Effectiveness of Decluttering Therapy for Hoarding Disorder among College Students During Covid-19 Pandemic

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INTRODUCTION

Background of the Study

Students worldwide face increasing challenges due to the COVID-19 pandemic (Elmer, Mepham, Stadtfeld, 2020). Globally, UNESCO estimates 91 percent of the world's students are learning remotely, with 194 governments ordering country-wide closures of schools and more than 1.3 billion students learning in online classrooms (Waters, 2020). As a result, education has changed dramatically. This drastic change to the mode of learning has contributed to the mental health state of learners, including the increasing experience of anxiety brought by the pandemic. Consequently, this anxious state disposes students to hoard brought by the uncertain situation. This hoarding behavior can result in poor school performance due to uncontrolled acquisition, clutter, difficulty discarding, emotion dysregulation, social isolation, and illness (Medley, Capron, Korte, & Schmidt, 2020, Clinicians are faced with the need to contextually assess and create interventions that address symptoms of hoarding disorder among students specifically during this time of pandemic (Rogowska, Ku'snierz, &Bokszczanin, 2020).

In the Philippines, the sudden shift in alternative ways from face-to-face classes to online classes and modular-based learning to convincingly adapt to the new normal affects not only the parents but also the students. Differing from the usual academic necessities, the current needs of students are now computers, cellphones, electronic tablets, and a stable internet connection. These requirements for attending classes have become the most significant challenge for both parents and students (Alip, 2020). A research conducted among 1,879 Filipino students reported moderate-to-severe anxiety, depression, and stress symptoms experienced among college students during the COVID-19 outbreak (Tee, Anlacan, Aligam, Reyes, Kuruchittham, & Ho, 2020). Further, the study reports poor health status, unnecessary worry, concerns for family members, and discrimination were significantly associated with the more significant psychological impact of the pandemic and higher levels of anxiety, depression, and stress among Filipino college students (Tee et al., 2020). The early phase of the pandemic in the Philippines shows a significant psychological impact among students in online learning. Brought by this experience and change, hoarding behavior was seen visible among Filipinos as precipitated by anxiety and other psychological conditions during the pandemic. A survey conducted by United Nations Conference on Trade and Development (UNCTAD) among the countries in Southeast Asia reveals that Filipinos, particularly students, recorded the highest increase in web visits and purchases among neighboring countries. The result showed that the traffic of the online stores leaped by 59 percent. These increased online transactions were attributed to the elevated stress and anxiety experienced by the students. The fallout of this crisis will remain even after the pandemic ends, according to UNCTAD (Cerezo, 2020). It is imperative that adequate psychological support and strategies must be identified (DOH, 2020).

During the opening of the school year 2020-2021, many reports on psychological distress were aired out to the authorities. This psychological distress includes anxiety attacks, emotional dysregulation, and completed and uncompleted suicide. Consideration of evidence was attributed to the new platform of educational learning (online and module learning) as the reasons for the distress (Palo, 2020). In Davao City, the teachers were trained by mental health organization (Philippine Mental Health Association) to respond to the demands of

online learning and the psychological needs of students amid the COVID-19 pandemic (Cudis, 2020). The teachers were trained in various teaching modalities and familiarized with video conferencing applications and software programs such as Google Classroom, StreamYard, Zoom, and different learning management systems (Moodle, OneNote, and Kotobee) (Cudis, 2020). Apart from these teaching modalities, the city government of Davao also recognized the need to establish mental health hotline to respond to the increasing psychological problems of students (Fenequito, 2020).

In response to the restriction of effective face-to-face psychotherapy, tele-mental health was used in response to the current times. Consequently, mental health practitioners are calling for effective solutions for hoarding behavior brought by the pandemic situation. Cognitive Behavioral Therapy (CBT) for Hoarding Disorder was designed for mental health clinicians who treat clients with hoarding disorder. A study of CBT methods designed to treat hoarding disorder has indicated that 70-80 percent of people undergoing CBT were much or very much improved after 9 to 12 months of treatment, and these improvements were maintained mainly one year after treatment ended. The administration of the model was administered both face-to-face that proves the efficacy of the therapeutic model. Consequently, the online delivery of the model was not adapted to fit the context during the pandemic, not validated to strengthen its psychometric properties (Tolin, Frost, & Steketee, 2014).

Tele-mental health as a therapeutic tool is a term broadly used in the literature for the use of technology that virtually provides mental health care (Uscher-Pines, Raja, Qureshi, Huskamp, & Busch, 2020). Tele-mental health has been used since the mid-20th century with a growing body of literature supporting video chats, phone calls to engage in talk therapies, mobile apps, online messages, and psychoeducational materials through virtual reality technology (Malbos, Rapee, &Kavakli, 2016). Overall, there is strong evidence for tele-mental health services as integrative and collaborative patient care (Fortney, Pyne, Turner, Farris, Normoyle, & Avery, 2015). Citing the gap between the current condition of students and susceptibility to symptoms of hoarding disorder, this study hopes to address this gap. More specifically, it aims to measure the effectiveness of Decluttering Therapy for Hoarding Disorder using an online platform.

REVIEW OF THE RELATED LITERATURE

The following section presents the related literature on the topic under study. This section is divided into three sections: 1) the etiology of Hoarding Disorder; 2) the description of hoarding behavior of students during COVID-19 pandemic; 3) the therapeutic interventions of hoarding disorder.

Etiology of Hoarding Disorder. Mental health during the COVID-19

pandemic deserves special attention due to its impact on the human condition (Qui et al., 2020). The pandemic has caused concerns about people's mental health, which prompted the researchers to investigate potential factors that could explain hoarding disorder during the COVID-19 pandemic and its possible severity. The COVID-19 pandemic-driven hoarding behavior by the mass population left supermarket shelves in many locations empty for weeks. Hoarding behavior was defined as persistent difficulty discarding possessions because of a perceived need to save them. A person with hoarding disorder experiences distresses at the thought of getting rid of the items and excessive accumulation of items, regardless of actual value (Cordeiro, Sharma, Thennarasu, & Reddy, 2015). Hoarding Disorder was first afforded diagnostic status in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (American Psychiatric Association, 2013). The DSM-5 diagnostic criteria for hoarding disorder include *difficulty discarding* or parting with possessions due to strong urges to save items and distress associated with discarding, *clutter* that precludes activities for which living spaces were designed, and *significant distress* or impairment in functioning caused by the hoarding.

Based on the former publication of the DSM-5, hoarding behaviors were considered a syndrome or subtype of obsessive-compulsive disorder (OCD). The differences between hoarding and OCD became increasingly clear: hoarding represented a unique syndrome that had not been adequately categorized (Pertusa, Frost, Fullana, Samuels, Steketee, Tolin, & Mataix, 2010). Epidemiological research has suggested that the prevalence rate of

hoarding disorder is between two and five percent making hoarding disorder a prevalent condition (Iervolino, Perroud, Fullana, Guipponi, Cherkas, Collier, & Mataix-Cols, 2009).

Brought by this condition, many are affected as it poses a substantial risk for falls, fires, and squalor (Steketee & Frost, 2014; Tolin, Frost, Steketee, Gray, & Fitch, 2008). Because clutter negatively affects others living within the home and nearby, individuals with hoarding disorder often experience interpersonal difficulties (Grisham, Steketee, & Frost, 2008; Norberg, Crone, Kakar, Kwok, & Grisham, under review). They tend to have lower rates of getting married, experience rejection in relationships, and hostility within families (Büscher, Dyson, & Cowdell, 2013; Frost, Steketee, & Tolin, 2011; Frost, Steketee, & Williams, 2002; Nedelisky & Steele, 2009; Tolin, 2011). Thus, individuals with hoarding disorder may not have anyone to assist them with the physical and emotional demands of decluttering and discarding. Symptoms of hoarding disorder consist of *difficulty discarding, clutter,* and *excessive acquiring.* The hallmark symptom of hoarding disorder is the reluctance to *discard personal possessions*, including objects that non-hoarding individuals might consider worthless or have little intrinsic value. Although the reasons for saving objects tend to be similar to those described by non-hoarding individuals (Frost, Steketee, Tolin, & Renaud, 2008), these beliefs are more intense and rigid for individuals with hoarding disorder applied to a more significant number of possessions. Attempts to discard usually cause substantial emotional distress, and therefore are frequently avoided. *Excessive clutter* is the most visible feature of hoarding disorder. Those with hoarding disorder commonly describe significant difficulty using the living spaces of their homes due to clutter. Individuals with hoarding disorder often have clutter that may cover beds, chairs, or tables, rendering them unusable. In severe cases, the clutter prohibits movement through the house or access to certain home parts (Frost, Steketee, & Tolin, 2011). Although acquiring is not a DSM-5 diagnostic criterion for hoarding disorder, research suggests that most individuals with hoarding disorder do engage in *excessive acquiring* (Frost, Tolin, Steketee, Fitch, & Selbo-Bruns, 2009). The excessive acquisition can include compulsive buying, collection of free items, inheritance of things, and, rarely, stealing and many hours each week searching for and acquiring objects (e.g., excessive shopping, rummaging through trash bins). Therefore, individuals with hoarding disorder may also present with distress related to overspending or debt because of compulsive shopping behaviors (Frost, Ruby, & Shuer, 2012).

The relational impact of individuals with hoarding disorder is likely to be particularly in their experience of isolation. A study conducted by Rasmussen, Steketee, Tolin, Frost, & Brown (2014) reveals that embarrassment on clutter or avoidant criticism, many individuals with hoarding disorder avoid inviting friends, family, or repair workers to their homes, contributing to social isolation. Hoarding Disorder may also increase rates of intra-familial conflict and rejection of the hoarding individual. Family members may be upset by excessive time spent on acquiring or in response to financial debt related to compulsive buying. Family members may become frustrated with the patient's reluctance or inability to change. In one extensive survey of family members of hoarding individuals, scores on a measure of rejection of hoarding individuals were higher than family rejection scores for clients with schizophrenia, especially if the hoarding individual was perceived as having little insight into their problem (Tolin, Frost, Steketee, & Fitch, 2008).

To understand the pathogenesis and progression of hoarding symptoms, it is helpful to examine hoarding behavior from the viewpoint of the age group. There has been accumulating evidence that suggests the presence of hoarding among different developmental stages. Hoarding behavior has often been observed in older adults with dementia (Hwang, Tsai, Yang, Liu & Lirng, 2018). Comorbidity occurs in up to 92 percent of cases meeting the diagnostic criteria for hoarding disorder (Samuels, Bienvenu, Riddle, Cullen, Grados, & Liang, 2018). This high comorbidity rate with other mental diseases complicates the diagnostic picture of hoarding disorder (Hall, Tolin, Frost, & Steketee, 2019). One investigation found that hoarding was nearly three times more prevalent among older adults than younger adults (Samuel, Bienvenu, Grados, Cullen, Riddle, & Liang, 2018).

Furthermore, some reports have suggested that hoarding symptom severity increases with age (Ayers, Saxena, Golshan, & Wetherell, 2020). However, retrospective studies indicate that hoarding behavior appears to emerge in adolescence. One study reported that the median age of onset for hoarding symptoms is 10–20 years

(Reid, Arnold, Rosen, Mason, Larson, & Murphy, 2019). Furthermore, other studies have reported that hoarding behavior usually starts at a subclinical level in early adolescence and gradually worsens (Grisham, Frost, Steketee, Kim, & Hood, 2017). These results suggest that hoarding behavior may require earlier intervention. Retrospective patient reports have consistently indicated that the early manifestations of hoarding symptoms can be traced early in life. The symptoms are then thought to follow a deteriorating course over the lifespan (Grisham, Frost, Steketee, Kim, & Hood, 2016). Recent population-based work has offered empirical support for these early retrospective reports, with results indicating that at least 15 percent of adolescents may endorse clinically significant hoarding symptoms, a somewhat lower point prevalence than in estimates derived among adult samples (Iervolino, Perroud, Fullana, Guipponi, Cherkas, Collier, & Mataix-Cols, 2019). Subsequently, from age 15, the prevalence of clinically significant hoarding symptoms is suggested to increase linearly, with around 20 percent every five years. Whether hoarding symptoms are distributed equally between the sexes during adolescence remains an unresolved issue, with some studies suggesting a higher prevalence in girls. In contrast, others have not detected any sex differences (Cath, Nizar, Boomsma, & Mathews, 2016).

The etiology of hoarding symptoms is still largely unknown. Evidence from twin studies indicates that, in adults, genetic factors account for a substantial proportion of the phenotypic variance, with heritability estimates ranging from 0.36 to 0.49 (Mathews, Delucchi, Cath, Willemsen, & Boomsma, 2014). However, the prior work suggests that hoarding symptoms may be less heritable during adolescence. Specifically, in a study of 3,974 twins aged 15, genetic factors explained 32 percent of the variance in boys and only 2 percent in girls (Ivanov, Mataix-Cols, Serlachius, Lichtenstein, Anckarsater, & Chang, 2013). However, potential etiological sex differences were interpreted cautiously since other more recent studies of young twins from the Netherlands twin register did not detect such sex differences. Taken together, the findings of twin studies from different time points across the lifespan suggest the possibility of dynamic changes in the etiology of hoarding symptoms, with the influence of genetics and environment varying over time and, potentially, between the sexes (Zilhao, Smit, Boomsma, & Cath, 2016). Previous heritability estimates of hoarding symptoms entirely relied on single-time point, cross-sectional methods–a design that does not offer scope for evaluating time-change in symptoms or the genetic and environmental influences underlying such change. Given the mounting evidence implicating the adolescent period in the emergence and establishment of hoarding difficulties and established knowledge of the progressive burden incurred by these symptoms from onset through the life course, investment in such approaches appears warranted. Longitudinal twin studies of a related phenotype have indicated that these symptoms are moderately stable across childhood and adolescence. Such stability is essential, but not entirely, explained by genetic factors (Ivanov, Nordsletten, Mataix-Cols, Serlachius, & Lichtenstein, 2017).

Description of Hoarding Behavior of Students During COVID-19 Pandemic. The COVID 19 pandemic is an unprecedented public health crisis that poses a challenge to humanity. Research conducted examining the literature argued that people worldwide alleviate their anxiety and stress induced by the pandemic through both prosocial and 'self-interested' hoarding behaviors. The research used a cross-cultural survey study that examined the pushing (threat perception) and pulling (moral identity) factors that predicted prosocial acts and hoarding, and subsequently psychological well-being. The data were collected from April 9 to May 14, 2020, from 251 participants in the United Kingdom (UK), 268 in the United States (US), 197 in Germany (DE), and 200 in Hong Kong (HK). The result shows the threat perception was associated positively with prosocial acts and hoarding; benevolent moral identity was associated positively with the former but not the latter behavior. The researchers observed cross-cultural differences, such that both effects were stronger in more individualistic (UK, US) countries than less individualistic (HK, DE) ones. The findings shed light on the prosocial vs. self-interested behavioral responses of people in different cultures towards hoarding and the pandemic crisis (Tse, Lau, Hong, Bligh & Kakarika, 2021).

Several studies on the relationship between the pandemic and hoarding behavior in the Western world (Kirk, & Rifkin, 2020) have reacted to the fear of COVID-19 altering by fear, tends to stock up (hoarding). For example, on specific categories of goods such as bottled water, canned goods, or disinfectant and cleaning products, to deal with the situation of uncertainty produced by the virus (Cambefort, 2020). The hoarder perceives a high risk of being deprived of a product, which drives the behavior to quickly acquire abnormal

quantities of goods. According to Kirk and Rifkin (Kirk, & Rifkin, 2020), possessions can help oppose the loss of control and contribute to a sense of security, managing the uncertainty of the future: hoarding behavior has an evolutionary basis. It is instinctual when a threat is perceived. Human being engages in hoarding beyond what is needed as an emotional reactance response. The first phase of the pandemic has been characterized by highly emotional and irrational behaviors leading individuals to empty the store shelves by hoarding products such as disinfectants or other convenience goods (Hall, Prayag & Fieger, 2020).

