because of barriers or hindrances in the world around you?	2.91	1.22
26. How much of a problem did you have living with dignity because of the attitudes and actions of others?	3	1.18
27. How much time did you spend on your health condition, or its consequences?	3.5	3.82
28. How much have you been emotionally affected by your health condition?	3.82	1.17
29. How much has your health been a drain on the financial resources of you or your family?	3	1.18
30. How much of a problem did your family have because of your health problems?	2.82	1.33
31. How much of a problem did you have in doing things by yourself for relaxation or pleasure?	2.82	1.47

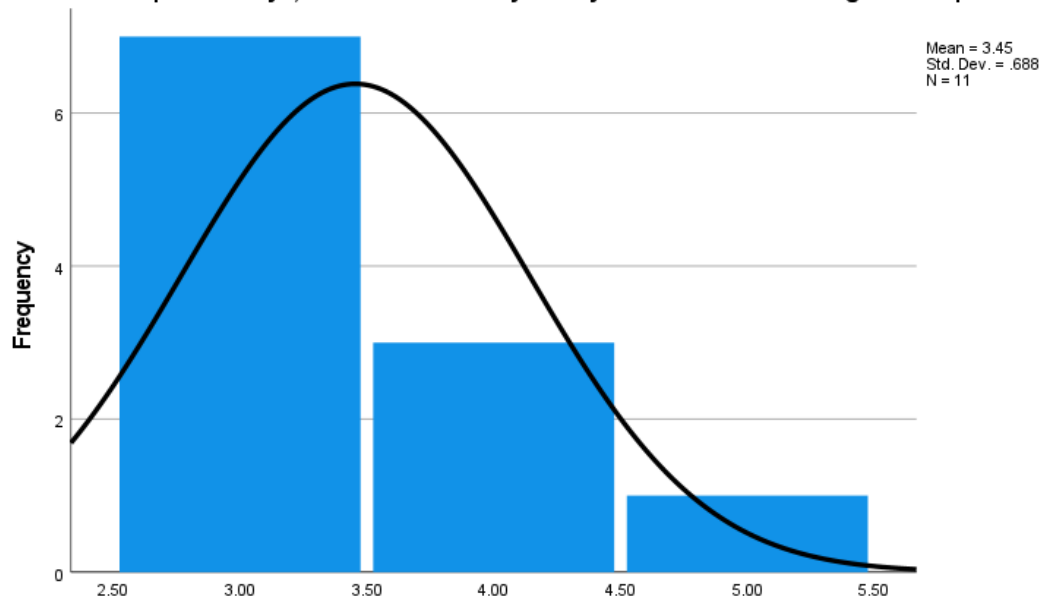
---

In the past 30 days, how much difficulty did you have in concentrating on doing something for ten minutes?



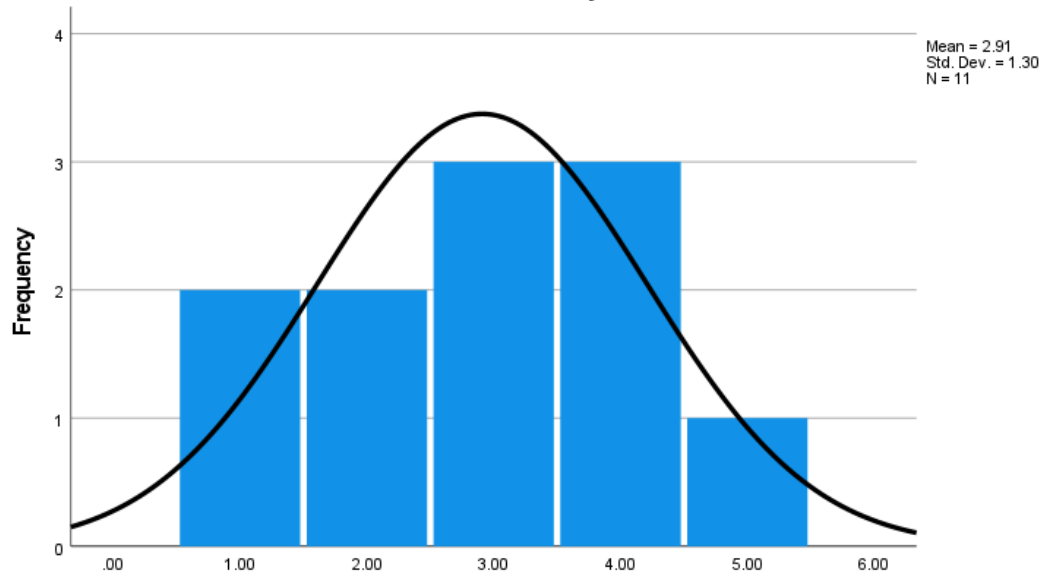
In the past 30 days, how much difficulty did you have in concentrating on doing something for ten minutes?

In the past 30 days, how much difficulty have you had in remembering to do important things?



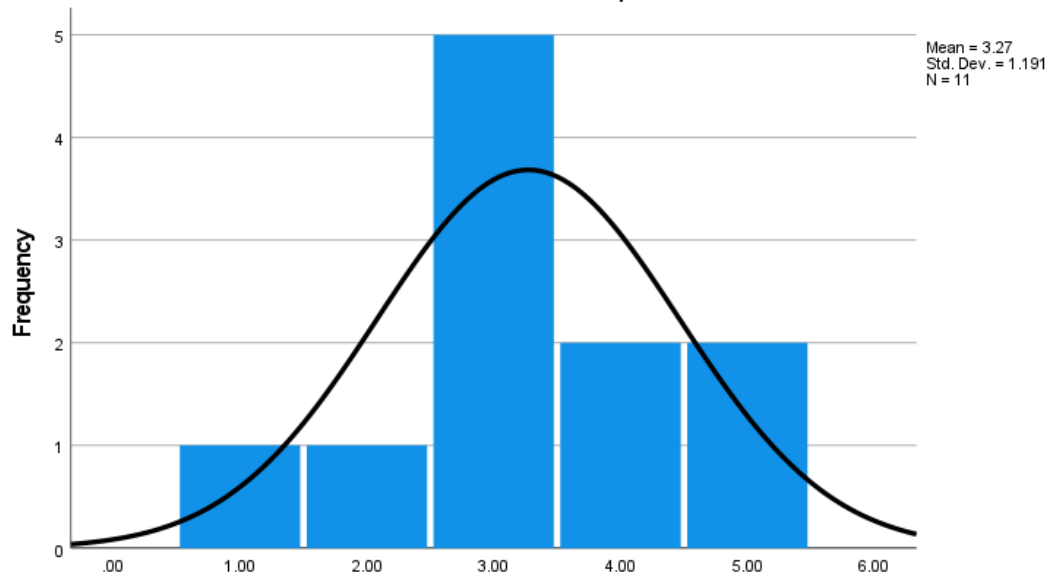
In the past 30 days, how much difficulty have you had in remembering to do important things?

In the past 30 days, how much difficulty have you had in analyzing and finding solutions to problems in day-to-day life?