In Italy, restrictions on mobility and interpersonal contact remained in place during the first phase of the lockdown. Due to the restrictive measures imposed by the government, consumers started to buy larger quantities of products to decrease the frequency of purchases and avoid gatherings and long queues in front of supermarkets. Over time, the easing of restrictions has led to a gradual return to normality, reducing the consumption of products such as eggs, flour, and cake mixes which, at the height of the pandemic, had experienced a boom in sales (IRI Analytic Centre of Excellence, 2020).

The early days of the COVID-19 pandemic in the United States brought uncertainty about COVID-19 and what to do about it. The research was made to test the hypothesis that knowledge about COVID-19 influences participation in different behaviors, including self-reports of purchasing more goods than usual – hoarding behavior, attending large gatherings, and using medical masks. The research suggests that Gen X and millennial participants had 56 percent and 76 percent higher odds, respectively, to hoard than baby boomers (Clement, 2020).

Students Hoarding Behavior During COVID-19 Pandemic. A study was conducted in the United States among 770 college students aged 13 to 18 years. The study's objective is to examine psychological factors associated with adolescents' behaviors during the COVID-19 pandemic. The participants were recruited via social media and complete an anonymous survey. The researcher hypothesized that greater attitudes about the severity of COVID-19, greater social responsibility, and greater social trust would be associated with greater news monitoring, social distancing, and disinfecting.

In contrast, greater self-interest would be associated with more hoarding. The result reveals that students reported hoarding 19.7 percent. Attitudes about the greater severity of COVID-19 were associated with more social distancing, disinfecting, and news monitoring and more hoarding 95 percent. Greater social responsibility was associated with more disinfecting and news monitoring and less hoarding. Greater self-interest values were associated with less social distancing and more hoarding 95 percent. The research concluded that the severity of COVID-19 and the social implications of pandemic-related behaviors are essential for students, particularly those who do not follow preventive health behaviors or engage in hoarding (Oosterhoff & Palmer, 2020).

A research was conducted in Germany among 6,957 students between March 16 and April 21, 2020, when COVID-19 became a serious health concern in Germany. Students were asked whether they kept up with the COVID-19 news, followed specific governmental rules and recommendations (washing hands more, using public transport less, avoiding larger crowds, and restricting meetings with family/friends), hoarded supplies, felt less secure in public places, or expected financial losses due to the crisis. The result of logistic regressions revealed that more students are conscientious, more agreeable, and keep up with the news more. More agreeable students were also more likely to wash their hands more often/intensively, use public transport less, avoid crowds, and restrict meetings with family/friends. Additionally, less emotionally stable students frequently bought more supplies than usual (hoard), felt insecure in public spaces, and expected financial losses. The general findings suggest that more agreeable individuals comply with governmental rules and recommendations to fight COVID-19. In contrast, less emotionally stable individuals, in particular, tend to hoard supplies, feel insecure, and fear financial losses due to the crisis (Asselmann, Borghans, Montizaan, & Seegers, 2020).

In a nationally representative sample from Poland among 755 college students, the researcher examined the relationships between the Dark Triad traits (i.e., psychopathy, Machiavellianism, and narcissism) and

collective narcissism (i.e., agentic communal) on hoarding behaviors as common reactions toward the pandemic. The study revealed that the Dark Triad traits engaged less in prevention and more in hoarding, while those characterized by collective narcissism engaged in more hoarding. The researcher concluded that coronavirus-related health beliefs mediated patterns of prevention and hoarding behavior in the latent Dark Triad and collective narcissism (Nowak, Brzóska, Piotrowski, Sedikides, Żemojtel-Piotrowska, & Jonason, 2020).

Hoarding Disorder and Co-occurring Disorder of Students during Pandemic. The prevalence of anxiety and hoarding symptoms among college students and the risk of substance use, suicides, and domestic violence has increased throughout the pandemic. Anxiety and fear were seen particularly with hoarding behaviors worldwide (Chakraborty, 2020 & Dos Santos, Picó-Pérez, & Morgado, 2020). The COVID-19-driven hoarding and anxiety by the mass population. Hoarding behavior was seen in several countries, including the U.S., Australia, Canada, the U.K., Singapore, Japan, Hong Kong, and other cities (Jankowicz, 2020). The widespread phenomenon received a lot of public attention in the news and social media, sending shockwaves to demand and supply chains around the globe (Kirk & Rifkin, 2020).

The International Journal of Environmental Research and Public Health (2020) conducted a study among college students using a qualitative approach that aims to examine the contents on social media surrounding the anxiety and hoarding behavior that occurred during the COVID-19 pandemic. The researcher analyses social media information applying a grounded theory and phenomenological approach. The researcher examines a total of 255,171 tweets on Twitter. Of these, 4,081 met our inclusion criteria, and 100 tweets were randomly selected to develop a coding scheme in the initial phase. Random samples of tweets in folds of 100 were then qualitatively analyzed in the focused coding phase until saturation was met at 500 tweets analyzed. The study reveals that the spontaneous contagion of fear and panic through social media fuels psychological reactions to being anxious and to hoard. The high level of negative social media posts crisis acts as an emotional trigger of public anxiety and panic (IJER & PH, 2021).

Another study was conducted to investigate anxiety and hoarding behaviors in response to the pandemic. The researcher proposed a novel computational framework using large-scale social media data. First, the researcher collects hoarding-related tweets shortly after the outbreak of the coronavirus. Next, the researcher analyzes the hoarding and anti-hoarding patterns of over 42,000 Twitter users in the United States from February 1 to April 30 and dissects the hoarding-related tweets by age, gender, and geographic location. With the proposed computational framework, the researcher derives significant findings. The percentage of females in both hoarding and anti-hoarding groups is higher than that of the general Twitter users.

Furthermore, using topic modeling, the researcher investigates the opinions about hoarding behavior by categorizing these topics according to demographic and geographic groups. They calculated the anxiety scores for the hoarding and anti-hoarding-related tweets using a lexical approach. The researcher arrives with the following findings by comparing their anxiety scores with the typical Twitter anxiety score. The LIWC anxiety mean for the hoarding-related tweets is significantly higher than the general Twitter anxiety mean. Interestingly, beer has the highest calculated anxiety score compared to other hoarded items mentioned in the tweets. The general conclusion of the study reveals that anxiety and hoarding behavior is explicitly experienced during the pandemic that triggers individuals to hoard as a way of coping with anxiety (Zhang, Lyu, & Luo, 2020).

According to recent research by the University of California, anxiety, fatigue, and depression trigger hoarding behavior (Cherrier & Belk, 2015). The study found that the higher hormone cortisol drives anxiety in adolescents who live in homes they described as hoarding home "cluttered" or full of "unfinished projects." This condition contributes to cognitive impairment that is manifested in the difficulty of concentration, worrying, negative thought patterns, physical poor eating habits, and general poor health (Cherrier & Belk, 2015). Another study conducted by researchers at Florida State University on anxiety and hoarding behavior reveals that college students exposed to anxiety experienced learning difficulty, concentration, uncontrollable worrying, poor judgment, and shows symptoms of hoarding and clutter behavior. The research result shows

that people with hoarding behavior and extremely cluttered homes were 77 percent more likely to change the learning pattern and affect learning performance due to anxiety (Aslan & Bekta, 2016).

The anxiety triggered by hoarding behavior leads to unhealthy behavior such as overeating "comfort foods," according to a Cornell University study from 2016 among college students (Raines, Oglesby, Short, Albanese & Schmidt, 2014). The same study conducted at the University of Minnesota likewise found that the thinking process related to creativity, motivation, and judgment is rated to the choices among students. The study shows that, while hoarding and clutter can sometimes spur creativity, a hoarding behavior and clutter room were more likely to lead to eating unhealthy snacks than eating healthy ones. This means that people who spent time in an unorganized room were twice as likely to decide to eat a chocolate bar than an apple. While there may be multiple reasons why people eat more poorly in cluttered surroundings. The research suggests that cooking and dining areas should be as free of clutter as possible. The general findings of this study reveal that clutter affects destructive eating pattern that leads to poor scholastic performance (Bernstein, Hadjiyanni, Cullen, Robinson, Harris, Young, & Papanikolopoulos, 2017).

A study on hoarding disorder resulted from social anxiety which is characterized by cognitive distortion associated with fear and catastrophic belief (excessive worrying) based on anxiety symptoms. The result of the study reveals that a patient with a severe social anxiety disorder who displayed hoarding has a direct consequence of social anxiety-related beliefs and atypical safety behaviors. The research findings provide support to current debates concerning the status of hoarding in new versions of classificatory systems. It also indicates that anxiety should be included in the list of conditions that need to be excluded from diagnosing "primary" hoarding disorder (Vigne, de Menezes, Yücel, & Fontenelle, 2013).

Tolin et al.'s (2018) study among seventy-seven outpatients aged 17 to 45 and gender-matched healthy control participants received a diagnostic assessment and completed self-report measures of hoarding severity, anxiety, and depression. The participants completed the Difficulties in Emotion Regulation Scale (DERS), a measure to assess the lack of emotional clarity (Clarity), difficulty regulating behavior when distressed (Impulse), difficulty engaging in goal-directed cognition and behavior when distressed (Goals), unwillingness to accept emotional responses (Accept), and lack of access to strategies for feeling better when distressed (Strategies) (Tolin, Levy, Wootton, Hallion, & Stevens, 2018). The study examines the area impairment of the affective domain, particularly on emotion regulation; this includes the inability to modulate emotions and excessive fear that constitutes dysfunction, which comprises the three main components. The study consists of reducing triggers of emotion, reducing the intensity of emotion, and reducing the duration of emotion. The results correlate significantly when controlling for depression, anxiety, and stress. Results suggest that self-reported deficits in emotion regulation characterize hoarding and that this relationship is attributable to high levels of anxiety and depression (Tolin et al., 2018).

Another study was conducted by Yap and Grisham (2019) among 532 individuals recruited via Turkprime. Turkprime is an online platform where researchers can post studies and instantaneously make them available to thousands of participants all around the world. The participants completed online self-report questionnaires on anxiety, depression, hoarding symptoms, and hoarding beliefs. The research examines emotional solid and sentimental attachments that hoarding sufferers have for their possessions that include fear to lose and anxiety feeling brought by separation of the items. The results showed that anxiety and depression were positively correlated with hoarding symptoms (Yap & Grisham, 2019).

A qualitative study on emotion regulation on anxiety and hoarding disorder was conducted among eleven clinical respondents. The results of the prominent themes provided support for emotion regulation difficulties in the experience of anxiety in hoarding behavior. Challenges with identifying and describing feelings, unhelpful attitudes toward the emotional experience, the use of avoidance-based strategies, and a perceived lack of effective emotion regulation strategies were prominent themes. Furthermore, emotional factors were associated with the onset and exacerbation of hoarding behavior and anxiety, and possessions and acquiring behavior appeared to serve an emotion regulation function (Taylor, Theiler, Nedeljkovic, & Moulding, 2018).

A study using 628 participants with self-identified hoarding difficulties completed questionnaires about general emotional reactivity, anxiety, depression, decision-making, and confidence in memory. To assess hoarding-related emotional reactivity, participants reported their emotional reactions when imagining discarding various items (decluttering). The result of the study reveals that heightened general emotional reactivity and more intense emotional responses to imagined discarding were associated with both difficulty discarding (declutter) and acquisition, controlling for age, gender, and co-occurring anxiety and mood symptoms. Fear of decision-making and confidence in memory interacted with general emotional reactivity to predict hoarding symptoms. The researcher suggests experimenting on whether emotional reactivity increases vulnerability for hoarding behavior. Future work should also examine whether emotional reactivity should be targeted in interventions for hoarding (Shaw, 2017).

A clinical study among 73 individuals diagnosed with behavioral symptoms of hoarding disorder was seeking treatment for hoarding at a community clinic. The study aimed to investigate the role of proposed individual difference factors anxiety sensitivity, intolerance of uncertainty, and distress tolerance with behavioral indicators of restlessness, irritability, and difficulty of calming. Results indicated that controlling for anxiety symptoms predicted the severity of hoarding symptoms. Furthermore, meditation analyses revealed that hoarding beliefs partially mediated the impact of distress tolerance on hoarding severity. These results have important theoretical and clinical implications for hoarding disorder. The research proposed that a greater understanding of the role of psychological vulnerability factors such as anxiety in predicting hoarding symptoms in a clinical sample could further enhance treatments on hoarding disorder (Grisham, Roberts, Cerea, Isemann, Svehla, & Norberg, 2018).

A study was conducted among 279 college students and 210 non-selected clinical participants, examining hoarding behaviors and anxiety sensitivity on the participants' behavior. The result of the study was significantly associated with hoarding behavior and anxiety. The study revealed that severe hoarding behavior could result in poor school performance due to unsanitary conditions (restlessness), social isolation (fear), work disability, and illness. Research also examines potential vulnerability factors despite the severity of impairment associated with this clinical syndrome of hoarding. Two independent studies have demonstrated that hoarding behaviors are significantly associated with anxiety sensitivity (AS), a well-known risk factor for anxiety pathology. Finally, when examining the relationships among overall anxiety sensitivity and specific hoarding facets, results indicated that the difficulty discarding sub-factor of hoarding was associated with overall anxiety sensitivity (Medley, Capron, Korte, & Schmidt, 2020).

Another clinical study was conducted to investigate the clinical characteristics of anxiety with significant hoarding behavior. The research examines the contributions of anxiety, obsessive-compulsive, inattentive, and hyperactive/impulsive symptoms in the prediction of hoarding. The study was made among adults' parents and children seeking treatment for an anxiety disorder—the clinician-administered to parent test that measures emotional and behavioral symptoms, functional impairment, and hoarding symptoms. The result of the study revealed that elevated levels of hoarding were reported for 22 percent of the sample. Elevated hoarding scored significantly higher on measures of anxiety, obsessive-compulsive, attention, social, and thought problems, rule-breaking, aggression, and overall functional impairment and had higher rates of major depressive disorder than without hoarding. Attention problems predicted hoarding symptomology over-and-above the contributions to anxiety symptoms. The findings suggest that a pattern of behavioral and emotional dysregulation for hoarding behavior and provide further insight into the relationships between anxiety, attention problems, and hoarding should be captured by another researcher (Hamblin, Lewin, Salloum, Crawford, McBride, & Storch, 2015).

In the research of Moulding, Nedeljkovic, Kyrios, Osborne, & Morgan (2017), he studied hoarding behavior and anxiety among college students. He defines hoarding behavior as the compulsion to continually accumulate various items that others often consider useless or worthless, accompanied by an inability to discard the items without great distress. In this study, the researcher addresses the behavioral domain with treatment included psychoeducation on hoarding, skills training for organization and decision making, direct session exposure to sorting and discarding (decluttering technique), and cognitive and behavioral processes.

Self-report measures were used to assess treatment effects were the Savings Inventory-Revised (SI-R), Savings Cognition Inventory, and the Depression, Anxiety, and Stress Scales. The result of Pre-post analyses indicated that after 12 weeks of treatment, hoarding symptoms as measured on the SI-R had reduced significantly, with large effect sizes reported in total and across all subscales. Moderate effect sizes were also reported for hoarding-related beliefs (emotional attachment and responsibility) and anxiety symptoms. Of the 41 participants who completed post-treatment questionnaires, 14 (34%) were conservatively calculated to have clinically significant change, which is considerable given the brevity of treatment administered (Moulding et al., 2017).

Therapeutic Interventions of Hoarding Disorder. Cognitive-Behavioral Therapy (CBT) for hoarding behavior is an evidence-based treatment, with many studies supporting its efficacy. In the first open trial of individual CBT for hoarding behavior, clients received 26 separate sessions, including frequent home visits, over a 7- to 12-month period (Tolin et al., 2007). Clients showed significant decreases from pre-treatment to post-treatment in hoarding severity. At post-treatment, 50 percent of treatment completers were rated "much improved" or "very much improved." Adherence to homework assignments was strongly related to symptom improvement. At post-treatment, 80 percent of clients who were rated at or above the median on homework completion were rated as "much improved" or "very much improved". In contrast, only 20 percent of those placed below the median on homework completion received this rating.

This initial open trial was later followed by a randomized controlled trial of individual CBT vs. waitlist (Steketee et al., 2010). Given the apparent importance of motivation and treatment compliance in the open trial, motivational interviewing strategies were emphasized to a greater extent in the controlled trial. Participants completing the treatment showed a pre- to post-treatment decrease of 24.7 percent on the Saving Inventory-Revised primary outcome measure (Frost, Steketee, & Grisham, 2004). At post-treatment, 80 percent of participants rated themselves as "much improved," and 69 percent received this rating from their clinicians. Next, the CBT protocol was translated into a group format. Three open trials of group CBT have now been conducted (Gilliam et al., 2011; Muroff et al., 2012; Muroff et al., 2009). These trials show that clients' hoarding severity decreased significantly using this format, with improvement comparable to those obtained using individual CBT.

Particularly encouraging is a recent study by Muroff and colleagues (Muroff, Steketee, Frost, & Tolin, 2014) examining long-term follow-up (up to 12 months) after CBT for HD. At follow-up, 62 percent of clients were rated "much improved" or "very much improved" by clinicians, and 79 percent rated themselves as "much improved" or "very much improved." Of those clients who were considered improved at post-treatment, 83 percent were still deemed to be improved at follow-up. Thus, preliminary evidence suggests that the effects of CBT for HD are durable (Muroff, Steketee, Frost, & Tolin, 2014).

Decluttering technique has become a widespread practice used among several populations, including students, because of its straightforward approach in assessing the clutter behavior (Mahajan, 2018). Decluttering is a process of conscious assessment of an item or 'clutter' and deciding whether or not it needs to stay in the life of an individual (Im, & Follette, 2016). The process includes activation of cognitive, affective, and behavioral assessment that drives the individual to change behavior (Whitbourne, 2017). Among recent research on decluttering Therapy, the technique was used to assess CBT's effectiveness on anxiety hoarding disorder (Moulding et al., 2017; Aso et al., 2017, Linkovski et al., 2018, Crone, et., al., 2020).

Training included a two-day course led by the therapist and a peer support specialist, including role-plays and didactic instruction. Volunteers also read seminal papers on hoarding disorder. Home sessions followed structured exercises from the Buried in Treasures workbook and its facilitator's guide. Two out of five patients met clinically significant change criteria of hoarding behavior 40 percent. These two studies prove that treatment outcomes can be improved by providing non-specialist in-home decluttering support (Linkovski, Zwerling, Cordell, Sonnenfeld, Willis, & La Lima, 2018).

A previous study in Japan examined the hoarding behavior of 450 undergraduates from two universities (Aso,

Yamaoka, Nemoto, Naganuma, & Saito, 2017). The results showed that younger people who had difficulty decluttering and organizing tended to live in cluttered or disorganized living spaces and low self-esteem. There are various ways to learn how to clean effectively in Japan, including workshops, books, and professional support, but it is not clear which method is most effective. To answer this question, a group of researchers in Japan developed an educational workshop on decluttering and organizing tended for teens and adults with difficulty organizing. The study's objective was to evaluate the effectiveness of a workshop for reducing clutter and improving the quality of life among younger people with difficulty decluttering and organizing. The study was an open-label, parallel-group, randomized controlled trial conducted among volunteers aged 12–55 years with mild difficulty decluttering and organizing. The result of the study reveals a significant effect of decluttering programs on hoarding symptoms, clutter behavior, and self-esteem. A substantial change in hoarding symptoms resulted due to decluttering program (Aso et al., 2017).

In a study conducted by Harvard University (Hicks, 2020) among students with hoarding behavior, the researcher explores the anecdotal accounts on decluttering or removing physical distractions from living spaces to help individuals looking for improved well-being. In that study, the researcher hypothesized that decluttering improves overall happiness, calmness, and mental clarity in the same way as engaging in mindfulness. Decluttering provides more significant improvements in confidence, productivity, and relationship happiness than mindfulness meditation, and decluttering diminish the importance of having material possessions and feeling overwhelmed by "stuff" compared to mindfulness meditation. The participants are adults living in the US and take part in an online longitudinal study. Participants were assigned to an intervention that either directed them to declutter or to meditate for 14 days. A well-being scale was used to captured baseline and end of treatment functioning. The result of the study reveals a significant effect on the behavior of the participants. Changes in behavior on confidence, self-regulation, directedness, productivity, and self-realization in relationship happiness compared to mindfulness meditation were noted after exposure to decluttering activity. Decreased material possession and feeling of overwhelm were also reported (Hicks, 2020).

In a more recent study, Crone et al. (2020) assessed the feasibility and efficacy of an in-home decluttering and discarding program delivered by undergraduate student volunteers. Participants with hoarding disorder (n = 6) attended a 15-week CBT program and began Clutter Buddies at Week 12. Clutter Buddies consists of eight members and administers decluttering sessions with hours weekly. Decluttering and discarding sessions which include motivational interviewing and routine outcome monitoring was administered. Participants completed questionnaires assessing hoarding severity clutter and cleanliness of the home at baseline (pre-CBT) and post-treatment (post-Clutter Buddies) and reported how satisfied they were with the Clutter Buddies program at post-treatment. Overall, participants reported reduced clutter and hoarding symptoms and a cleaner home at post-treatment compared to the start of group CBT, with 66.67 percent of participants achieving clinically significant change. Additionally, participants self-reported high satisfaction levels with the Clutter Buddies program and consistently expressed interest in receiving more and longer sessions. As volunteer-led home assistance increases the accessibility of treatment without increasing its cost to clients, integrating a volunteer-based in-home program improves CBT outcomes for individuals receiving treatment for hoarding disorder (Crone, Zach, Isemann, & Norberg, 2020).

Online Modalities as Tools during COVID 19 Pandemic. The effect of the COVID-19 pandemic creates a huge disturbance in daily living. The rapidly spreading and deadly virus has infected over 100 nations, including the Philippines, and has been declared a public health emergency (Jaymalin, 2020). As part of the mitigation strategies, the Inter-Agency Task Force on Emerging Infectious Diseases (IATF) recommends limiting community movement and practicing social distancing (Paneda, 2020). Coping with the illness of self, family, or loved ones while managing hospital- or home-based isolation may be stress-provoking. With the crisis projected to last weeks to months, it is expected that mental health conditions will only worsen over time. Infected people experience elevated stress due to fear, uncertainty, financial stress, and limited in-person interactions (Huremovic, 2019). As a result, and paired with confinement in narrow spaces, generally, in single-patient rooms with restricted movement and contact precautions from the health personnel, people are more likely to experience anger, confusion, hopelessness as well as present symptoms of anxiety, depression,

and posttraumatic stress disorder (Brooks, Webster, Smith, Woodland, Wessely, & Greenberg, 2020).

Moreover, people with pre-existing mental health conditions are disproportionately affected since they are more susceptible to stress than the general population (Yao, Chen, & Xu, 2020). Despite the adverse repercussions, contact precautions and public health recommendations must be implemented. Accordingly, alternative methods to deliver mental health care are necessary to bridge the significant health gap. Tele-mental Health has a unique potential in addressing the psychological side effects of social distancing.

The use of tele-mental health services has been studied extensively in recent years as attention has been turned to revitalizing perceptions and uses of mental health services. There is strong evidence for the use of Tele-mental health services as a component of integrative and collaborative patient care (Fortney et al., 2015) and to manage medication compliance and side effects between in-office treatments (Parikh & Huniewicz, 2015). These methods also provide practitioners a means to reach patients in underserved or resistant populations (Kasl-Godley, King, & Quill, 2014) and improve coping mechanisms and the overall well-being of patients and providers alike (Kasl-Godley, King, & Quill, 2014). Tele-mental health has also proven an effective means of assessing and improving physicians' use of education. Among its many proven advantages, its most pertinent utility to the current situation is to expand access to care for hard-to-reach and underserved populations with restricted mobility due to mental, medical, or geographical challenges. Tele-mental Health reduces or eliminates the need for travel for both patients and clinicians and delivers remote services cost-effectively while maintaining the quality of care (Mahmoud, Vogt, Sers, Fattal, & Ballout, 2019).

As a result, in times of public health crises and national and international emergencies, the value of Tele-mental Health cannot be overstated. The COVID-19 is highly contagious and deadly for at-risk and elderly individuals (Paneda, 2020). However, these risks should not prohibit individuals from receiving mental health care. Therefore, Tele-mental Health may be an ideal solution to reduce the risk of clinicians or patients being infected while still providing care, especially in settings with shortages of mental health professionals. The value proposition of Tele-mental Health is that it can effectively respond to the mental health needs of people in isolation, quarantine, or restricted mobility while reducing patient and clinician infection risk. Thus, Tele-mental Health adheres to social distancing, avoids care interruptions, and maximizes public health outcomes (Whaibeh, Mahmoud, & Naal, 2020).

Benefits of Online Tele-mental Health Care during COVID-19 Pandemic. A study conducted in Lebanon on a modality that delivers remote mental health services provides an ideal solution to complement existing efforts. The study presents the first roadmap for Tele-mental health applicability, focusing on the Primary Health Care (PHC) setting, which has international relevance (Naal, Whaibeh, & Mahmoud, 2020). Another research used tele-mental health and explored individuals with physical deficiency. Four hundred twenty-two participants completed an anonymous questionnaire about their perspectives of Tele-mental health services for deaf individuals. Results showed that several variables, such as if the participant was unable to receive another type of psychotherapy and whether the therapist was (American Sign Language) ASL-fluent, were significantly related to whether the respondent would use Tele-mental health. The participants reported that Tele-mental health services are a viable option for treating various mental health issues. Tele-mental health services can act as a bridge between mental health care consumers and their providers, allowing accessible and equitable healthcare opportunities (Crowe, 2017).

In response to COVID -19 Pandemic, the University of Colorado Anschutz Medical Campus conducted a study on rapidly virtualized clinical services during the COVID-19 pandemic (Mishkind, Shore, Bishop, D'Amato, Brame, Thomas, & Schneck, 2020). The study was made in all current clinical appointments, which were converted to a virtual platform. All new clinical intakes were scheduled as virtual visits starting March 16, 2020. Virtualization included a modified needs assessment, updated clinic procedures, focused patient and staff training on Tele-mental health, and increased team meetings. The researcher conducted a retrospective evaluation of clinic logs and electronic health record data to examine the number of appointments and no-shows before and after COVID-19 virtualization. The result of the study reveals that rapid virtualization of mental health services occurs effectively, with 7.8 percentage across the six months' post-virtualization and no-

show rates dropped from 11.9 percentage pre- to 6.8 percentage post-virtualization, leading to a 26.2 percent increase in completed visits. The researcher concluded that Rapid virtualization of mental health services could occur effectively. More extensive use and acceptance of TMH, especially inpatient homes, is likely in the foreseeable future as health care providers and systems re-conceptualize service delivery (Mishkind et al., 2020).

The changes in inpatient care modalities among mental health professionals from face-face appointments to Tele-mental health were also analyzed. In research was conducted to explore the experiences of mental health clinicians and staff in rapid conversion to full-time Tele-mental health and work from home during the COVID-19 pandemic (Steidtmann, McBride, & Mishkind, 2020). The researchers conducted an online survey among 14 clinicians and 11 administrative staff from two outpatient mental health clinics in a large academic medical center last May 2020. The result of the study revealed that more than 85 percent of participants rated the experience of providing or supporting full-time Tele-mental health care as "somewhat better" or "much better than expected." Clinicians and administrative staff reported perceptions that most clients were satisfied with Tele-mental health services. Identified work-life balance benefits included lack of commute, time with loved ones, opportunities for self-care, and increased flexibility. Maintaining team cohesion and communication while working remotely and setting boundaries between work and non-work hours were identified as challenges. While identified tele-mental health challenges included difficulty providing clinical forms and challenges with technology. Nearly all respondents indicated a preference to continue some tele-mental health from home in the future. Identified tele-mental health challenges included difficulty providing clinical forms and challenges with technology (Steidtmann, McBride, & Mishkind, 2020).

Another study on the perspective of college students on tele-mental health revealed that college students view tele-mental health as convenient, accessible, easy to use, and helpful. tele-mental health helps to overcome the barrier of the stigma associated with seeking mental health treatment. Willingness to engage in Tele-mental health varies based on prior experience with mental health treatment, ethnicity, and severity of symptoms. The recent literature highlights the potential for Tele-mental health to play a key role in mental health services for college students. It also highlights some of its shortcomings, which are indicative of the continued need for in-person assistance. Future studies should continue to track college student perspectives toward and utilization of Tele-mental health (Hadler, Bu, Winkler, & Alexander, 2020).

Administering tele-mental health in group psychotherapy shows favorable results. A study used video teleconferencing (VTC) as mental health treatment delivery to geographically remote, underserved populations. The study compares process variables such as therapeutic alliance and attrition among participants receiving anger management group therapy through traditional face-to-face delivery or VTC. This study represents secondary analyses of a randomized non-inferiority trial (Morland, Pierce, & Wong, 2004) in which the clinical effectiveness of VTC delivery proved non-inferior to in-person delivery. Participants were male veterans (N = 112) with posttraumatic stress disorder (PTSD) and moderate to severe anger problems. The researcher examined potential differences in process variables, including therapeutic alliance, satisfaction, treatment credibility, attendance, homework completion, and attrition. The study results show that there were no significant differences between the two modalities on most process variables. However, individuals in the VTC condition exhibited lower alliance with the group leader than those in the in-person condition. Mean self–leader alliance scores were 4.2 (SD = 0.8) and 4.5 (SD = 0.4), respectively, where five represents strongly agree, and four agree with positive statements about the relationship, suggesting that participants in both conditions felt reasonably strong alliance in absolute terms. Individuals who had stronger associations tended to have better anger outcomes, yet the effect was not strong enough to produce inferior aggregate outcomes in the VTC condition. The findings suggest that even if group psychotherapy via VTC differs in subtle ways from in-person delivery, VTC is a viable and effective means of delivering psychotherapy (Greene et al., 2017).

Limitations of Online Tele-mental Health. While the benefits of Tele-mental health have been identified, including reduced barriers to access, increased cost-effectiveness, and the broad availability of services, there are unique limitations to its implementation (Lacktman, 2017). These unique limitations are only accessible in face-to-face sessions; this includes challenges with attention and emotion regulation skills, difficulties

identifying dissociative symptoms, and increased time for case analysis. These limitations are exacerbated for most marginalized clients and face the highest levels of social and economic barriers. Lack of access to reliable technology, lack of a private or confidential space for sessions, and reluctance to process psychological conditions in the absence of a safe environment, are all barriers to conducting effective treatment over tele-mental health (Racine, Hartwick, Collin-Vézina, & Madigan, 2020).