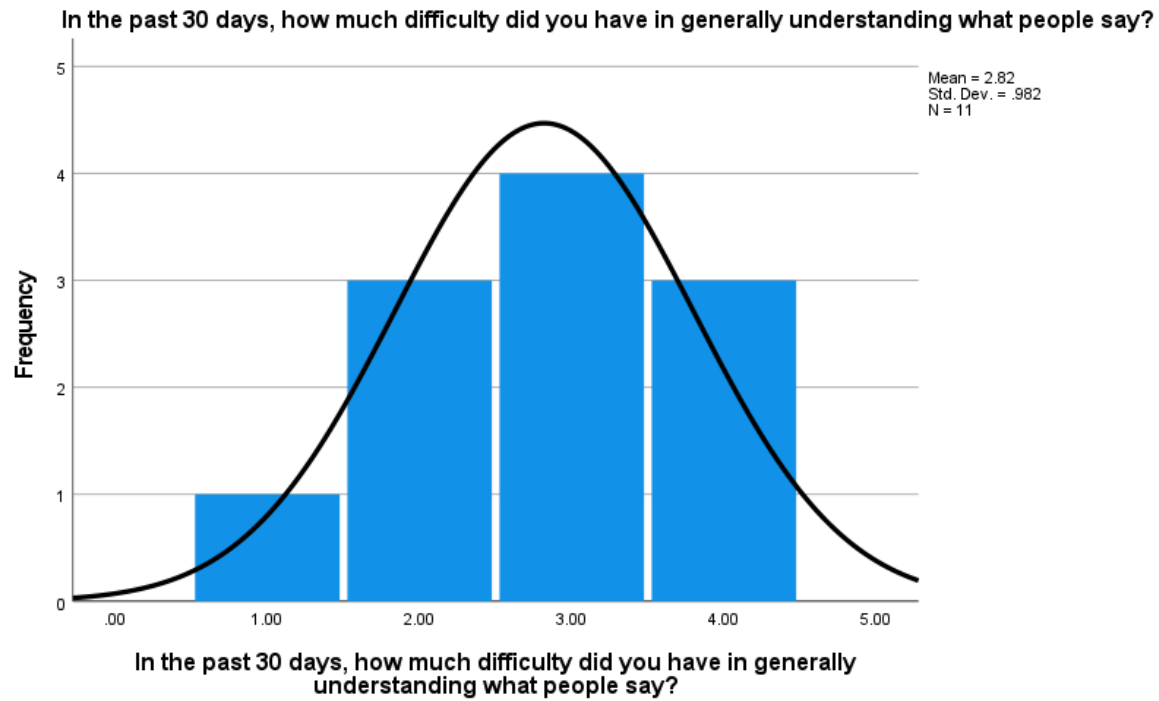


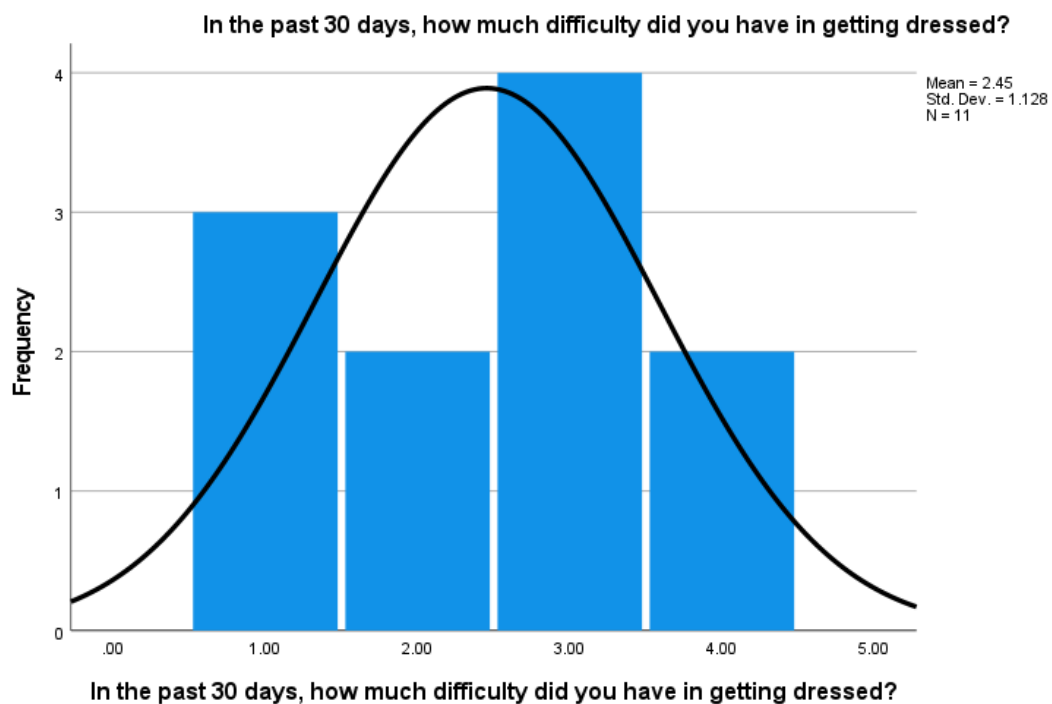
In the past 30 days, how much difficulty have you had in analyzing and finding solutions to problems in day-to-day life?

In the past 30 days, how much difficulty have you had in learning a new task, for example, learning how to get to a new place?

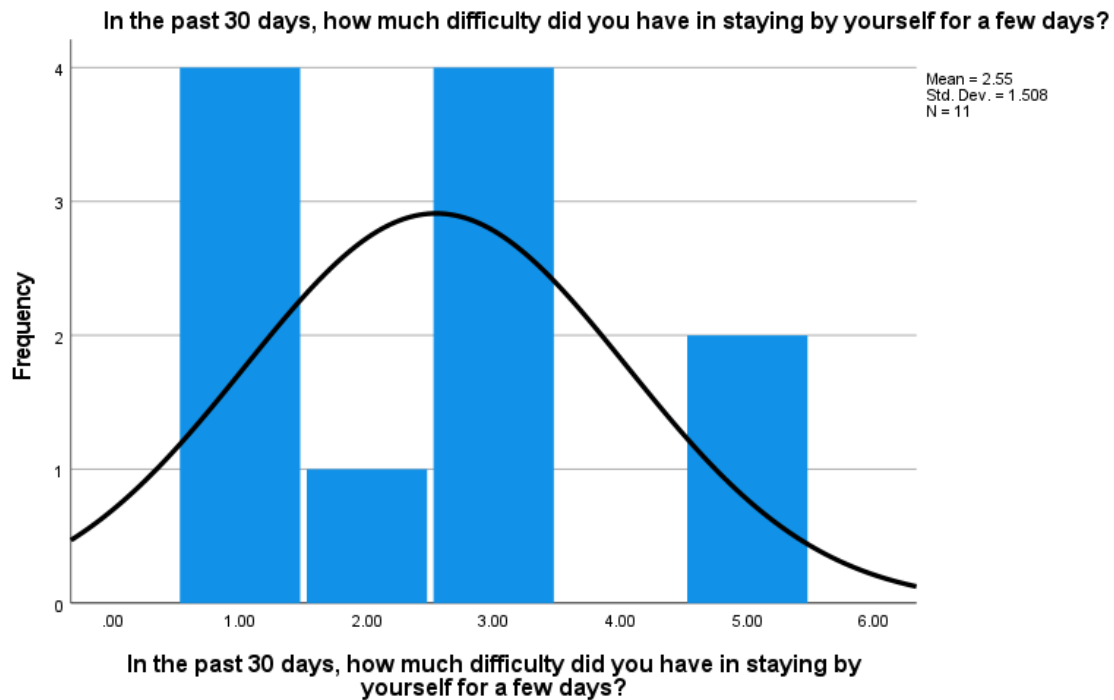
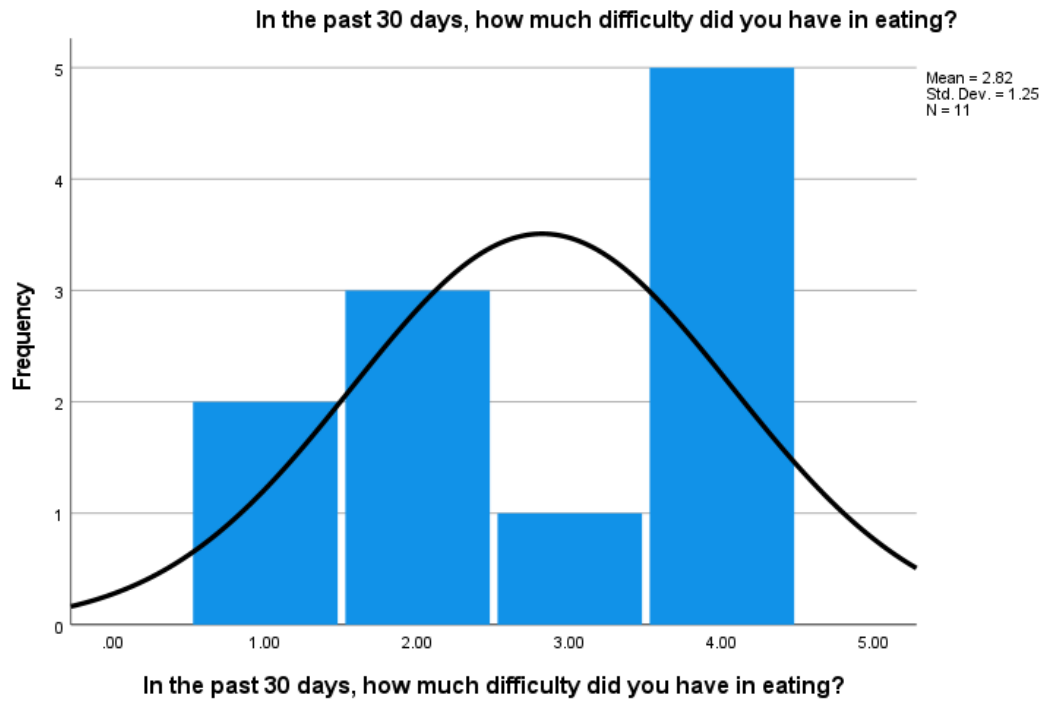