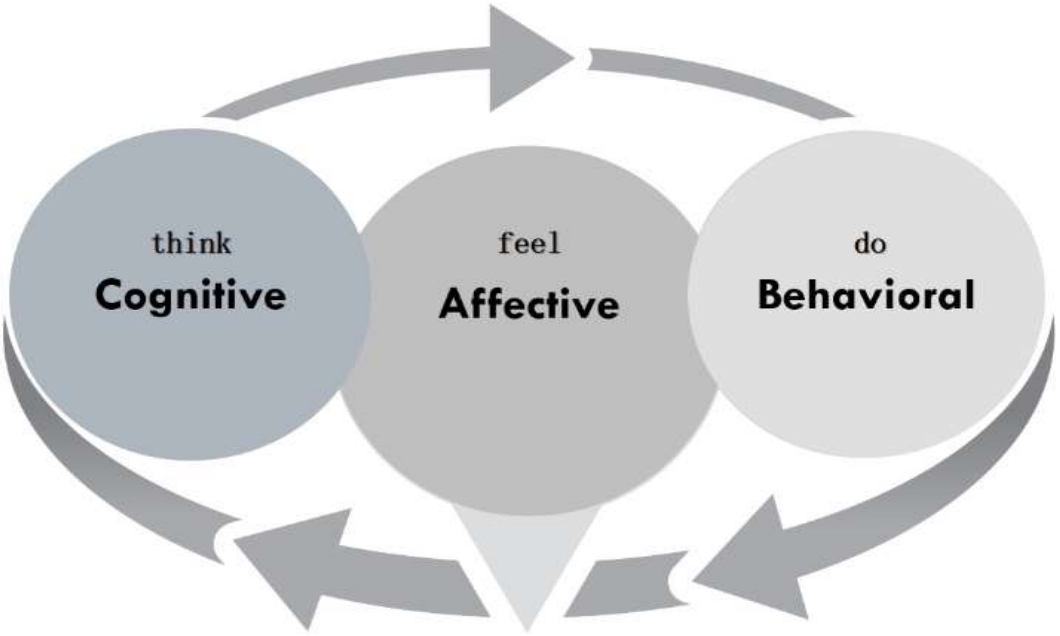
Citing some limitations of Tele-mental health, Canadian researchers studied the benefits, challenges, and future directions during the COVID-19 pandemic. The research explains that although tele-mental health may be an innovative solution for broadly delivering psychological services, it can also pose threats to confidentiality and is limited to individuals with accessibility to the internet and the capability to navigate online platforms. Tele-mental health may also not be appropriate for individuals with severe mental illness (e.g., active psychosis, suicidality). Who requires in-person services to mitigate acute risk or in situations in which a high degree of confidentiality is critical for accurate disclosure (e.g., child maltreatment, domestic violence). The paper describes the benefits and challenges of Tele-mental health. It highlights important considerations for clinicians, children, youth, systems that coordinate and facilitate mental health services, and future research. They concluded that Tele-mental health is not a solution and requires careful consideration for appropriateness depending on client needs and confidentiality and standards for ensuring optimal outcomes for clients.

Another standard limitation of Tele-mental health is on technical components of the device. Despite advances in video conferencing software programs, technical issues appear to be the most prevalent (Greene, Morland, Macdonald, Frueh, Grubbs, Rosen & Craig, 2017). Providers have noted video, audio, and latency issues and an inflexible video camera as barriers to patient care (Hughes, Gorman, Ren, Khalid, & Clayton, 2019). For example, providers are often troubled if a technical issue occurs when a patient discusses an emotional and sensitive topic and has difficulty not interrupting the patient during audio lags (Hensel, Ellard, Koltek, Wilson, & Sareen, 2019). Relatedly, technical issues may prevent providers from seeing facial expressions, tics, and tremors, which may inherently translate in a decreased sense of therapeutic alliance building with tele-mental health being perceived as impersonal (Yeong, Ismail, Ismail, & Hamzah, 2018). One study (Uscher-Pines, Raja, Qureshi, & Huskamp, 2019) interviewed providers who believed that some patient drawbacks are using Tele-mental health, including less patient engagement, challenges sharing information within the care team, and more significant inefficiency. As for patient suitability for Tele-mental health, providers' opinions are mixed. In one study (Maia, Castela, Pires, & Lapão, 2019), providers indicate that all mental health patients can be treated via Tele-mental health and identify patients with anger management issues and agoraphobia as those who best respond to Tele-mental health. Besides, some psychiatrists believe that shy or socially anxious patients may be well treated through tele-mental health (Varrell & Boyce, 2017). Conversely, other providers believe that patients who are emotionally unstable, impulsive, or have poor coping skills and those who have dementia, paranoia, visual and/or hearing deficits are not suitable for Tele-mental health (Jensen, Wieling, & Mendenhall, 2019).

Theoretical Framework

Aaron Temkin Beck developed the Cognitive Behavioral Theory. He believed that dysfunctional behavior is caused due to dysfunctional thinking and that our beliefs shape dysfunctional thinking. These beliefs decide the course of actions. Beck was convinced that positive results are attainable if patients were persuaded to think constructively and abandon negative thinking (Beck, 2019). Added to these cognitive processes are forms of meanings, judgments, appraisals, and assumptions associated with specific life events that are the primary determinants of one's feelings and actions in response to life. These processes either facilitate or hinder the process of adaptation to a life's wellness (Prendes & Resko, 2012). CBT explains how thought, feeling, and behavior interact. This theory focuses on how certain thoughts lead to certain emotions, which, in turn, lead to specific behavioral responses. Accordingly, it was further expressed that the views are changeable, and changing ideas will change feelings and behavior. It also works in reverse. Changing the behavior can also lead to changes in emotions and ultimately in thinking. Even though feelings cannot be directly manipulated, they can be indirectly changed by changing thoughts and behavior (Parvez, 2019). The loop and movements

are observed in Flow 1.



Flow 1: Theoretical Framework using Cognitive Behavioral Theory

The Cognitive Behavioral Theory uses three fundamental assumptions to highlight the treatment model (D. Dobson & Dobson, 2009; K. Dobson & Dozois, 2001). The *first assumption* is that cognitive processes and content are accessible and can be known. The *second key assumption* is that our thinking mediates the way that we respond to environmental cues. From this perspective, people react not only emotionally or behaviorally to life events but also formulate their thoughts. The *third fundamental assumption* of CBT is that such cognitions can be intentionally targeted, modified, and changed. When cognitions are altered toward more rational, realistic, and balanced thinking, the individual's symptoms will be relieved, and the person will have increased adaptability and functionality (Prendes & Resko, 2012).

Cognitive Behavioral Therapy assesses anxiety and hoarding based on its fundamental core areas: cognition, emotion, and behavior. CBT allows the individual to analyze and interpret every situation and recognize negative thoughts. Negative thoughts about the world, about the future, and self. These negative thoughts eventually destabilize emotions (such as low self-esteem and uselessness) and, consequently, counter-productive behavior (Otte, 2011). CBT technique teaches individuals to draw rational beliefs from adverse events and develop healthy negative emotions that translate to productive behavior (Steward & Chambless, 2009).

Conceptual Framework

This study intends to measure the effectiveness of Decluttering Therapy on hoarding disorder. The intervention of Decluttering Therapy is predicted to affect the level of hoarding behavior among the participants. To achieve the objective of this effect, online modalities will be used as a tool to implement the technique. The therapist's fidelity to the method determines the effects of the intervention on hoarding behavior. Thus, evaluation on the compliance of the steps and principles of the therapist will also be measured. The independent and dependent variables of this study show the direction and figure of this inquiry. Figure 2 is the conceptual diagram of the study.

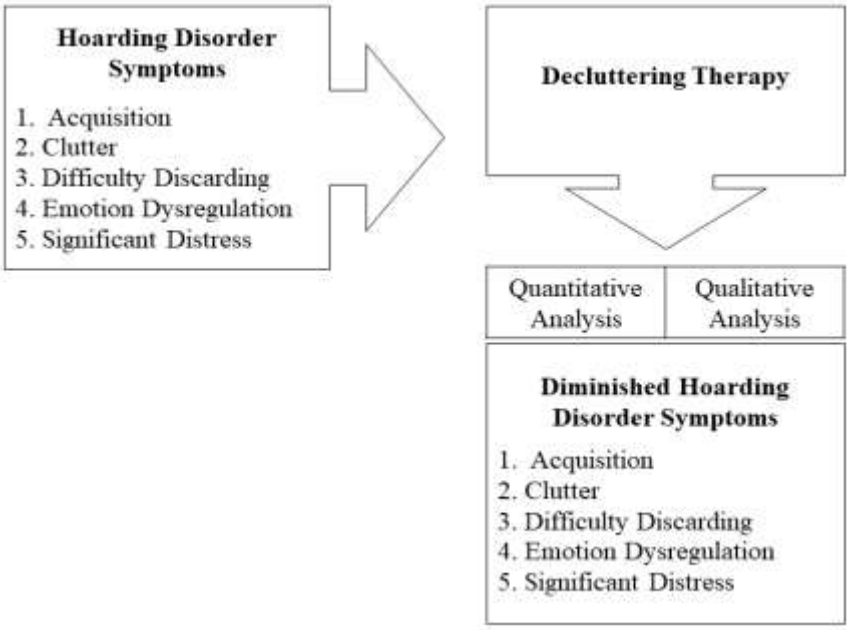


Figure 2: Illustration of conceptual figure and interaction of Independent Variables (Decluttering Therapy) and the Dependent Variable (Hoarding Disorder Symptoms) in the study.

Decluttering Therapy as an independent variable illustrates a direct effect on the symptoms of hoarding disorder as the dependent variable.

Statement of the Problem

This study examined the effectiveness of Decluttering Therapy on the hoarding disorder of college students. Specifically, this study following questions:

1. What is the demographic profile of the participants?

    a. Gender
    b. Age
    c. Year Level/Major
    d. Locale (Urban/Rural)

2. What is the level of hoarding disorder symptoms before and after intervention?

3. What is the level of difference in pretest and posttest of hoarding disorder symptoms in terms of:
    a. Acquisition
    b. Clutter
    c. Difficulty Discarding
    d. Emotion Dysregulation
    e. Significant Distress

4. How do college students experience hoarding disorder symptoms during the COVID-19 pandemic?

    1. How do college students experience Decluttering Therapy?
    2. How do college students experience online Therapy?

Significance of the Study

The importance of this study is anchored on the holistic understanding of the experience of students whose current psychological disposition differs from what is the usual (face-to-face) setup. The holistic approach of this study resides through the examination of the effects of Decluttering Therapy and the analysis of the experiences of the participants. The Decluttering Therapy incorporated in online Tele-mental health methodology will be a platform for students' psychological assistance. Further, this study is beneficial for the following sectors in society.

1. The findings of the study are advantageous to individuals, especially college students. Considering the amount of anxiety they experience brought by the COVID-19 pandemic, which changes the medium of learning, the psychological disposition of students will be assessed immediately and eventually come up with appropriate intervention. Furthermore, Decluttering Therapy trains the student to be tidy, organized, proactive, and contended in the physical environment and life in general. The training of the technique allows the student to reflect their capacity to self-regulate and healthy future.
2. For parents and family, the benefits of this research focus on awareness of the adolescents on money handling. Since the adolescents contribute to the family's budgetary allocation, the adolescents must be aware of their role in monetary budgeting.
3. This study is beneficial to the guidance counselor and school psychometrician; since the approach was set online, it would be easy for the professionals to contact and facilitate the intervention since the online tele-mental health approach may host individual and group sessions.
4. This study will encourage local government units and national agencies to create and organize programs for families, communities, mental health professionals, and other related professionals to establish specific projects to improve the services on mental health as expressed in Mental Health Bill.
5. Finally, this study contributes to student hoarding behavior, particularly during heightened health situations. This research is also beneficial to future researchers to contribute to the sprouting therapeutic technique to help alleviate the current psychological condition, particularly in the Philippines.

Definition of Terms

The following are the variables and terms which the researcher defined and used throughout the study. The operational definition of variables and terms used in this study may defer from that employed in another study. This definition was contextualized by the research based on the execution of the study.

COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, China. The World Health Organization declared the outbreak a Public Health Emergency of International Concern in January 2020 and a pandemic in March 202.

CBT – Decluttering Technique is a proposed approach that adapts the CBT for Hoarding Disorder Group Therapy, integrating the decluttering technique. The proposed decluttering technique explores thinking, feelings, and doings (thinkfeeldo) as the entire area to resolve dysfunctional behavior.

Hoarding Behavior is an association of symptoms related to anxiety categorized in cognitive, affective, and behavioral domains. In the cognitive domain, this of difficulty categorizing or organizing possessions, severe anxiety when thinking to discard items and suspicion of other people touching items. In the affective domain, this includes distress feeling, embarrassment by possessions, and fear of running out of an item or needing it in the future. For the behavioral domain, the behavior is seen to frequently check the trash for accidentally discarded objects, functional impairments, including loss of living space, social isolation, family or marital discord, financial difficulties, and health hazards.

Online Tele-mental Health Care uses telecommunications technology to provide mental health services to individuals (college students) in communities or locations and because of COVID-19 pandemic health

restriction.

METHOD

This chapter presented the general procedure and process of the research which include the research design, research locale, research participants, research instrument, research procedure, statistical analyses, and ethical considerations.

Research Design

This study utilized a mixed-method design, particularly an experimental embedded mixed-method design. Cresswell (2018) defines Embedded Design as a mixed-methods design in which one data set provides a supportive secondary role in a study based primarily on the other data type. In this paper, the investigator gathered qualitative data to develop the treatment, examine the intervention process, and follow up on the results of an experiment (Creswell & Creswell, 2018). Following this premise, this study was conducted in seven phases. Figure 3 presents the stream of the research design.

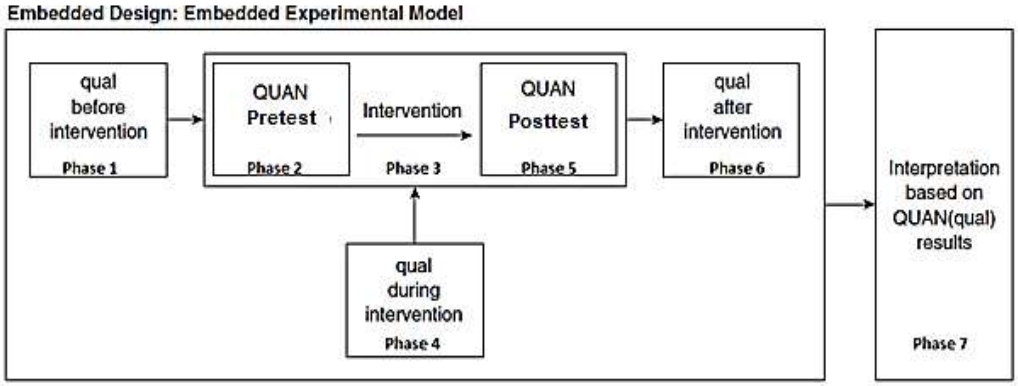


Figure 3: Research Design Framework

The qualitative study utilized a phenomenological approach in exploring the hoarding disorder of students. While quasi-experimental design was used in a single independent group was used in the quantitative examination.

Research Locale

The study was conducted in one college school in Davao City, Philippines. The college is a Catholic institution and offers degree courses that cater to average to below-average income families. Since most of the classes today are via a virtual classroom, the conduct of this study was done using the online platform. Thus, the session was conducted in the comfort of the place of the participants. The general guideline of the venue duri-

ng the conduct of the study was based on standard guidelines set by the school during online classes. Such guideline includes; the students should stay in a place where minimal noise was visible. Ventilation and lighting of the space be available for conducive learning. A strong internet connection should be available for connectivity, and devices such as (camera, headphones, speakers, laptop, or desktop computer) should be available.

Research Participants

The inclusion criteria of the study are the following:

1. A college student officially enrolled in the first semester of the school year 2021-2022.
2. A student should score above 41 of the cutoff score of Saving Inventory-Revised (SIR). While a student with clinically significant anxiety (score of >60 in Zung Self-Rating Anxiety Scale (SAS).

3. The participant should be knowledgeable in the navigation of both computer hardware connections and software applications. A full-time or working student is considered illegible in this study. This criterion was measured using the intake form of the study.

The study exclusion criteria are students with a pre-existing psychological condition, which was screened through the intake form part of the screening process. Validation of the truthfulness of data entries was verified through the Program Head and School Clinic.

To capture the randomized selection of the study, the researchers used stratified sampling and identified General Education as the baseline sample. The two screening tools were administered among 281 students. Fifty-one students reached the cutoff score in both screening tools and received their results via email. Fifteen out of fifty-one invited students attended the orientation. During the orientation, the invitees were oriented on the nature of the therapy, objective, duration, benefits, role, participant's rights, the therapist's role, ethical procedure, and other essential details. Among 15 students who attended the orientation, only nine complied with the documentary requirements, including signed contracts and informed consent. The nine participants participated in the initial meetings of the therapeutic group; however, two of the participants withdrew from the session in its initial phased (phase 1). Thus, the actual participants of the study are seven students with hoarding disorder symptoms.

Research Instruments

For specific functions, the following instruments are presented to screen the actual number of participants, and the researcher used the following tools.

Saving Inventory-Revised (SIR) (Frost, RO., Steketee, G., & Grisham, J., 2004), the Saving Inventory-Revised is a 23-item questionnaire designed to measure three features of hoarding behavior. The test measures the figuring domain, excessive acquisition, difficulty discarding, and clutter. Saving Inventory-Revised exhibited high internal consistency (Cronbach's alpha = .94 and .84 for controls) (Frost, RO., Steketee, G., & Grisham, J.,2004).

Zung Self-Rating Anxiety Scale (SAS) (Ramirez, & Lukenbill, 2008). The scale focuses on the most common general anxiety disorders consists of a 20-item self-report assessment. Each question is scored on a Likert-type scale of 1- 4 with descriptive "a little of the time," "some of the time," "a good part of the time," "most of the time." Some questions are negatively worded to avoid the problem of set response. The total raw scores range from 20-80. The raw score then needs to be converted to an "Anxiety Index" score using the chart on the paper version of the test that can be found below. The "Anxiety Index" score can then be used on this scale below to determine the clinical interpretation of one's level of anxiety:

20-44 Normal Range
45-59 Mild to Moderate Anxiety Levels
60-74 Marked to Severe Anxiety Levels
75 and above Extreme Anxiety Levels

The internal reliability score was 0.80 with strong validity properties (Ramirez, & Lukenbill, 2008).

To measure the symptoms of hoarding disorder, the following test was used.

The Hoarding Rating Scale (HRS) (Tolin, Frost, Steketee, & Fitch, 2008) is a brief five-item scale that can be given as a semi-structured clinician interview or a questionnaire. This tool includes five questions about clutter, difficulty discarding, excessive acquisition, and the resulting distress and impairment caused by hoarding. Initial studies suggest that a score of 14 or higher on the HRS indicates a probable hoarding problem/ Hoarding Disorder diagnosis. The scoring measure of the test includes the mean score for nonclinical samples total score of 3.34 with a standard deviation of 4.97, and the mean score for people with hoarding problems with a total score of 24.22 and a standard deviation of 5.67

CBT for Hoarding Disorder: A Group Therapy Program Therapist's Guide. Cognitive-behavioral therapy (CBT) for HD is an evidence-based treatment, with many studies supporting its efficacy. The Therapist Guide outlines a Cognitive-Behavioral Therapy Program for hoarding disorder using a group model and covers education about hoarding disorder, the CBT model, therapy goals, personal values, motivational enhancement methods, including identifying barriers to progress, organizing and problem-solving about hoarding problems, cognitive therapy strategies to reduce problematic hoarding beliefs and to replace acquiring with more adaptive behaviors, sorting, removing clutter. It also reviews the most effective therapy methods, coping with change, and highlighting strategies for maintaining gains.

Research Procedures

The undertaking of this research was made based on the following sequence and procedure. Before the data gathering began, the researcher emailed an electronic letter to request permission to the identified college. The letter contained a background of the researcher's analysis, objectives, procedures, and agreements, stipulating the terms for research compliance. The request was subjected to ethical review, and after satisfactorily complying with the requirements, the ethics committee issued the certificate of data gathering. Thereafter the data gathering started.

The researcher used stratified random sampling through identifying the section under the General Education subjects. The identified general education subject was Understanding the Self; there were four sections captured in the selection process. The screening process was done online. The identified section was contacted and provided with an invitation letter and discussed the nature of the study. After the entire screening process, the research captured seven participants in the study. All participants received a letter of invitation presented the purpose of the study, the role of researcher and respondent, date gathering, ethical norms, frequency and duration of the session, and benefits of the study. Along with the letter is the informed consent that was signed by the respondent and the parent or guardian. Ethical considerations were explained, including confidentiality issues, especially on the use of recordings during the session. Their right to withdraw from the study was highlighted to emphasize freedom and voluntary participation in the study.

Thereafter, the phased one of the study commences, the researcher collected qualitative data through in-depth interviews and focus group discussions among college students with hoarding disorder symptoms. The result of this first inquiry served as the baseline to contextualize the norm of hoarding behavior among college students. In phase two, the researcher conducted the quantitative examination by administering the pre-intervention assessment as the baseline score of the participants before exposure to the treatment condition. Phased three, the implementation of the intervention. This phase measured the effectiveness of Decluttering Therapy on hoarding disorder symptoms. Using the repeated measurement, the researcher analyzed the individual score variability of the participants and determined the effects of the treatment. Phased four, gathering qualitative data by exploring the experience of participants under Decluttering Therapy. The key informant interview technique was used to collect the subjective experience of the participants. Phased five, administration of a post-intervention measure. The purpose of this measurement is to examine the efficacy of Decluttering Therapy by analyzing the score of the participants. Phase six, gathering qualitative data by exploring the experience of participants after the intervention. Part of its exploration is to identify areas of strength and improvements of the therapy. At the same time, the overall impression under the therapeutic technique was unearthed. The key informant interview technique was used to gather the subjective experience of the participants. Phased seven, the last part of the examination, was interpreting and integrating qualitative and quantitative data. During this period, the researchers analyzed the data respectively and created a meaningful result of the study.

A collateral interview among the members of the participants' families was conducted to establish the study's validity. The goal of the collateral interview was to identify the observed behavior of the participants before and after the Decluttering therapy. The collateral interview was conducted with the mother, sister, and aunt of the participants. The interview session was set after the 12 sessions through online modalities. The data from

the interview was analyzed using Thematic Analysis. Data from the collateral interview was used to examine the changes observed after the session with the participants. This data was essential to understand the context of the changed behavior before and after the session.

Summary of sessions. There were 12 sessions in 6 weeks, two times a week, for the entire completion of the group therapy session. The session was conducted online to achieve change among the participant's hoarding disorder symptoms. Below is a summary of the session.

Table 1: Summary of Therapy Schedule

Decluttering Therapy Summary of Session

Week	Session	Day	Topic
Week 1	**Session 1**	**Monday**	Welcome to the Class
		Activities	1. Welcome to the Declutter Class 2. Class Rules and Guidelines 3. What is Hoarding Disorder? 4. What Will I Learn in This Class? 5. How Well Does the Declutter Class Work? 6. Homework
	Session 2	**Friday**	Why Do I Have So Much Stuff?
		Activities	1. Homework Review 2. Rewards 3. Meet the "Bad Guys." 4. Setting Goals 5. Homework
Week 2	**Session 3**	**Monday**	Making Decisions and Solving Problems: Part 1
		Activities	1. Homework Review 2. Making Decisions and Solving Problems 3. Making Decisions and Minimizing Distractions 4. Making Decisions and Improving Organization 5. Putting Skills Together to Discard Better 6. Homework
	Session 4	**Friday**	Making Decisions and Solving Problems: Part 2
		Activities	1. Homework Review 2. Making Decisions: Acquiring 3. Solving Problems 4. Discarding Practice 5. "Bad Guy" Re-evaluation 6. Homework
Week 3	**Session 5**	**Monday**	Intense Emotions: Part 1
		Activities	1. Homework Review 2. About Intense Emotions 3. Tackling Intense Emotions That Lead to Acquiring 4. Homework
	Session 6	**Friday**	Intense Emotions: Part 2
		Activities	1. Homework Review 2. Tackling Intense Emotions That Get in the Way of Discarding

			3. "Bad Guy" Re-evaluation 4. Homework	
Week 4	**Session 7**	**Monday Activities**	Unhelpful Thinking: Part 1 1. Homework Review 2. How Thoughts Influence Emotions 3. Identifying Unhelpful Thoughts 4. Homework	
	Session 8	**Friday Activities**	Unhelpful Thinking: Part 2 1. Homework Review 2. Tackling Unhelpful Thoughts 3. "Bad Guy" Re-evaluation 4. Homework	
Week 5	**Session 9**	**Monday Activities**	Waxing and Waning Motivation: Part 1 1. Homework Review 2. Improving Motivation 3. Acting on Your Top Goals and Values 4. Homework	
	Session 10	**Friday Activities**	Waxing and Waning Motivation: Part 2 1. Homework Review 2. Improving Motivation to Discard 3. Being Motivated by Your Values Long-Term SMART Goals 5. "Bad Guy" Re-evaluation 6. Homework	4. Checking in on
Week 6	**Session 11**	**Monday Activities**	Putting It All Together: Part 1 1. Homework Review 2. Troubleshooting Common Barriers 3. Putting It All Together 4. Homework	
	Session 12	**Friday Activities**	Putting It All Together: Part 2 1. Homework Review 2. Troubleshooting Common Barriers 3. Putting It All Together 4. Homework	

One of the tools in the therapy was the usage of pictures. The presentation pictures were used to monitor the progress of the participants. During the initial sessions, the participants were asked to take photos of the entire house. Then the participants were asked to select one location that they wanted to declutter. This location was considered to be the target and monitored through sending of photos.

Online Tele-mental Health Modalities. To respond to the current psychological needs, the researcher used online tele-mental health modalities. These modalities included online video conferencing and phone call communication. The online session used Google meet.

Online tele-mental health can be used via a computer, desktop, laptop, and mobile. However, the researcher recommends using a desktop or laptop to maximize efficiency since video conferencing requires more stable

internal support. All activities, worksheets, scheduling, evaluation, and assessment are done online; this means that the participants need to comply with basic requirements, which include internet connection. The minimum bandwidth required for video conferencing that's effective is 8Mbps for downloading and 1.5 Mbps for uploading (Alexa, 2020).

All scores, worksheets, and registration data were directed to the Google email account. While online assessment scores were directly stored in the online service provider. Screenshot pictures of the scores were sent to the Google email account.

Data Analysis

The comparison of the baseline-intervention-baseline data was conducted for each participant using the descriptive statistic. To describe whether the difference between two sets of observations has change, the mean score descriptive comparison was utilized. To analyzed the demographic details of this study, descriptive statistics were also administered using the standard deviation formula.

For the qualitative inquiry, the researcher used thematic analysis. Thematic analysis was used to develop a coding template, which summarizes themes identified by the researcher as important in a data set. The researcher then organized the data in a meaningful and valuable manner (Cresswel, 2003).

Ethical Considerations

Informed Consent: The researcher provided the participant's informed consent that included a detailed explanation about the objectives and significance of the study and the study's duration. A contract to voluntarily participate or withdraw from the study was also be provided. Considering that setup, the participants' family was informed on the nature of the research undertaking since the support system is part of the change behavior program.

Beneficence: The researcher upheld the principle of beneficence that aimed to provide maximum possible benefits. The researcher ensured that the safety of the participants was the primary concerns, thus, all interaction was done online. No face-to-face interaction was done in response to existing health conditions brought by the pandemic. Further, risks and benefits were discussed during the research orientation and debriefing.

Confidentiality: The researcher at all times conformed to the ethical value of confidentiality. Thus, to maintained anonymity and confidentiality, the researcher used code names to protect the personal information of the participants in the program. Confidentiality and private interaction online were done using google meet. Google meet provides secured features that allow the users to regulate the security features during the meeting. The researcher also created a google classroom where links and forms were placed and downloadable. The membership of the classroom only includes the participants and the researcher. The security feature of the classroom was activated. After the entire therapy session, the classroom was deleted to ensure the privacy of the data. All sessions with the participants were done using a single code. Video recording of the experimentation was stored and safely kept as part of the entire process. All the video recording was automatically directly sent to the google drive of the researcher. These video files have security features (password) to secure access. The files were also downloaded and placed in one flash drive to be submitted to the University library as part of the safekeeping.

The retention and disposal of data were based on standard regulations set by the university. For data and datasets created from clinical research, the university stores the data in the library's archives with security measures relative to retention and disposal policy. The researcher did not withhold any data as part of the research protocol compliance.

Role of the Researcher: The researcher was responsible for carrying the integrity, sensitivity, and

commitment to moral issues and actions throughout the study as mandated in the Psychological Association of the Philippines Code and Civil Service.

As a way of expressing gratitude, the research provided virtual recognition to the participants as part of the completion of the therapy. This event serves as a positive reinforcement part of the vital technique of Decluttering Therapy.

Commission. The researcher was cautious in dealing with any concerns and addressed uncertainties and difficulties to the research mentor.

The researcher presents the study's findings during the university research conference as part of the research mandate. Likewise, the researcher will also present the finding to the participating institution where the data was gathered. Moving further, the researcher will present the finding to the Psychological Association of the Philippines (PAP) during the annual conference and other national conferences. Publication of the research is one the primary drive of the researcher to complete the project, thus, considered as part of research dissemination.

RESULTS

This chapter presents the profile of the participants, the result of the quantitative examination, and the qualitative themes derived from key informant interviews (KII). These results are presented based on the sequence shown in the statement of the problem.

Socio-Demographic Profile of the Participants

The demographic profile of the participants was identified to describe the sample population presented in table 2.

N	Age	%	Gender	%	Year Level	%	Area	%
7	18 = 3	42.9	Male = 2	28.6	2nd Year = 5	71.4	Urban = 4	57.1
	19 = 4	57.1	Female = 5	71.4	3rd Year = 2	28.6	Rural = 3	42.9
					Course			
					BS Psych = 4			
					BS IT = 1			
					BS Crim = 1			
					BS CA = 1			

Table 2: Demographic Profile

There are seven participants in this study. The participants have a mean age of nineteen, where most of them are second-year college. The majority were females coming from the urban area and taking up the BS Psychology program.

Level of Hoarding Disorder Symptoms. The overall interpretation of mean score based on the pretest and posttest examination presented in (table 3). After the 12 sessions, the pretest and posttest score was compared to assess the change of behavior after decluttering therapy.

	Pretest	Posttest
Mean Score	27.28	13

with hoarding problems No hoarding problems

Mean for people with hoarding problems: HRS Total = 24.22

Mean for people without hoarding problem: HRS Total clinical cutoff score of 14.

Table 3: Level HD on Pretest and Posttest Results

The overall mean score of the pretest of 27.28 corresponds to the verbal description of *hoarding problem.* All of the Decluttering Therapy participants exhibit hoarding symptoms, which indicate the behavioral manifestation of clutter, difficulty to discard, uncontrolled acquisition, emotional dysregulation, and significant distress. To address this behavioral problem, Decluttering Therapy was administered with the hope of decreasing the symptoms of hoarding disorder. The posttest after the intervention of Decluttering Therapy shows a change on overall score with the general mean score of 13 with a corresponding verbal description of *no hoarding problem*.