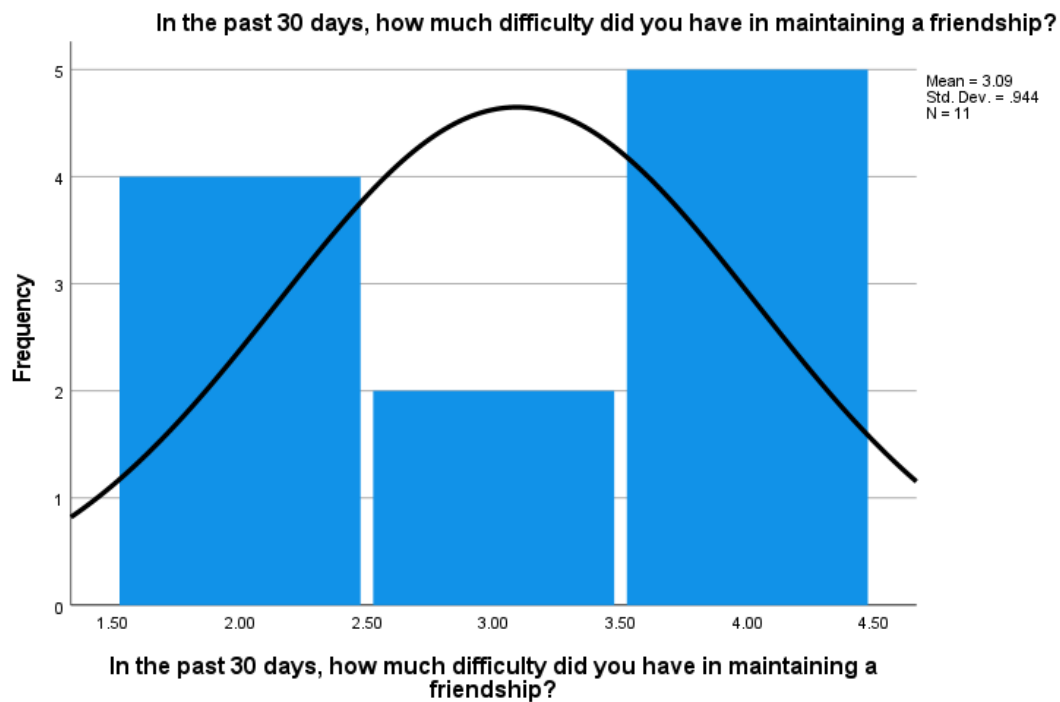
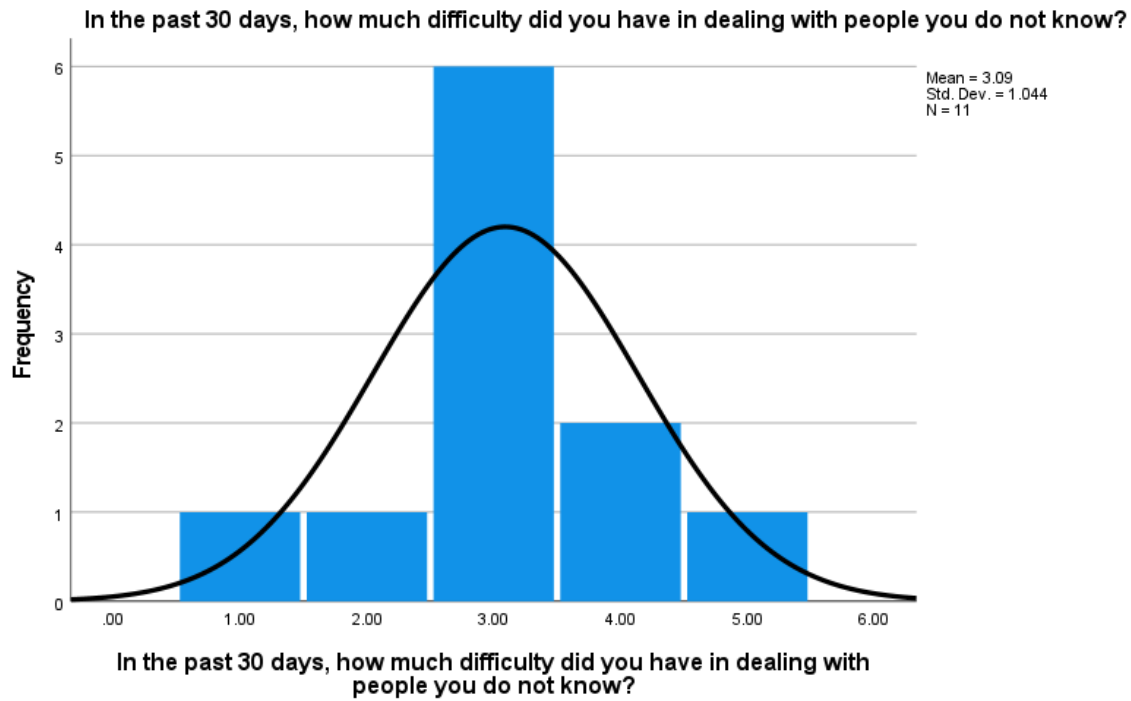
In the past 30 days, how much difficulty have you had in learning a new task, for example, learning how to get to a new place?



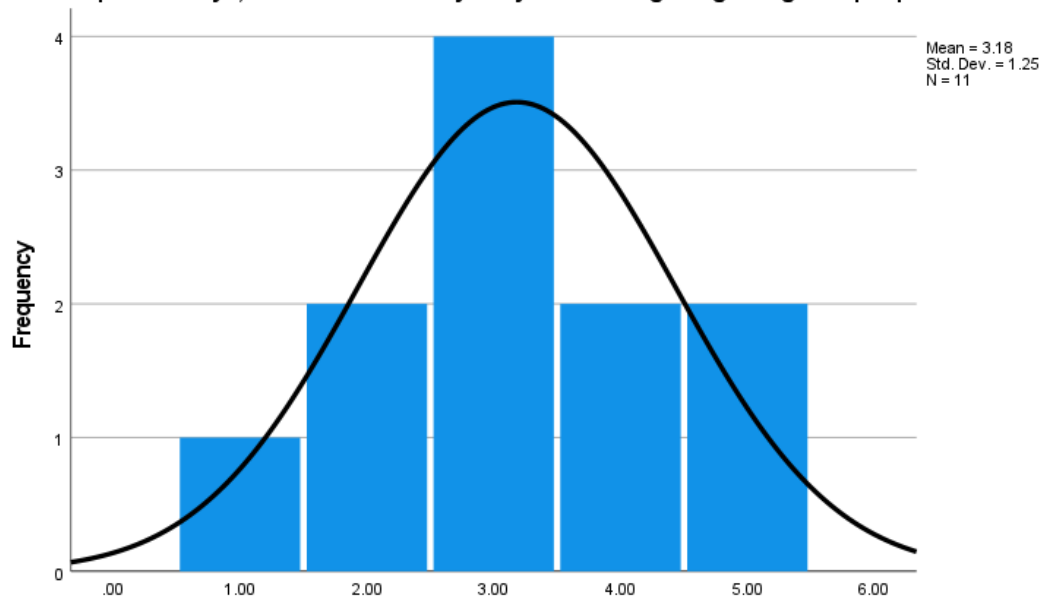






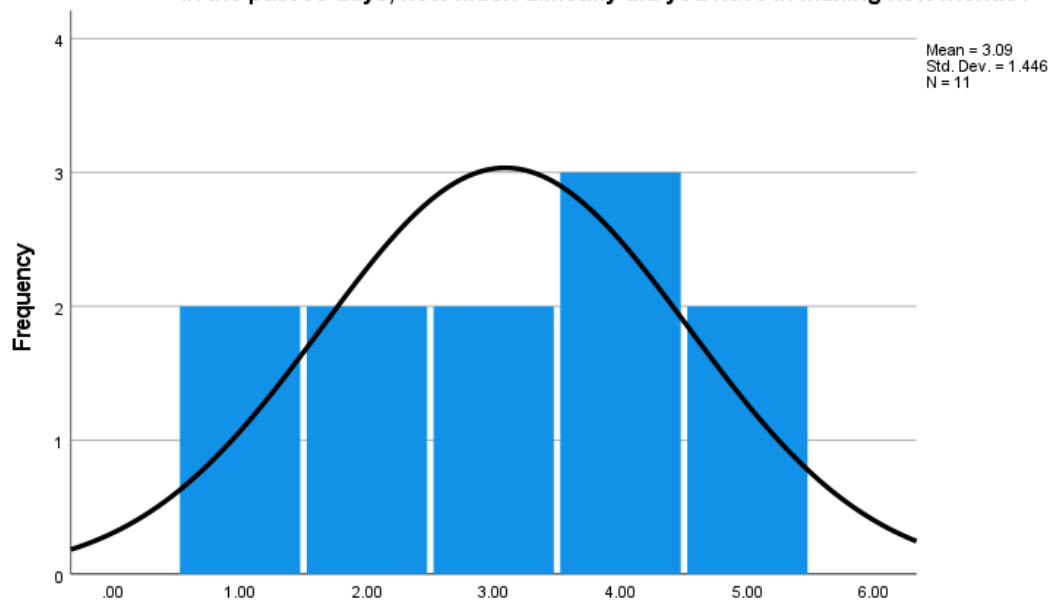


In the past 30 days, how much difficulty did you have in getting along with people who are close to you?