Participants	Pretest ∑ Score	Posttest ∑ Score	Difference ($D = X_1 - X_2$)	$(D - \bar{d})^2$
1	28	14	14	0.0816
2	27	12	15	0.5102
3	28	12	16	2.9388
4	27	12	15	0.5102
5	26	14	12	5.2245
6	28	13	15	0.5102
7	27	14	131.653	131.653
Total ($\sum$)	191	91	100	11.4286
Mean ($\bar{X}$)	27.29	13	14.29	

Standard Error of the Mean Difference: 0.5216
Degrees of Freedom: 6
Paired Samples t-Statistic: 27.386
Critical Value & p-value: <.001
Effect Size (Cohen's d): 10.35

Table 4: Level of pretest and posttest total score of the participants

A paired-samples t-test was conducted to evaluate the efficacy of the intervention on participants' hoarding problem severity scores. Prior to the intervention, all participants demonstrated elevated scores exceeding the clinical benchmark for hoarding problems (Cutoff = 24.22), yielding a pretest mean score of 27.29 (SD = 0.76). Following the intervention, participants experienced a substantial reduction in total scores, dropping to a posttest mean score of 13.00 (SD = 1.00). The mean decrease of 14.29 points (SD = 1.38) was statistically significant, $t(6) = 27.39$, $p < .001$, with a 95% confidence interval for the mean difference ranging from 13.01 to 15.56. Furthermore, the calculated Cohen's d of 10.35 indicates an exceptionally large effect size.

Beyond statistical significance, the findings demonstrate profound clinical impact. Every participant exhibited meaningful score reductions, with all individual posttest scores dropping to or below the clinical cutoff threshold of 14. Consequently, 100% of the sample transitioned from the clinical range for hoarding problems at pretest into the non-clinical range at posttest, providing strong empirical evidence for the favorable therapeutic effects of the intervention.

Level of Hoarding Disorder per Symptoms. To test the difference of score between pretest and posttest based on the hoarding symptoms, table 5 presents the mean score per hoarding symptoms.

Hoarding Symptoms	Mean Score Pretest	Posttest	Difference ($D = X_1 - X_2$)	$(D - \bar{d})^2$	Pretest Rating	Posttest Rating
Uncontrolled Acquisition	6	3	3	0.00	Severe	Mild – Moderate
Clutter	5	2	3	0.00	Moderate	Mild
Difficulty Discarding	6	3	3	0.00	Severe	Mild – Moderate
Emotion Dysregulation	5	3	2	1.00	Moderate – Severe	Mild – Moderate
Significant Distress	5	1	4	1.00	Moderate – Severe	No Problem – Mild
Total ($\sum$)	27	12	15	2.00	-	-
Mean ($\bar{X}$)	5.40	2.40	3.00	-	Moderate – Severe	Mild

0 = No problem / 1 = No Problem - Mild / 2 = Mild
3 = Mind – Moderate / 4 = Moderate / 5 = Moderate – Severe
6 = Sever / 7 = Sever – Extreme / 8 = Extreme

Standard Error of the Mean Difference: 0.3162
Degrees of Freedom: 4
Paired Samples t-Statistic: 9.487
Critical Value & p-value: <.001
Effect Size (Cohen's d): 4.24

Table 5: Overall Pretest and Posttest Results for Hoarding Symptoms

A paired-samples t-test was conducted to evaluate the impact of the intervention on mean severity scores across five core hoarding symptom domains. Prior to the intervention, participants exhibited elevated mean symptom ratings (Pretest Mean $= 5.40$, $SD = 0.55$), placing the overall symptom baseline in the Moderate – Severe qualitative category. Following the intervention, symptom ratings experienced a marked reduction across all assessed domains (Posttest Mean $= 2.40$, $SD = 0.89$), shifting the overall average severity down to the Mild category. This mean score reduction of 3.00 points ($SD = 0.71$) was statistically significant, $t(4) = 9.49$, $p < .001$, with a 95% confidence interval for the mean difference ranging from 2.12 to 3.88. Additionally, the calculated Cohen's d of 4.24 demonstrates an exceptionally large treatment effect size.

From a qualitative and practical standpoint, every individual symptom domain registered notable improvement following the intervention. Primary behavioral symptoms—including Uncontrolled Acquisition and Difficulty Discarding—decreased from severe ratings of 6 down to mild-to-moderate levels of 3, while Clutter dropped from 5 (Moderate – Severe) to 2 (Mild). Notably, the intervention demonstrated its strongest effect on psychological burden: Significant Distress saw a substantial 4-point decline, falling from 5 (Moderate – Severe) down to 1 (No Problem – Mild).

In creating a clear comparison of the hoarding disorder symptoms in attending the Decluttering group therapy session, pretest and posttest scores of the participants was presented. The table 6 presents the pretest of actual scores per hoarding disorder symptoms.

n	Acquisition	Clutter	Difficulty Discarding	Emotion Dysregulation	Significant Distress
1	6	6	5	6	5
2	5	5	6	6	5
3	6	5	6	5	6
4	7	6	5	5	4

5	5	6	6	5	4
6	6	6	6	5	5
7	7	4	5	6	5

0 = No problem / 1 = No Problem - Mild / 2 = Mild
3 = Mind – Moderate / 4 = Moderate / 5 = Moderate – Severe
6 = Sever / 7 = Sever – Extreme / 8 = Extreme

Table 6: Pretest Score based on Hoarding Symptoms

Comparing the result of pretest and posttest per hoarding symptoms shows a difference. The pretest score in five symptoms shows hoarding disorder symptoms ranging from 5 (moderate-severe) to 6 (severe). Behavioral indication of this level includes problematic experience in hoarding symptoms, including clutter, difficulty to discard, uncontrolled acquisition, emotional dysregulation, and significant distress. The impairment level to individuals manifests in the physical environment such as in the living room, dining area, bedroom, and other living space. Significant distress was also seen in the relationship among the family member.

n	Acquisition	Clutter	Difficulty Discarding	Emotion Dysregulation	Significant Distress
1	2	3	2	4	3
2	3	3	2	3	1
3	3	2	2	3	1
4	3	2	2	3	1
5	3	3	4	2	2
6	3	2	3	2	3
7	3	2	4	2	3

0 = No problem / 1 = No Problem - Mild / 2 = Mild
3 = Mind – Moderate / 4 = Moderate / 5 = Moderate – Severe
6 = Sever / 7 = Sever – Extreme / 8 = Extreme

Table 7: Posttest Score based on Hoarding Symptoms

The individual scores presented in the posttest reveals a remarkable changed compared to pretest scores. The score of the participants in all areas of hoarding disorder symptoms dramatically decreased, ranging from two to three points drop score. The drop in the score was attributed to the intervention program that decreased hoarding symptoms. The notable change of score was seen under the symptom of significant distress. Three of the seven participants had a rate of 1 with a verbal description of "No Problem – Mind" significant distress; this declined distress on hoarding symptoms was essential in analyzing the substantial change of behavior brought by the Decluttering Therapy. The scores in difficulty discarding among four of the participants rated remarkable drop which shows attributed to the Decluttering Therapy. Behavioral change of these symptoms illustrates a positive impact of the therapy; this means that the change of behavior of letting go has a significant value as experienced by the participants.

The significant difference of the mean score of **emotion dysregulation** with a pretest score of 5.42 with a verbal description of *moderate-severe* denotes that the participants experience a strong emotional connection with the material passion, which leads to difficulty discarding and uncontrolled acquisition clutter behavior. The posttest means a score of 3.28 with a verbal description of *mild-moderate* denotes the significant effect of the intervention on the emotional symptoms. This slight decrease of difference from pretest and posttest mean scores was due to the nature of emotion with is fluid and inconsistent.

Profile of the key informants in the In-Depth Interview. The key informants of this interview were composed of seven students who participated in the Decluttering Therapy. A key-informant interview was

conducted in three different phases. The first phase interview was conducted to explore the college student's experience of hoarding behavior during the COVID-19 Pandemic. The second phase interview was to explore the experience of the participants during the Decluttering Therapy. The third phase interview was conducted to explore the experience of the participants in the online therapy. They were given the freedom to choose their pseudonym to hide their identity.

In categorizing the data, the first step was to group the data from the responses given by the informants and identify the commonality to be able to make essential themes. These data were arranged and organized based on the general or common concepts presented by the participants; the process finally generated essential themes. The second step was presented in Table 8,9,10. The vital themes that emerged from the transcripts were identified as core ideas. There were organized to come up with essential themes.

Experience of adolescent on hoarding disorder during the COVID-19 Pandemic. The key informants of this interview are the college student with hoarding disorder symptoms during the COVID-19 Pandemic. The respondent's experiences during the in-depth interview can be found in table 8. The themes with the supporting statements are as follows:

Major Themes	Core Ideas
Elevation of Hoarding Symptoms	Difficulty to clean & organize (Clutter
	Difficulty to let go due to regrets (Discarding)
	Frequent online purchase (Acquisition)
	Personal & Familial conflict (Significant Distress)
	Cognitive Distortion
	Perceive material use for future
	Online sale
	Sentimental value
Psychological Difficulty	Feeling of Abandonment and Loss
	Difficulty to Manage Life
	Difficulty to Move Forward
	Self-Blame
	Difficulty to Think
	Traumatic Experience
	No Motivation
Cognitive Dissonance	Realization of Material is not good
	Awareness of Unhealthy Behavior
	Allocation of Space
	Wrong Situational Perception

Table 8: Major themes and Core ideas on lived experiences of an college student with hoarding disorder symptoms during COVID-19 Pandemic.

Elevation of Hoarding Symptoms. When the informants were asked about their experiences of hoarding symptoms during the COVID-19 Pandemic the informants they were very enthusiastic in sharing those experiences as if they were back in the time it happened; some of them shared negative experiences, personal difficulties and challenges. The informant initial shared their understanding of hoarding disorder.

Mr. IT said:

For me hording is the in ability of a person to move forward of his/her life and this shows in keeping materials.

For me hording is the in ability of a person to move forward of his/her life and this shows in keeping materials.

Ms. Scientist said:

Ka nang feeling na lisod e let go ang mga butang Sir na gina value nimo, kay basig man god pag-abut sa panahon gamiton pa nimo…
Feelings of difficulty to let go of the things Sir that you value, because maybe when the time comes you'll still use it…

When the respondents were asked about the specific experience of hoarding disorder symptoms during the COVID-19 Pandemic, the respondents relayed real experience. These experiences are seen among symptoms of a person with hoarding disorder.

Ms. Scientist said:

Sa tibuuk nga panahon sa pandemya, wala gyud ko ka limpyo ug organized sa akong mga gamit. Mag lisod gyod kog organize o paglimpiyo maski taas nga oras sa balay. Para dli ma bored naga online shopping sa Shoppee ug Lazada. Usually mo purchase ko 2-3 times sa usa ka bulan. Kasagaran mopalit ko og sinina, bag ug accessories tungod sa online sale.

During the entire pandemic period, I never cleaned and organized my belongings. I have difficulty to organized or clean my space considering the long time at home. To escape from boredom, I visit online shopping application like Shoppee and Lazada. I usually purchased 2-3 times a month. I usually buy dress, bag and accessories because of online sale.

Ms. Strong Girl said:

Guilty gyod ko ana Sir, naga tago kog gamit na wala na nako gina gamit. Dili ko ganahan hilabtan akung mga gamit. Naa time nag-away me sa akung ate, kay gi limpyohan niya akong gamit. Suko kayo ko…

I'm really guilty Sir, I'm hiding something I don't use anymore. I don't like other people to touch my belongings. At one point, I had a fight with my sister, because she cleaned my belongings. I was very angry…

Ms. Determine said:

Naga keep kog gamit sir maski dili na nako ma gamit. Karong pandemic Sir, ni dagha gyod ako parcel per week, naka ila nagod nako ang mga rider Sir, kay permi sila naga hatod sa balay. Naga palit mga gamit sa balay unya pag check nako naa na di mi ato. Manghinayang man god ko sa delivery charge sir kaya mag order na lng kog maski unsa.

I keep of things Sir, even though I don't use it anymore. In

this Pandemic Sir, I had a lot of parcels per week, I even know the riders Sir, because they always deliver my order. I used buy kitchen items and then when I checked, we already have one. I feel in need to buy to maximized the delivery charge.

Ms. Hope

mas ni grabe akung pag-oder online, labi na pandemic Sir sigi kog order online na dapat mag save ko, sigi noon palit. 10 times in a month ko gan order of sanina, dli man unta maka gawas tungod sa pandemic pero nagapalit kog sanina maski dili nako masoot.

My ordering online is even worse, more so during the Pandemic. Sir, instead of saving my money I used it to buy online stuff. I order clothes 10 times a month, I am aware I can't wear it because its Pandemic, I can't go out, but I still buy clothes.

Akung ate suko sa ako usahay kay gubot kaau among kwarto. Si Mama pod mag yaw-yaw kay perting hugawa among kwarto og irresponsible daw ko.

My sister was angry because of the clutter in our room. My mother also angry because of clutter in our room and being irresponsible.

Mr. IT said

Tungod sa sentimental value. Mag lisod og disposed.

Because of the sentimental value. It's difficult and disposed.

Psychological Difficulty. The respondent's experiences of hoarding symptoms during the COVID-19 pandemic exhibit within the psychological domain that creates disturb psychological state. Difficulties in functioning include feelings of abandonment and loss, difficulty managing life, difficulty moving forward, self-blame, difficulty to think, loss of interest, and elicit traumatic experience.

Ms. Scientist said:

Ka nang feeling na lisod e let go ang mga butang Sir na gina value nimo, kay basig man god pag-abut sa panahon gamiton pa nimo… pero ma realize nimo na dili naman nimo sya kailangan pero gina keep gyapon… ako man god Sir naga overthink ko na basig biyaan ko unya masakitan. Unya magmahay pod ko kung ma wala akung mga gamit og mga amigo. Wala gyod ko kabalo ngano lisod sa ako mag let go.

Feelings of difficulty to let go due to regret. Feeling of that the materials has still value in the future. When you realize that the materials are not good to you but you still keep it. I always over think that I might be left by someone and its painful. I feel regret if I lose staff and my friend. I really don't

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know why its difficulty to let go.

Ms. Barbie Said:

Lisod siya, gubot, di ko kabalo unsa-on pag-manage gyod, dIli ko kabalo sa pagmanage sa mga butang-butang. Kay murag feel nako kung naa koy buhaton feeling nako mali gyapon...

It's hard, chaotic, I don't really know how to manage, I don't know how to manage things. Because I feel like if I have something to do, I'm feeling wrong...

Ms. IT said:

During sa entire pandemic sir wla gyod ko ka fix sa akung mga gamit. I feel no motivation. Kapuy mag lihok. Wala pod ko kabalo asa nko ibutag akung mga gamit.

During the entire Pandemic Sir I never fixed my personal belongings. I don't have and motivation. I feel tired to move. I don't even know where to put my things.

Ms. Determine said:

Lisod makahuna-huna og tarong tungod sa sitwasyon, pareho nako.

It's hard to think straight because of the situation, like me

Ms. Scientist said

Nag start ni sir katong nasunogan me, wala gyod me nakuha, didto nakona learn na dapat mag ipun gyod.

It started when we experience fire in the family, we never got anything, that's when I learned that we really have to save.

Akung lola pod sir, siya ang una sa family naga hoard Daghan kayo siya gina tagoan na butang na dili na magamit, nag kalat lang sa balay.

My grandmother, she is the first in the family to hoard. There a lot of things she hoards. This material are no longer usable, just cluttering the house.

Cognitive Dissonance. The respondent's experiences during the pandemic period elicit the thinking problem in the form of cognitive dissonance. The respondent felt aware of the discrepancies of thoughts and behavior as they experienced the hoarding symptoms. Such experiences were noted during the uncontrollable online purchases, difficulty cleaning and organizing, and stressful moments of letting go of materials. The respondent narrated this entire experience.

Ms. Hope

Nag provide kog space para sa pinalit nako. Mag sabay ang parcel og abot og akung mama ang nagbayad usahay.

I provided space for what I bought. When the parcel arrives all other, my mom pays sometimes.

Ms. Scientist said:

Ka nang feeling na lisod e let go ang mga butang Sir na gina value nimo, kay basig man god pag-abut sa panahon gamiton pa nimo… pero ma realize nimo na dili naman nimo sya kailangan pero gina keep gyapon…

That feeling of difficulty to let go of the things Sir that you value, because maybe when the time comes you'll still use it… but you'll realize that you don't need it anymore but still you keep it…

Mr. IT

Feel bad about myself because I am aware I needs to clean but I can't perform the task.

Feel bad about myself because I am aware I needs to clean but I can't perform the task.

Adolescent experience in group Decluttering Therapy. Part of the objective of this research was to explore the participants' experiences as the recipient of the therapy for hoarding disorder symptoms. The respondent attended twelve sessions and activity performed the task mandated to them. To capture the most significant experience of the respondent during the therapy, a key informant interview was conducted. Key informants of this interview are participants of Decluttering Therapy. The general intent of this interview was to explore the experience of the college student with hoarding disorder symptoms in Decluttering Therapy. The respondent's experiences during the in-depth interview can be found in table 9. The themes with the supporting statements are as follows.

Major Themes	**Core Ideas**
Self–Directed Behavior	Motivation (necessity to convert the area for functional use)
	Self-discipline
	Decisive Decision Making
Self – Regulation	Finding ways not to be distracted
	Control of hoarding symptoms
	Controlling environmental stimulus.
	Assessment of the value of material before purchasing
	Reducing purchase stimulus (money accessibility)
Self-Realization	Learned to let go of a material position
	All material things are non-being
	The usefulness of the therapeutic session
Techniques in Decluttering Therapy	Usage of Cognitive Triangulation Matrix (CTM), Emotion Association to Material Matrix (EAMM) and Behavioral learning from the member of the group

Table 9: Major themes and Core ideas of adolescent experience in group Decluttering Therapy.

Self–Directed Behavior. The participant's experience during the therapy provides self-directed behavior that allows the participants to move towards behavioral change. Such self-directed behavior involves self-discipline, drives to achieved goals, and exercising decisive decision making.

Ms. Hope said:

Daghan og natabang sa ako ang therapy, Una, kanang mag decide sa kailangan og dili kailangan. Karon na notice na nako sa akung sarili na pag naa koy makita maghunahuna nako kung kailangan ba gyod nko siya or dli.

Therapy has helped me a lot, First, when I decide what is necessary and what is not. Now, I notice to myself that when I consider something to buy I will think first if I really need it or not.

Ms. Care said:

Naka tabang ang pag uninstall nako sa mga application.

Uninstalling the applications helped me.

Ms. Determine said:

Daghan kog na learn sa therapy isa na diha pag silent nako tong mga notification sir. Sa online shopping applications. Akong gi silent og gi uninstall na nako ang uban…

I learned a lot in therapy, one of which is to silent all notifications of shopping app. In online shopping applications. The other application, I it in silent mode, while I uninstalled the others…

Mr. IT said:

Every Wednesday og Saturday, gina pangitaan gyod nkog ways na ka online ko. Kay ma excite ko sa activities.

Every Wednesday and Saturday, I'm really looking for ways to get online. Because I get excited about activities.

kanang sa akoa gyod mag sugod sir. Sa ako mag sugod na gusto na gyod nko undangon, kay kung dli mag sugod sa akung sarili lisod gyapon sa akoa sa pagattend sa session.

It always starts in my will, because if I don't start on my own, it's still difficult for me to attend the session.

Ms. Scientist said:

una gyod kailangn nko sya magamit, magamit sa akung iga agaw or ako ba, second, nahugawan ko sir, gubot kaau sya,

as in kanang motan-awa ko ato na area maglagot ko. Mao to na nka decide ko na limpyohan, para dli an mginit akung ulo. Karaon na na functional na sya happy kaau ko sir.

First, I really need to use the place, that place can be used by my cousin or me. Second, its dirty, it's a mess, every time I see it I feel sorry for this area. I feel angry. That's why I decided to clean it, now, it's already functional, I'm happy sir.

Kay tong first attempt nko wla ko nag huna-huna, ni deritso nko didto og wla nko na prepare akong sarili sapag limpyo. Pero katong Tuesday nag decide na gyod ko mao na wla nko na lisdan og diretso-diretso akung pang limpyo.
Because on my first attempt, I didn't think about it, I didn't prepare myself to be clean. But on Tuesday, I have decided to let go of does materials, so when cleaned last Tuesday I didn't experience hard time of deciding and my decluttering when on.

Self – Regulation. Apart from self-directed behaviors, the respondents develop self–regulated behavior to manage the hoarding symptoms and control dysfunctional behavior. The respondent learned essential strategies in dealing with hoarding symptoms. Such learning regulatory strategies include finding ways not to be distracted, controlling unwanted purchasing behavior, controlling environmental stimulus, assessing the value of material before purchasing, and reducing purchase stimulus (money accessibility).

Ms. Hope said:

kanang mang limpyo, naka kitana kog way na dili mag pa distract sa mga butang na maka distract sa ako.

When I clean, I can find a way not to be distracted by things that can distract me.

Mr. Businessmen said:

Sa katong part na pagpalit, kato na session sir, affected kaau ko ato sir, tungod pod ato sir na lessen ang akung pagpalitpalit online, actually karon sir, wala na gyod sir.

The session on purchasing, I was very affected of that topic sir, because of that my online shopping was lessened, actually now sir, there is nothing sir.

Ms. Scientist said:

Effective pod sya sa ako a kay karon sir, wla nkoy add to cart wla nkoy Shopee.

The technique was effective because now I don't do an add to cart in Shopee, I don't have a Shopee application.

Ms. Care said:

Effective pod to dili ko mag pundo og kwarta sa wallet sir kay

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kung mag pundo ko tinood gyod na makapalit ko. Ang akung gibut sir kay akung gipahuram akung kwarta sir kay para wla koy kwarta na magamit.

The sharing of not putting money in the wallet was also effective, because if there is money in my wallet I am tempted to buy, what I did is a I lent my money sir so that I don't have any money to use and for me not to buy.

Self-Realization. The experiences of the respondent in the therapy provide realization and change of behavior. This change of behavior is essential to translate dysfunctional behavior into a more productive one. The respondents' self-realization is expressed by letting go of material position, the real meaning of material things, and the usefulness of therapeutic sessions.

Ms. Hope said:

Naka realized ko na kabalo nako sir kung kanus-a e let go ang mga butang na magamit ba o dli.

I realized now how to let go of things that are useful or not.

Mr. IT

Na realized nako na ang tanan butang ra gyod.

I already realized everything was really the same.

Ms. Scientist said:

After few sessions na realized nko na dako syang tabang sa akoa as a student og dli lng d is a akoa pati na pod d i sa akong pamilya naka tabang pod sya.

After a few sessions I realized that this therapy is a huge help for me, not only for me but also with my family.

Ms. Care said:

Then sa 5th session sir Didto gyod ko naka decision na magdeclutter na gyod sir kay na realized nko sir na naa gyod mga butang na kailangan e let go ok lang mag keep og butang pero kang dili na gyod maka occupy na og dako na space sir.

Then in the 5th session sir, I really made the decision to declutter sir because I realized sir that there are really things that are needed to let go. Keeping personal belongings is fine, as long as it did not occupy so much of scape.

Ms. Determine said:

Na realize nako sir ang self-discipline, kay kung gusto na gyod akayo ka na mo hawa sa ingon ani na actions,

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kailangan gyod nmo buhaton og will gyod nimo. Example sa gibuhan nko, gi mute nko tanan notification, sa declutter always nko gina think na niapil ko sa session kay para ma declutter nko tong clutter nko na lugar, murag na himo nko sya na goal na dapat bago ni na mahuman na session ma decluttrer gyod nko syi sir. And so far so good man pod sir kay na declutter gyod nko sya sir.

I realize about self-discipline, because if I really want you to get rid of such actions, I really have to do what I really want. For example, what I did, I mute all notifications. In joining this therapy, I always think that I joined the session because in order to declutter my clutter, it looks like I made it a goal that should be before the end of the session to declutter, and so far so good I did declutter my space.

Techniques in Decluttering Therapy. The therapeutic technique of Decluttering therapy provides explicit effect in the change of behavior of the respondents. The different techniques used in the therapy guided the respondent to process the respondents' inner striving, particularly in dealing with symptoms of hoarding disorder. Among these techniques are the Cognitive Triangulation Matrix (CTM), Emotion Association to Material Matrix (EAMM), and behavioral learning from the group member.

Ms. Scientist said:

Katong listing sir, isulat ang ang gamit og feeling, effective saya sir kay sa sugod palang pag declutter nko naa man gyod sya (intense feeling) maka feel ko na something wrong na feeling example katong book na science sakit sa akung dughan na ilabay na pero tngod pod atong sa mga session nato sir na realized nko na dli na pod gyod siya magamit kato sya nga technique ang effective. (emotion association matrix).
About the listing, when I started decluttering I feel the emotion (intense feeling) I feel that there is something wrong with how I feel. For example, the science book, it was very painful for to dispatch that book but because of our sessions I realized that I can't also use it because of its poor condition. That technique was very effective (emotion association matrix).

Ms. Care said:

Katung list na dapat isulat ang dapat lang paliton og katong money dli magdala og subran na kwarta para dli ka maka palit og mga unnecessary na butang, *effective to sya sir.*
The activity of listing only what you suppose to buy, and not bring extra money so that you can't buy unnecessary things, that was effect sir.

Ms. Determine said:

Isa pinaka maka help Sir katong strategies unsaon pag-handle sa circumstances special sa environment. Kay katong

nag declutter ko sir dagahn kaayog sugo. Samok kaau na naa pakoy gibuhat mao na ma undang napod og declutter. Lain man god ko kay kung pag trabaho ko, mag trabaho ko, gusto nko na dli ko samokon, bahalag ako ra isa mag declutter sir kay kabalo man ko sir na mahuman gyod nko, pero kangang sugosugoon paka, mao na hindrance sa ako kay basig ma abtan ko sa akung katapol. Pero dire na learn nko unsaon pag handle sa emotion og huna-huna.

One of the most helpful Sir the strategies is how to handle circumstances special in the environment. When I did the first decluttering sir, there are so many interruption, I was upset because I cannot complete my decluttering. When I work I really work, I don't want to be interrupted, even if am alone its fine for me because I know I can finish it. But when there are a lot of request that's one of the hindrance because I might end up feeling lazy. But here learn how to handle emotions and thoughts.

College students experience online group therapy. To explore the experiences of the respondents in online therapy, a key informant interview was conducted to elicit information in conducting online therapy. Used online therapy was an alternative medium in conducting counseling or therapy with a client. In the advent of the COVID-19 Pandemic, the authority encouraged tele-mental health to protect both client and the therapist from being infected by the virus. Consequently, group therapy as a tool has encountered challenges, particularly in maintaining the clients' participation. The therapy strategies were seen as an essential tool in ensuring the success of the therapeutic relationship—the respondent's experiences during the in-depth interview, which can be found in table 10. The themes with the supporting statements are as follows.

Major Themes	Core Ideas
Decluttering Therapeutic Technique	Effective decluttering approach
	Targeted Hoarding symptoms
	Therapeutic alliance
	Self-reflective Therapy matrix
Hindrance in Online therapy	Difficulties in internet connection
	Unexpected event
	Initial response of shame
Benefits of Online therapy	Positive, helpful experience
	Realization of personal capacity
	Personally guided motive
	Self- improvements
	Realization of reasons for participation

Table 10: Major themes and Core ideas on experiences of an college student with hoarding disorder symptoms in online group therapy.

Decluttering Therapeutic Technique. When asked about the experience of the effectiveness in online therapy, the respondents shared the effectiveness of the Decluttering Therapy technique. The technique captured the different approaches in dealing with symptoms of hoarding disorder. The respondents narrated these practical ways, including an effective decluttering approach, targeted hoarding symptoms, and the self-reflective therapy matrix.

Ms. Scientist said:

Effective siya sir, habang naga answer ko ato gina rate nako akung sarili kay kung ing-anina ba ko, effective sya kay katong naga sulat didto ma realized nimo na lahi na lahi na gyod ko. Dili nako parihas dati. Naa pa d i koy ika improve.

Its effective sir, while I'm answering, I'm rating on how I see myself. Its effective because when we write there, I realize that I'm really different. I wasn't the same before. I can still improve myself.

Ms. Hope said:

Positive akung experience, naka tabang man gyod sya maskin online sya, naa man pod kuy nahibal-an, naa pod koy na gamit sa about ani na session.

My experience is positive, it was really helpful even though it was online, I already learned something, I already have something because of this session.

Ms. Determine said:

Very effective, kay naka declutter man gyod ko, dli lang about atong sa pag declutter nko sa mga notebooks nko, apil pod ang kwarto nko, ang kitchen namo nag declutter pod ko.

Very effective, because I really did the decluttering me, not only my book but I also declutter our room and our kitchen.

Mr. IT said:

Sa uban session nato abi na nko declutter lang happy pod ko sir kay na apil pod tong online buying na wla na gyod to sa ako sir kay wla pa pod gyod ko a ka online order.

In some of our sessions, I was thinking it was just decluttering, I'm happy sir because we also included online buying, I was really gone now. I don't even order online now.

Benefits of Online therapy. On the benefits of conducting the therapy online, the respondents share positive experiences in an online session. The common response of the respondent's experience includes positive, helpful experience, the realization of personal capacity, personally guided motive, self-improvements, and realization of reasons of participation.

Mr. Businessman said:

Para sa ako depende sa tao, depende lng na siya sa tao kung helpful ba o dli. Kinina online session akoa man gong gina sulod sa akung utok na dapat gyod nako ni sya buhaton dli nko sya baliwalaon. So helpful sya kay na improve nako akung sarili naa koy na kita na improvement.

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For me, it depends on the person, it depends on the person whether he is helpful or not. In this online session, I put it in my mind that I need to do this and that I should not neglect this. So this is helpful for me because I improved.

Ms. Determine said:

Maski online sya sir, gina point out gyapon sa sarili nimo sir. Mao para ako effective gyapon kay maka istorya man gyapon me, og interact online.

Even if this online sir, it pointed out yourself sir. That's why its effective for me because we can still interact online.

Ms. Care said:

Actually didto sa session 5 gyod ko na tandog kay na encourage gyod ko na mag declutter, tungod gyod ato na mga session na igo gyod ko sir banda-banda kay halus tanan kay tinood sa ako sir. After 2 days ato na session 2 nag declutter daun ko sir.

Actually in session 5, I was really touched because I was really encouraged to declutter, because of that session I was hit by the discussion and most of the details are true to me. After 2 days of session 2, I decluttered, sir.

Ms. Barbie said:

10 out of 10 ako ma rate kay sana kita nako sir kay katong room na gipakita nako magamit na gyod sya. Ka nang sa pag palit-palit naa nakoy na tigum…
10 out of 10 is my rating, because the room I showed you is really usable now. About my purchases, now I have already saved.