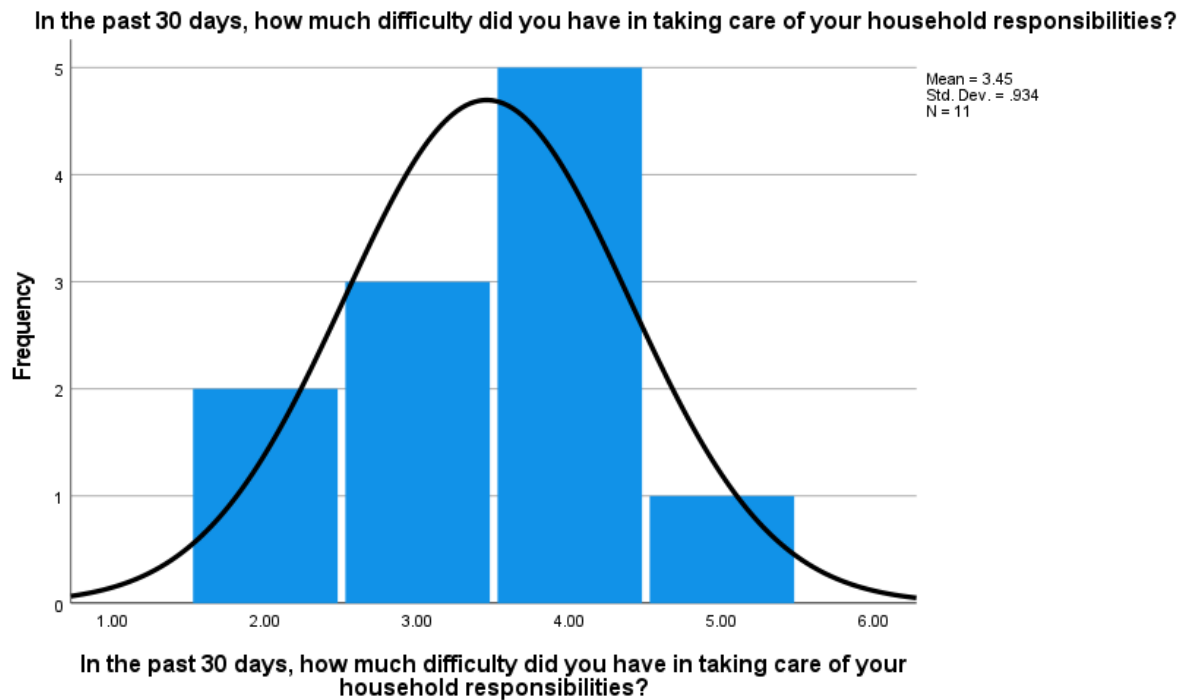
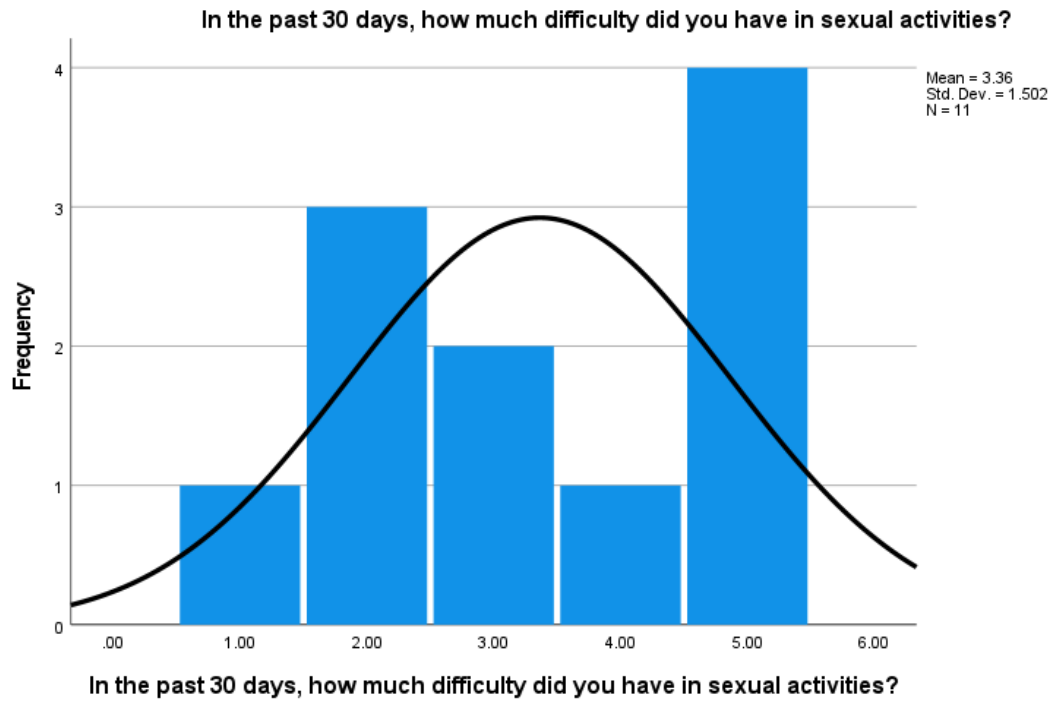


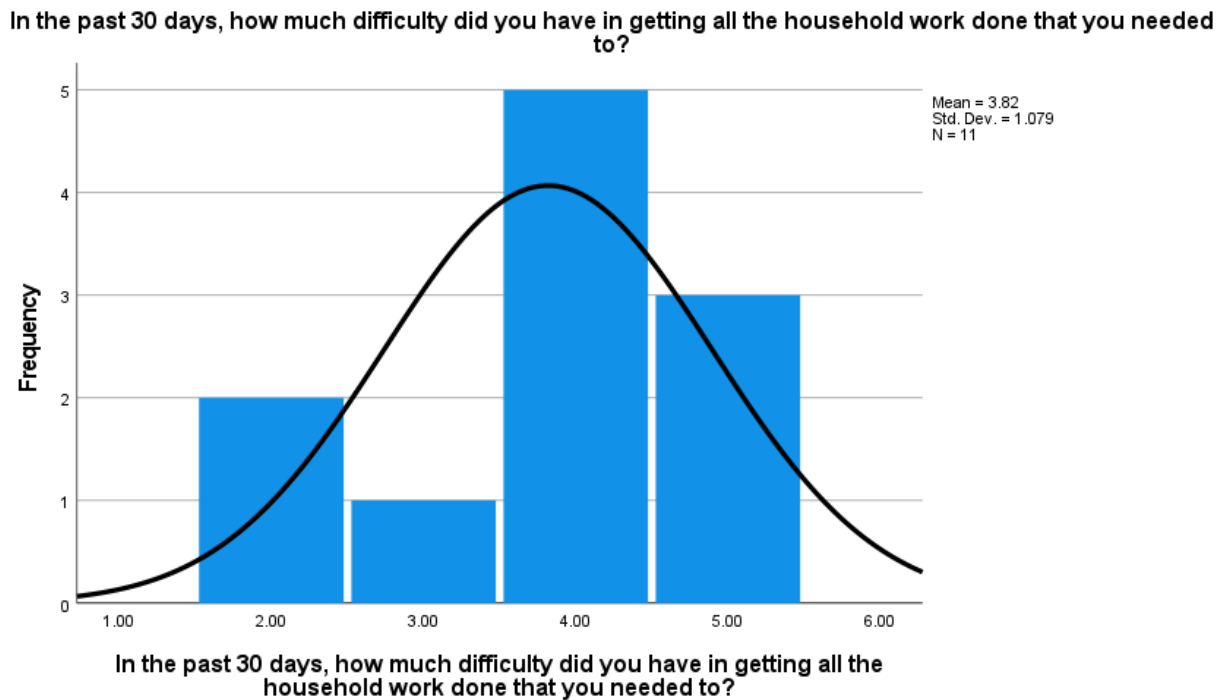
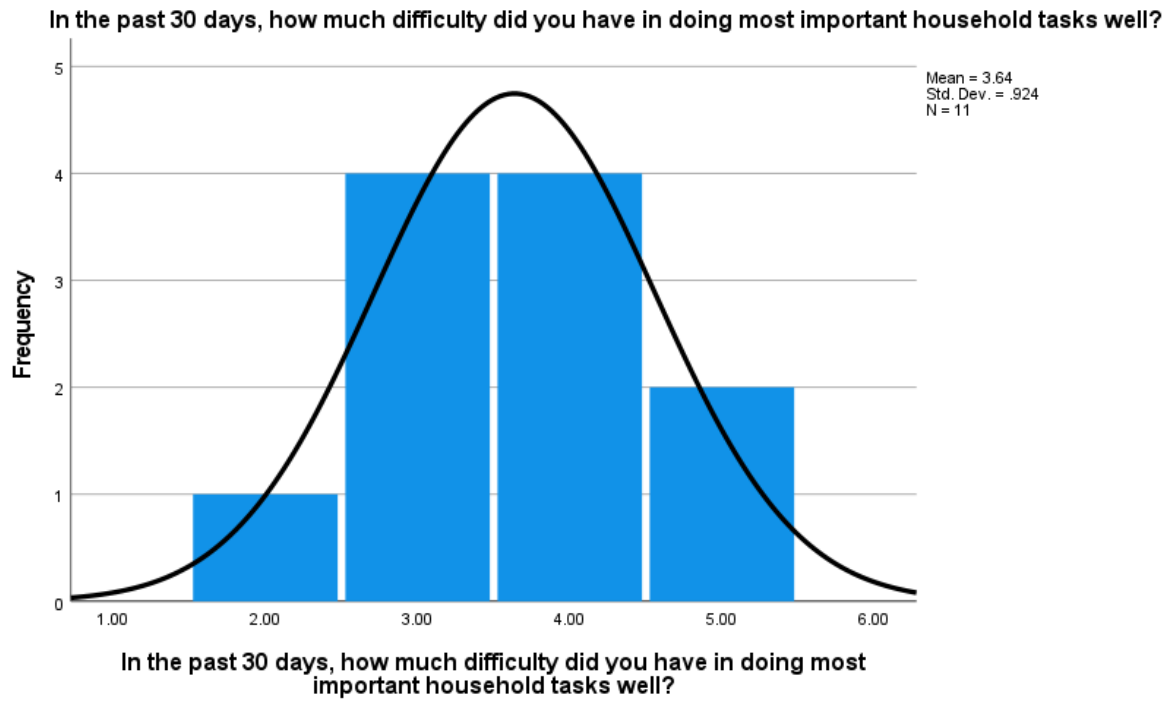
In the past 30 days, how much difficulty did you have in getting along with people who are close to you?

In the past 30 days, how much difficulty did you have in making new friends?

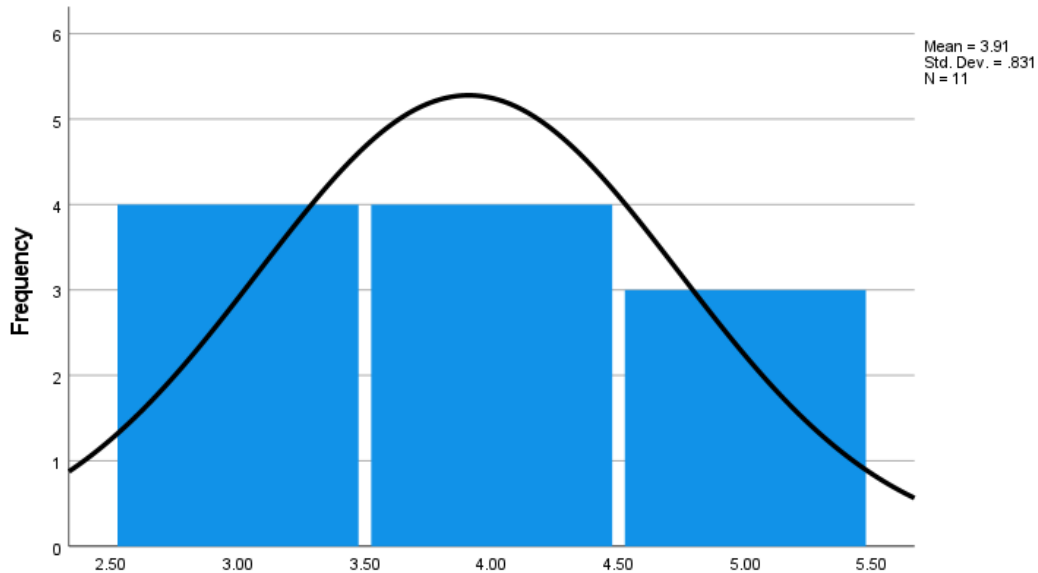


In the past 30 days, how much difficulty did you have in making new friends?



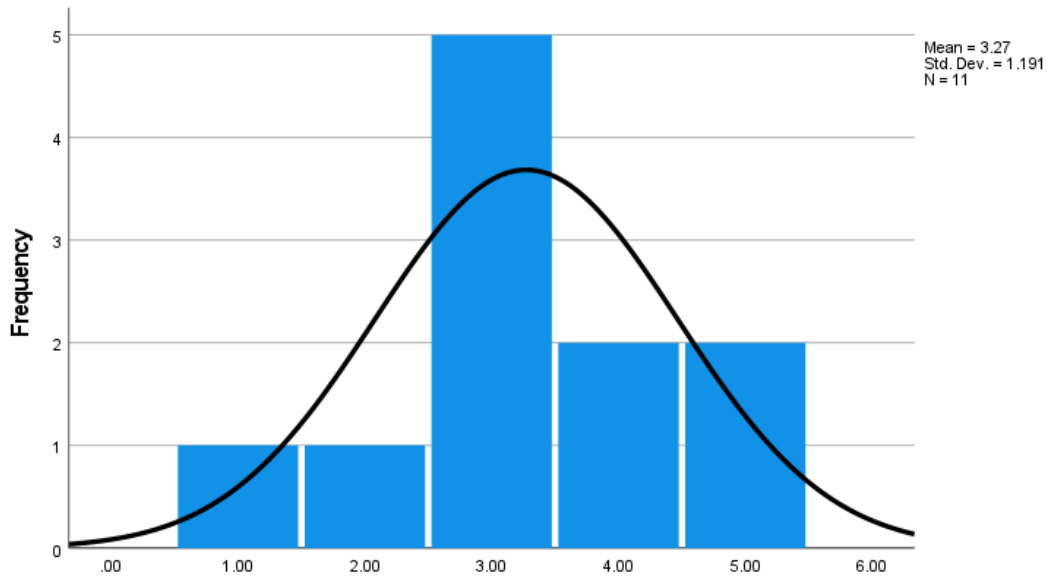


In the past 30 days, how much difficulty did you have in getting your household work done as quickly as needed?



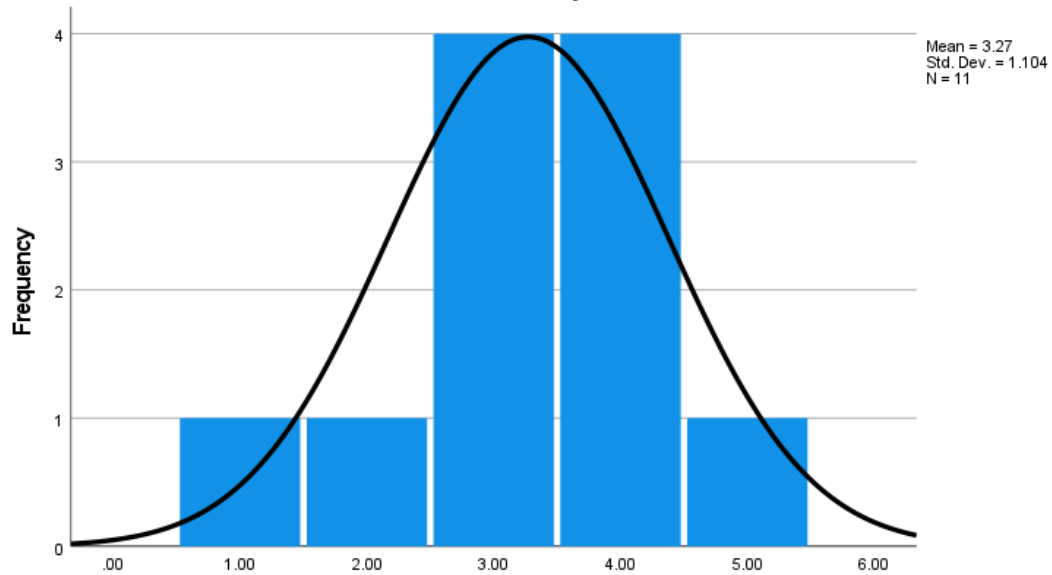
In the past 30 days, how much difficulty did you have in getting your household work done as quickly as needed?

Because of your health condition, in the past 30 days, how much difficulty did you have in your day-to-day work/school?



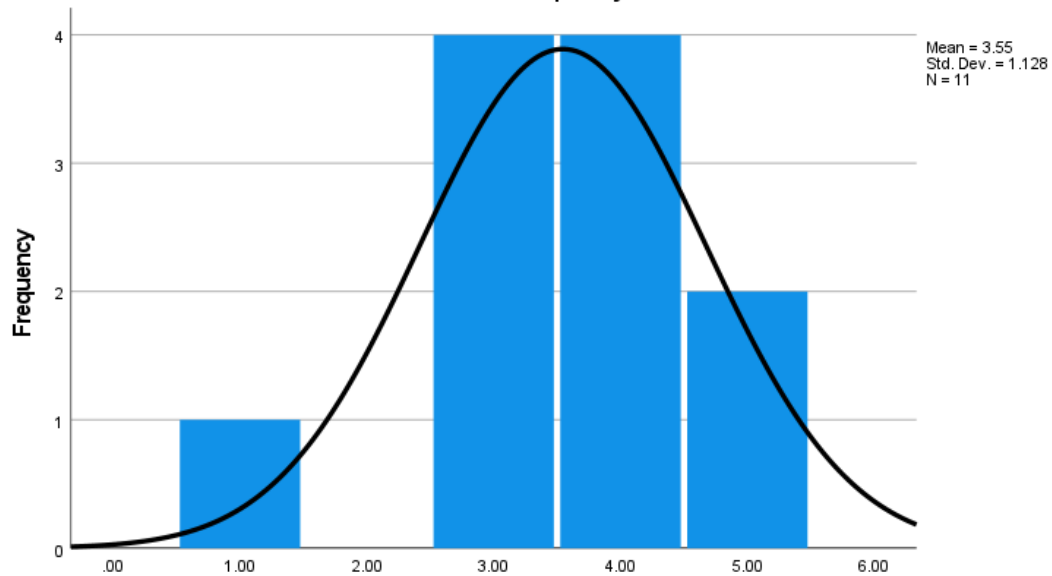
Because of your health condition, in the past 30 days, how much difficulty did you have in your day-to-day work/school?

Because of your health condition, in the past 30 days, how much difficulty did you have in getting all the work done that you need to do?



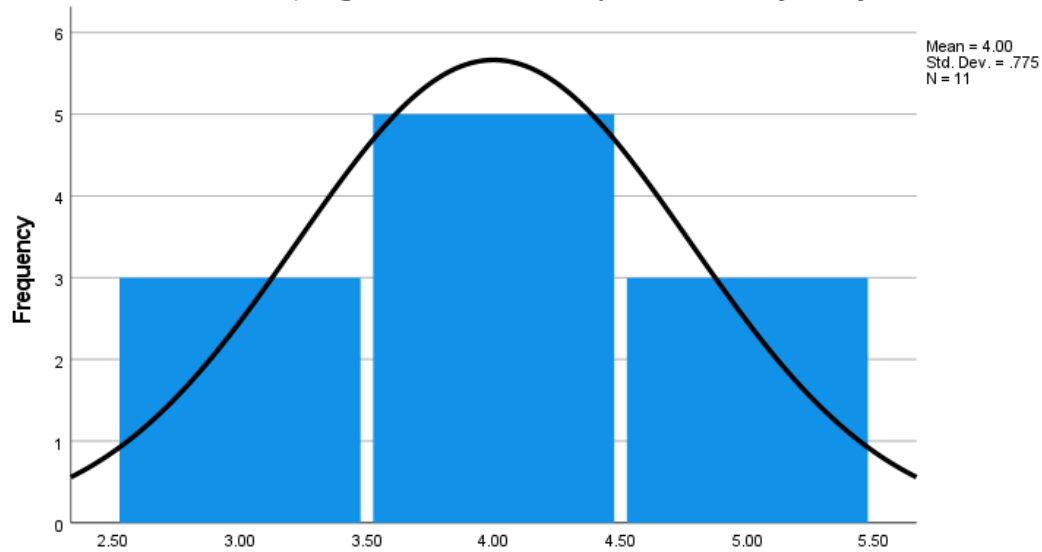
Because of your health condition, in the past 30 days, how much difficulty did you have in getting all the work done that you need to do?

Because of your health condition, in the past 30 days, how much difficulty did you have in getting your work done as quickly as needed?



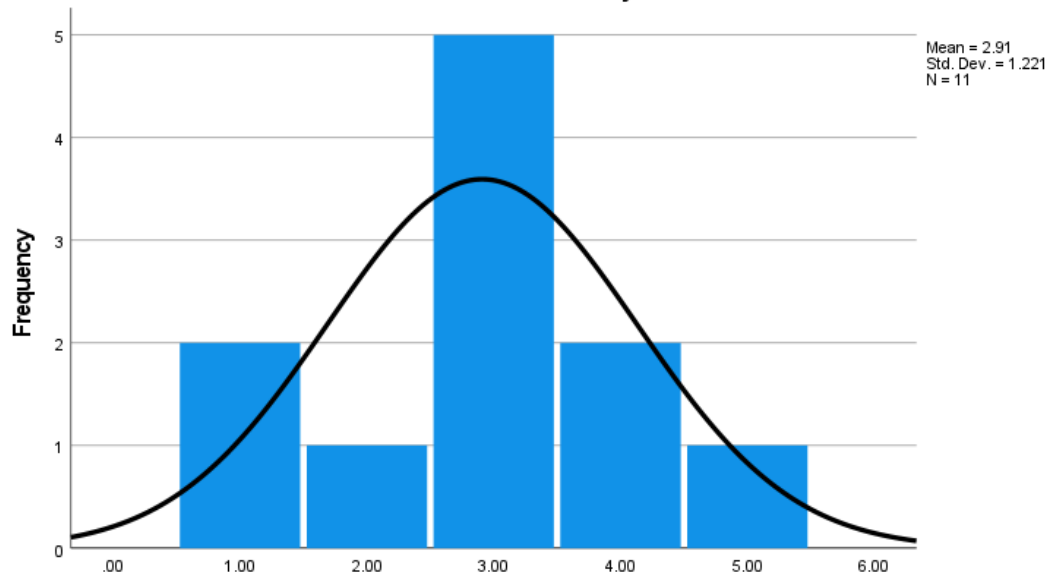
Because of your health condition, in the past 30 days, how much difficulty did you have in getting your work done as quickly as needed?

In the past 30 days, how much of a problem did you have in joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?



In the past 30 days, how much of a problem did you have in joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?

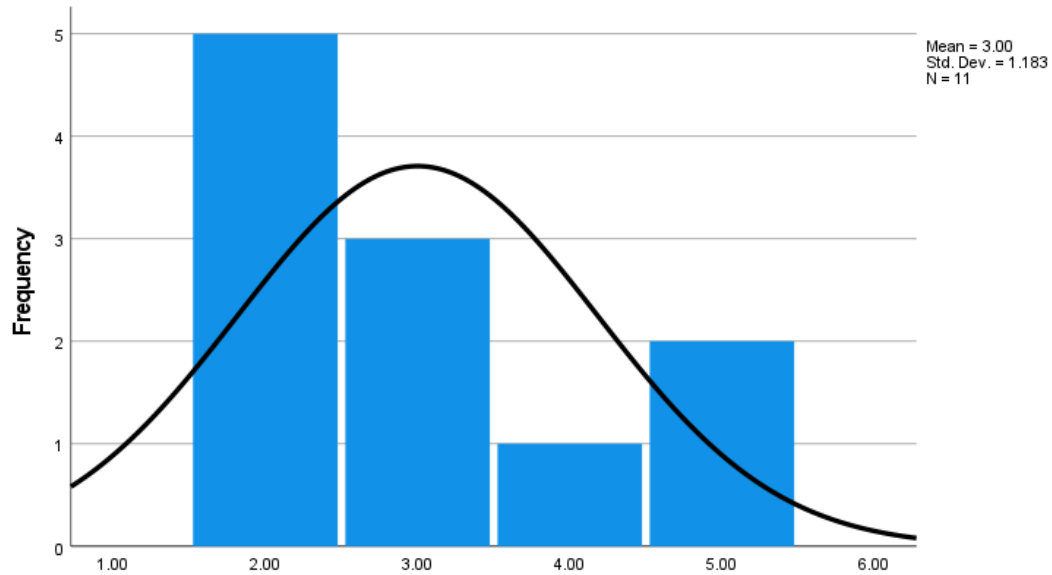
In the past 30 days, how much of a problem did you have because of barriers or hindrances in the world around you?



In the past 30 days, how much of a problem did you have because of barriers or hindrances in the world around you?

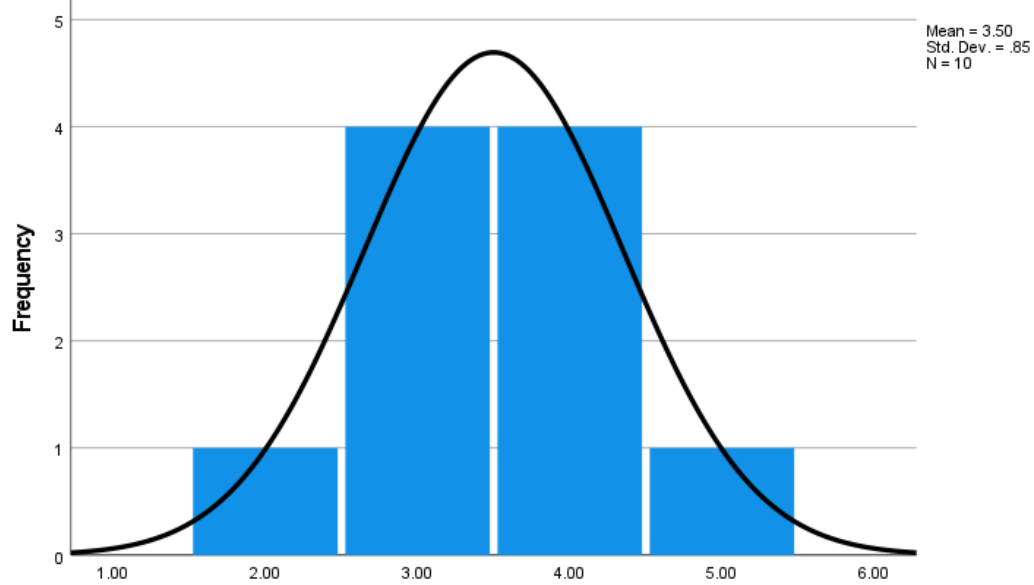


In the past 30 days, how much of a problem did you have living with dignity because of the attitudes and actions of others?

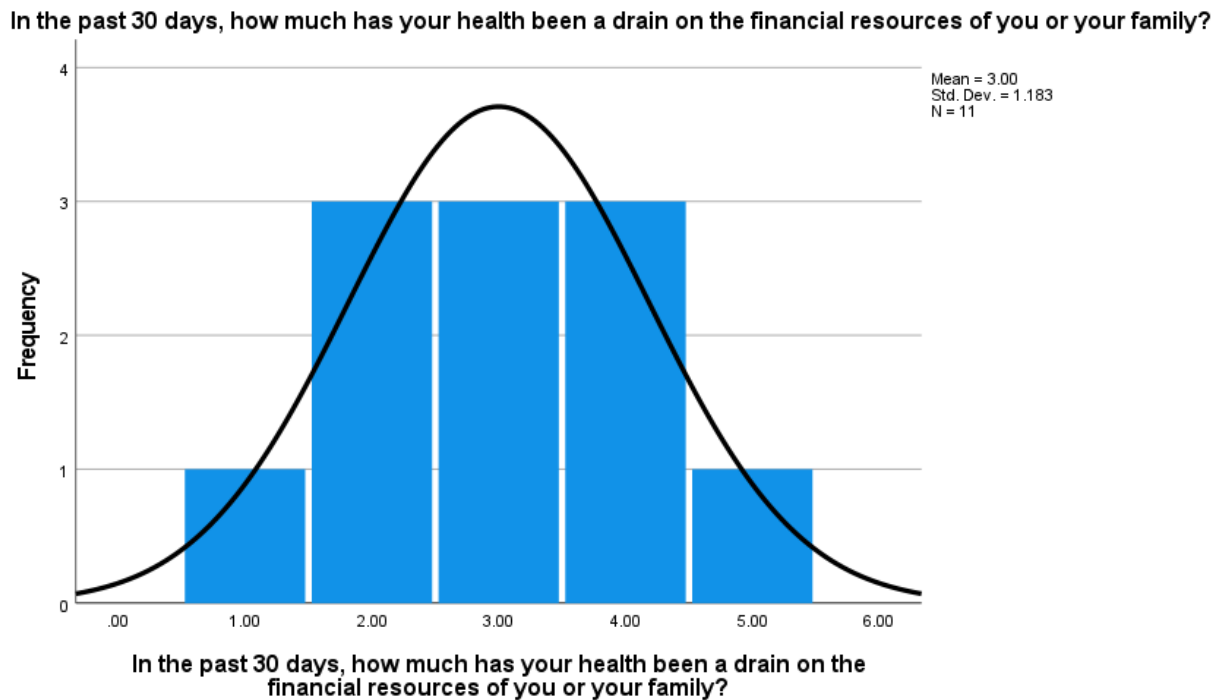
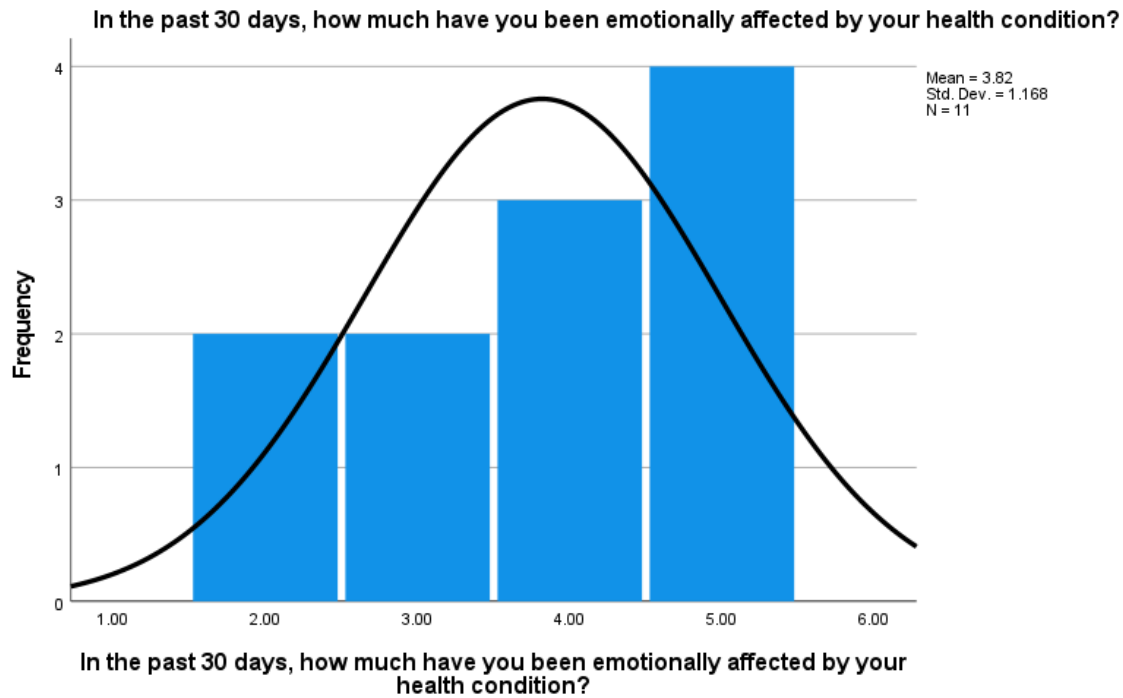


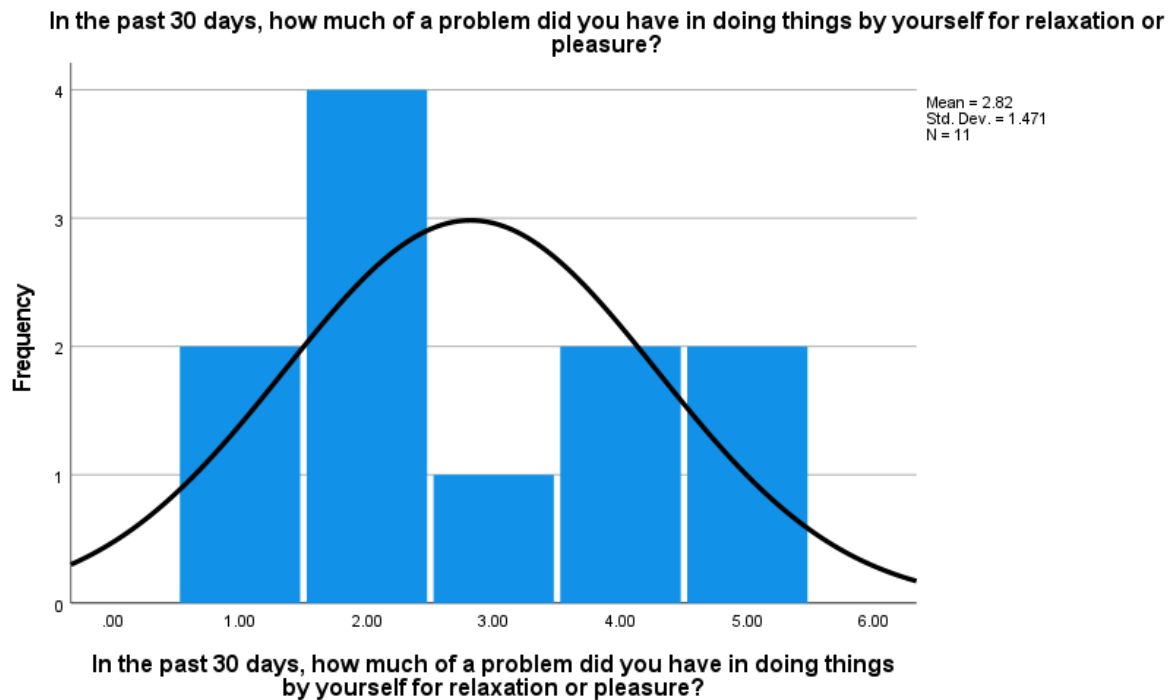
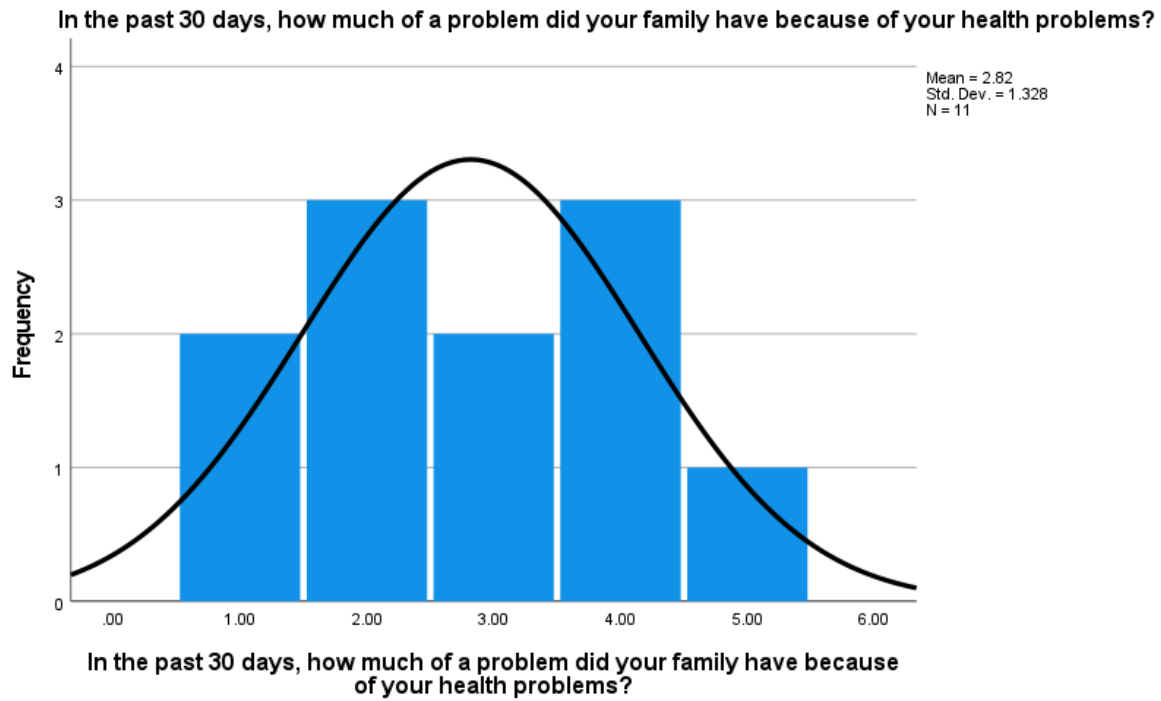
In the past 30 days, how much of a problem did you have living with dignity because of the attitudes and actions of others?

In the past 30 days, how much time did you spend on your health condition, or its consequences?



In the past 30 days, how much time did you spend on your health condition, or its consequences?





**Table 5***Intercorrelations for WHODAS-2.0, 36 item version*

In the past 30 days, how much difficulty did you have:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Concentrating for 10 minutes?	████																		
2. Remembering to do important things?	.543*	████																	
3. Analyzing and finding solutions to problems in day-to-day life?	.712**	.0275	████																
4. Learning a new task, for example, learning how to get to a new place?	.743**	.0322	.047	████															
5. Generally understanding what people say?	.043	-.013	.0064	.0303	████														
6. Starting and maintaining a conversation?	.0216	.0164	.0429	.0316	.611*	████													
7. Washing your whole body?	.0626	.034	.0423	.0354	.0023	-.01	████												
8. Getting dressed?	.806**	.0481	.576*	.0494	.0172	-.0043	.869**	████											
9. In eating?	.909*	.571*	.665*	.641*	.0215	.0269	.615*	.702**	████										
10. Staying by yourself for a few days?	.005	.0104	.0064	.0243	.614*	-.0027	.0175	.0428	.0323	████									
11. Dealing with people you do not know?	-.0117	-.0481	.0301	.0058	.0018	.0513	-.0527*	-.0378	-.0139	.0317	████								
12. Maintaining a friendship?	.0344	.0238	.0089	.0154	.667*	.568*	-.0232	-.0137	.0354	.0313	.0194	████							
13. Getting along with people who are close to you?	.0448	.036	.0319	.0031	.0437	.0224	-.0084	.0077	.0343	.042	.0139	.662*	████						
14. Making new friends?	.533*	.0357	.043	.623*	.0436	.0432	-.0036	.0095	.0508	.0296	.0325	.726**	.0322	████					
15. Sexual activities?	-.0086	-.037	-.0033	-.0117	.0389	.0432	.0191	.007	-.0228	.0124	.0168	-.0026	-.0039	-.0109	████				
16. Taking care of your household responsibilities?	.0209	-.0354	.0202	.0237	.0208	.042	.0516	.0259	.0163	-.0052	.0056	-.0165	-.0078	-.0108	.726**	████			
17. Doing most important household tasks well?	.0237	-.0343	.0303	.0281	.014	.0346	.0497	.0174	.0283	-.0059	.0038	-.0073	-.011	.0027	.0465	.905**	████		
18. Getting all the household work done that you needed to?	.0391	-.0012	.557*	.0198	.0249	.0148	.559*	.0321	.0418	.0375	-.0073	.0116	.0101	.0204	.0415	.686**	.830**	████	
19. Getting your household work done as quickly as needed?	.0146	-.0445	.547*	-.0073	-.0022	.0096	.0363	.0155	.0175	.0044	.0241	-.0116	.0017	-.0076	.027	.574*	.734**	.760**	████
20. Because of your health condition, in the past 30 days, how much difficulty have you had in: your day-to-day work/school?	.0443	.0078	.599*	.577*	.0047	-.0054	.0424	.0494	.0372	.0466	-.0022	-.038	.024	.0451	.0377	.0417	.0462	.051	.0331
21. Doing your most important work/school tasks well?	.0478	.026	.834**	.0383	-.013	-.0134	.046	.0481	.0455	.557*	.0076	-.0147	.0011	.0256	.0163	.0347	.0443	.729**	.0517
22. Getting all the work done that you need to do?	.0397	.0216	.716**	.0166	-.0042	-.0138	.0458	.533*	.0474	.0503	-.0024	-.0122	-.0184	.0171	-.0005	.0062	.0205	.550*	.0466
23. Getting your work done as quickly as needed?	.046	.0293	.787**	.0176	-.0172	.0043	.0381	.0414	.644*	.0219	.0208	.0137	.0064	.0396	-.0129	.0026	.0209	.0501	.0485
24. In the past 30 days, How much of a problem did you have in: joining in community activities (for example, festivities, religious or other activities) in the same way as anyone	.0346	-.0188	.0397	.0325	0	.568*	.0428	.0458	.0413	-.0171	.0371	-.0137	-.0206	.0089	.043	.553*	.0419	.0239	.0311
25. How much of a problem did you have because of barriers or hindrances in the world around you?	.0173	.0292	.0057	.0225	-.0432	-.0439	.0451	.541*	.025	-.0079	-.0463	-.0599*	-.0578*	-.0278	-.0417	-.0223	-.0209	-.0242	-.0206
26. How much of a problem did you have living with dignity because of the attitudes and actions of others?	.604*	.860**	.039	.0284	-.0172	-.0372	.631*	.749**	.676*	.0336	-.0566*	-.009	.0135	.0058	-.0338	-.0181	-.0183	.0078	-.0203
27. How much time did you spend on your health condition, or its consequences?	.633*	.0135	.716**	.0213	.0069	0	.610*	.555*	.679*	.0342	-.0079	.0139	.0113	.0263	-.0166	.0202	.0482	.691*	.801**
28. How much have you been emotionally affected by your health condition?	.820**	.611*	.647*	.0471	.0143	.0062	.658*	.752**	.934**	.046	-.0313	.0198	.023	.0307	-.0244	.0083	.0211	.0447	.0781
29. How much has your health been a drain on the financial resources of you or your family?	.604*	.615*	.039	.0497	-.0344	-.0223	.631*	.599*	.743**	-.0056	-.0405	-.0179	.0068	.0058	-.045	.009	.0183	.0157	0
30. How much of a problem did your family have because of your health problems?	.788**	.647*	.0511	.856**	.0049	.0187	.0454	.595*	.821**	.0154	-.0059	.0174	.0142	.582*	-.0264	.0073	.0104	.0114	-.0198
31. How much of a problem did you have in doing things by yourself for relaxation or pleasure?	.530*	.0387	.775**	.0317	.0252	.0049	.0184	.0236	.047	.635*	.0207	.0373	.563*	.526*	.0123	.0212	.0314	.670*	.0394

In the past 30 days, how much difficulty did you have:	20	21	22	23	24	25	26	27	28	29	30	31
1. Concentrating for 10 minutes?												
2. Remembering to do important things?												
3. Analyzing and finding solutions to problems in day-to-day life?												
4. Learning a new task, for example, learning how to get to a new place?												
5. Generally understanding what people say?												
6. Starting and maintaining a conversation?												
7. Washing your whole body?												
8. Getting dressed?												
9. In eating?												
10. Staying by yourself for a few days?												
11. Dealing with people you do not know?												
12. Maintaining a friendship?												
13. Getting along with people who are close to you?												
14. Making new friends?												
15. Sexual activities?												
16. Taking care of your household responsibilities?												
17. Doing most important household tasks well?												
18. Getting all the household work done that you needed to?												
19. Getting your household work done as quickly as needed?												
20. Because of your health condition, in the past 30 days, how much difficulty have you had in: your day-to-day work/school?	_____											
21. Doing your most important work/school tasks well?	.811**	_____										
22. Getting all the work done that you need to do?	.622*	.809**	_____									
23. Getting your work done as quickly as needed?	0.325	.680*	.832**	_____								
24. In the past 30 days, How much of a problem did you have in: joining in community activities (for example, festivities, religious or other activities) in the same way as anyone	0.325	0.282	0.351	0.458	_____							
25. How much of a problem did you have because of barriers or hindrances in the world around you?	0.363	0.114	0.391	0.185	0.211	_____						
26. How much of a problem did you have living with dignity because of the attitudes and actions of others?	0.284	0.369	0.459	0.449	0.109	.623*	_____					
27. How much time did you spend on your health condition, or its consequences?	0.366	.586*	.733**	.780**	0.266	0.152	0.38	_____				
28. How much have you been emotionally affected by your health condition?	0.471	.549*	.663*	.690**	0.332	0.408	.496**	.733**	_____			
29. How much has your health been a drain on the financial resources of you or your family?	0.355	0.307	0.23	0.375	0.218	.554*	.786**	0.382	.724**	_____		
30. How much of a problem did your family have because of your health problems?	0.414	0.373	0.242	0.407	0.389	0.359	.636*	0.244	0.01	0.003	_____	
31. How much of a problem did you have in doing things by yourself for relaxation or pleasure?	0.431	.782**	0.465	.548*	0	-0.4	0.23	0.481	0.445	0.172	0.34	_____

Note

\*. Correlation is significant at the 0.05 level (1-tailed).

\*\*. Correlation is significant at the 0.01 level (1-tailed).