Ms. Scientist said:

Unsay mga dli nko kailangan sir kay ako ng gipanghatag, unsa napod tong wala sa ako paliton nako pero dli nko daghanon.

Whatever I don't used I discard it, whatever I don't have a buy, but in moderation.

Hindrance in Online therapy. Consequently, the participants also experience hindrances in participating the online therapy. These hindrances were seen to be minimal based on the responses of the respondents. Although this hindrance strike as a barrier to complete the therapy, the respondents did not allow the situation to control their eagerness to meet the goal. Instead, they look for ways to achieve the sessions. The hindrances they encounter include difficulties in internet connection, unexpected events, and initial experience of shame.

Ms. Scientist said:

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Internet connection, since naa ko sa province mag agad ko kung kanus-a mag kusog ang internet.

Internet connection, since I'm in the province, I am dependent with internet speed.

Ms. Barbie said:

Internet connection, gyod kay usahay hinay labi na mo ulan.

Its Internet connection, at times its really slow specially if it rains.

Ms. Determine said:

Unexpected na event, ang mahitabo kay dli ka maka join. Pero kung gustohon maka apil man gyod sir. Mao lng na hindrance.

Unexpected event, if that happens I can't joint. But if there is will, we can really join. That the only hindrance.

Mr. IT said:

Dli hindrance na dili me physically present kay naka hatag mag gyapon mig mga ideas, like kay Emerose naka hatag siyag idea nko or bcg ako naka hatag pod kog idea sa uba. Kay naa pod sya way na maka tabang sa uban, maka hatag og concern sa usag usa. Naka hatag mig idea sa usag usa na maka tabang sa amo mismo. Dli hindrance na dli me face to face.

It's not a hindrance that were not physically present because we can still manage to give each other ideas, like Emerose, she was able to give her idea to me, or I was able to give an idea to others. We were able to give each other ideas that could help us. Absence of psychical presence it's not a hindrance.

Ms. Care said:

At first kay ulaw, ulaw kay dli nimo kaila ang naa didto. Pero later on na realize nko dli man d I ingon ana ka ulaw, kay kailangan man pod gyod siya e sulti. After ato wala nay ulaw kay feeling nako kung mangatik ko dli pod sya healthy sa ako a.

At first I feel ashamed because we don't know the members. But later on I realized that there’s nothing to be ashamed because we really need to share it. After that, I don't feel ashamed anymore, because if I lie, it's not healthy for me.

DISCUSSION

The aim of the present study was to assess the feasibility and efficacy of Decluttering Therapy in group online sessions. Overall, participants reported decreased symptoms of hoarding disorder which include uncontrolled acquisition, clutter, difficulty of discarding, emotion dysregulation, and significant distress. The Decluttering Therapy was designed with 12 sessions adapted and contextual from Cognitive Behavioral Therapy Therapist Guide. The outcomes of these observed changes, or improvements associated with the therapy was through the Decluttering Therapy.

This study used the Cultural Adaptation Framework in adapting and contextualizing the approach to the Filipino setting. Heim & Kohrt (2019) cited the definition of Bernal, and Rodríguez (2009) defining cultural adaptation as the systematic modification of an evidence-based treatment or intervention protocol to consider language, culture, and the context in such a way that it is compatible with the client's cultural patterns, meanings, and values. This framework was enhanced by Eva Heima & Brandon A. Kohrt (2019), presenting a new paradigm of adaptation and contextualization in Psychological Interventions. The cultural adaptation framework encompasses three elements, cultural concepts, treatment components, and treatment delivery (Heim, & Kohrt, 2019). The researcher used this approach to adapt and contextualize the treatment protocol culturally. In doing this, the researcher identified cultural differences between western culture and Filipino culture. One culture contextualization was the concept of Pakiramdam.

The original manual, a direct approach to participants was needed in the actual protocol, especially in complying with the activities and homework. While in this research, pakiramdam was used to effectively empathize with the participant's consideration of the current setup. Pakiramdam was also utilized during the sharing part of the session; if one participant was not ready to express or share personal messaging was used to check the current disposition. On the criteria of treatment components, there are activities in the guide that are not culturally fitting; an example was the story presented based on western sitting. This activity was replaced with the matrix that assesses the impairment of hoarding disorder. Another major contextualization in the treatment component was the delivery online. The manual was presented in a face-to-face setup; considering the health restrictions, the delivery of the treatment was done through an online group session. In contextualizing the approach, the researcher ensured that the flow of the manual was still followed. The topic sessions and the topic integration were used in the psychoeducation part of the session. In the treatment delivery, the manual used a group leader as a facilitator in facilitating the sessions, while in this study, the research served as the facilitator of the session. The researcher also integrated the paper-pencil matrix intended further to explore cognitive, affective, and behavior domains. In general, the procedure and flow of the model were followed. Approval from the author of the model was secured as part of the ethical procedure.

Socio Demographic Profile of the Participants. The entire composition of the participants was presented with the following details. The mean age of participants was 19 years old where most of them are second-year students. The majority of the participants took BS Psychology, while other participants took BS IT, BS Criminology and BS Custom Administration. The development of hoarding difficulties tends to start around the age of 10 to13 years. A study of children under the age of 10 years, by Frank et al. (2014), found the onset of hoarding at a younger age. The expression of hoarding among children and young people shows some differences from that seen in adults. Plimpton et al. (2009) found that children had difficulties in discarding and maintaining control over possessions, but they did not have problems with clutter or excessive acquisition. This difference is partly associated with the controls put in place by parents, which prevent acquisitions overwhelming family living space. In addition to this, children simply have had less time to accumulate items than adults (Storch et al., 2011a).

In this current study there were five females and two males in the study. In analyzing the gender composition, it shows hoarding symptoms are more visible to females compared to males. This observation was also visible in the study conducted by Moulding et al. (2017), which reveals that young girls often start hoarding things, including old-school items or clothing. However, some women start hoarding after a stressful, life-changing event; these are events such as the breakup of a relationship, the death of a loved one, or a severe illness. While hoarding often co-occurs with other psychiatric disorders, those co-existing conditions tend to appear in

women than men (Moulding, Nedeljkovic, Kyrios, Osborne, & Morgan, 2017).

In analyzing the composition of the locale, the observation revealed no difference in hoarding symptoms between urban and rural participants; this means that hoarding disorders may develop from urban and rural areas. In the participants' demographic profiles, both geographic locations were represented and revealed hoarding symptoms. This result is backed by the study conducted among 279 college students from urban areas and 210 rural participants, examining hoarding behaviors and anxiety sensitivity on the participants' behavior. The result of the study revealed insignificant associated levels of hoarding between urban and rural participants (Ayers, Saxena, Golshan, & Wetherell, 2020).

Level of Hoarding Disorder Symptoms. The research found that seven participants met the criteria for clinical change of symptoms after completing the Decluttering Therapy. These outcomes demonstrate notable improvements compared to the 25% success rate evidenced in previous studies (Bodryzlova, Audet, Bergeron, & O' Connor, 2019). When compared to the study conducted by Crone et al. (2020) among 12 participants, the Decluttering Therapy demonstrated a higher success rate (100%) among seven participants vs. (66.67%) six out of 12 participants. While all participants met criteria for clinical change, these single-group findings represent preliminary improvements that must be interpreted cautiously, as a single-group design cannot isolate treatment effects from external variables or spontaneous recovery. Greater improvements in the current study may be attributable to the well-established protocol and activities in implementing the therapeutic session. The integration of CBT matrix worksheets also served as the instrument to assess the three domains of the hoarding problem. This includes cognitive, affective, and behavioral domains. Moreover, Decluttering therapy provides weekly feedback on participants' progress based on routine outcome assessment and visual representation charted with reference to clinical and non-clinical norms. Past studies have demonstrated that routine outcome monitoring enables treatment adaptation, enhances participant engagement, and can nearly double clinically significant change rates in patients who would otherwise have poor outcomes (Lambert & Harmon, 2018; Lambert, Whipple, & Kleinst¨auber, 2018).

The psychological discussion was presented on the studies that suggest hoarding develops as a result of conditional emotional responses to various thoughts and beliefs (Grisham, Frost, Steketee, Kim, & Hood, 2006). Hoarders often have an apprehension to discard possessions, which represents anxiety avoidance of decision-making and discarding. Hoarders can exhibit excessive saving behavior, which is reinforced through feelings of pleasure associated with possessions and collecting. It has been suggested that several types of deficits are contributors to hoarding; information processing, beliefs about emotional attachment to possessions, emotional distress, and avoidance behaviors (Grisham et al., 2006). Neziroglu, Bubrick, and YaryuraTobias (2004) identified fear of losing information, indecisiveness, fear of making mistakes, inability to prioritize, fear of loss, fear of memory loss, and lack of organization as common traits of hoarders. Hoarding may be a characterological phenomenon, whereby saving becomes part of one's identity. Individuals who hoard tend to be single, often lack a personal connection with other people, and therefore develop intensified attachments to possessions (Grisham et al., 2006). Some hoarders indicate that hoarding behaviors began as a result of a stressful event that occurred in the past, an event in which they had trouble coping with, and others report a slow and steady progression over their lifetime.

The concept of possession of objects as if part of ourselves is established by the age of two. In childhood, intense relationships can develop with one particular object to which the obvious term attachment object is ascribed. The term transitional object is also used as the object is seen to provide a role in gaining independence from parents. In the teenage years, possessions start to act as a crutch for the self (Jarrett, 2013). For instance, when children in the age range 8-18 years were asked 'What makes you happy?', they chose a material possession – a tendency which peaked in middle adolescence (Chaplin & John, 2007). At this time, possessions can increasingly become a reflection of who or what we are, and this continues into adulthood. Thus, our relationship with objects over our lifespan has a developmental progression.

Hoarding as a mental disorder was thought to originate from the concept of the "anal character," which later became the advent for the term "anal-retentive." Freud explained that while the money motive starts with

coins, its most familiar form, an interest in these must come from displaced interest in feces. According to Freud and other psychoanalysts, problematic money behaviors, ranging from hoarding to being a spendthrift, represents varieties of anal eroticism. Freud posited that the anal triad of orderliness, parsimony, and obstinacy are the precursors to OCD and the anal retentive personality (Frost et al., 2012).

Klontz and Britt (2012) also found compulsive hoarding to be significantly correlated with other disordered money behaviors, including Compulsive Buying Disorder and Pathological Gambling. In some cases, financial psychologists have identified a miserly relationship with money as being a feature of HD in some individuals. It has been suggested that money hoarders have so much anxiety about not having enough money that they may neglect the most basic self-care activities and have great difficulty enjoying the benefits of accumulating money (Klontz, Kahler, & Klontz, 2008b; Klontz & Klontz, 2009). Forman (1987) described a financial hoarder as having a fear of losing money, distrust of others around money, and trouble enjoying money. Klontz and Britt (2012) identified a link between money attitudes and hoarding behaviors. They found that money status scripts and money worship scripts predicted compulsive hoarding behaviors. Specifically, individuals who linked net worth to self-worth and held the belief that the key to happiness and the solution to all of their problems was to have more money were significantly more likely to engage in hoarding behaviors. The DSM-5 criteria for OCPD also included a miserly spending style and the need to hoard money (American Psychiatric Association, 2013), adding support for the link between hoarding and money.

Hoarding Disorder during COVID-19 pandemic. The analysis of the experiences of the participants in attending Decluttering Therapy to hoarding symptoms during COVID-19 pandemic highlighted presence of Hoarding Disorder, psychological difficulties and cognitive dissonance. In understanding this experience, analysis of each symptom plays an essential role especially in assessing the Decluttering Therapy on hoarding disorder.

Uncontrolled Acquisition. The result of the participant's uncontrolled acquisition was seen to be relevant to the literature. It was revealed that the participant's acquisition reaches beyond purchasing two to ten times within the month without thinking of its necessities. These findings were consistent with several studies that suggested an association between compulsive buying and hoarding severity. Self-identified hoarders report significantly more buying of extra items in anticipation of potential need and report higher levels of compulsive buying (Frost et al., 2018). A study conducted on adolescents reveals that hoarding has been associated with a lack of insight, and self-reports of excessive acquisition are subject to distortion. For instance, people with hoarding problems may acquire excessively but not recognize it (Frost, Steketee, Tolin & Fitch, 2007). The participants' feedback in attending the Decluttering Therapy reveals that the participants learned to self-regulate in handling excessive acquisition. The participants managed to uninstall the online shopping application or put the notification on silent mode. Another self–regulated behavior was documented by learning not to expose self to spending by not keeping excessive money in the wallet. The participants adapt self-directed behavior by processing and challenging cognitive stimuli to further improve, especially when confronted with purchasing decisions. To challenge the thought to buy, the participants evaluate the necessity, value, and urgency of using the materials. The technique of 24 hours' role was also an effective strategy to assess the need to purchase.

Verifying this behavior, observation of the family member on excessive online purchases of the participant was evident. One family member shared that the participants' online purchases were successive to the extent that almost everyday riders delivered the parcel. Other family members' observations were on the continued purchase even if the materials were not needed. One family member shared

> *before her decluttering therapy started, she had a lot of old things that not use. A thing that shouldn't be hidden anymore. And she has a lot of orders from Shopee or Lazada to the point that the rider knows her already.*
>
> (Before her decluttering therapy started, she had a lot of old

> things that not use. A thing that shouldn't be hidden anymore. And she has a lot of orders from Shopee or Lazada to the point that the rider knows her already).

Another observation by the family member was the uncontrollable acquisition of the participants. One of the family member shared,

> *she is always buying things bisag dili kaayo niya need, then iyang mother always asked me asa daw padulong iyang mga kwarta. Then ginapakita nako iyang mga napalit.*
>
> She is always buying things even though she doesn't need much, then her mother always asked me where her money seems to go. Then I show his purchases.

Another observation of the family member also links to uncontrollable acquisition, the family member stated,

> *wala siyang pigil sa pagbili ng mga gamit na hindi paman kaylangan. Kaya masasabi ko or namin na ang behavior nya ay hindi na normal pagdating sa mga gamit*.
>
> Has no restraint on buying things that she doesn't need, so we can say that her behavior is no longer normal when it comes to things.

Along with this technique administered to the participants were the matrixes introduced in the therapy. The participants engaged in assessing acquisition by listing what was needed to be purchased, other materials outside the list were not purchased. The general learnings of the participants centered on self-realization; the participants realized that material possession does not control their life.

Clutter. The examination of the clutter behavior shows an amount of change on clutter in the actual place of the participants. Considering the nature of clutter, the effective way to assess its result is to declutter an actual place at home. In each session, the participants presented items from the area they needed to declutter. The experience of the participants in decluttering the actual place during the therapy was successful. This successful execution of decluttering was an indication of significant learning acquired in the therapy. This result was backup in the study conducted using Decluttering technique. Decluttering technique was used in a widespread practice among several populations because of its straightforward technique in assessing the clutter behavior (Mahajan, 2018). To further capture this claim, Follette et al. (2016), in their practice, define the Decluttering technique as an effective process in the conscious assessment of 'clutter' and deciding whether or not it needs to stay in an individual's life.

One of the benefits of the therapy was the restoration of the participant's relationship with their respective families. According to Grisham et al. (2019), clutter negatively affects others living within the home and nearby. Individuals with Hoarding Disorder often experience interpersonal difficulties (Grisham, Steketee, & Frost, 2019). This condition was present before the therapy, where most of the participants had a conflict with members of their families. This conflict springs from the clutter space and difficulty of movability in their respective home. After the entire session, the participants were able to declutter the target place and transform the area into a functional site; as a result, the relation of their family was restored.

The family members also observed the clutters in the space of the participants. One of the family members shared that the participants' previous room was converted to the stock room due to excessive clutter.

> *Ang place namo diri is puno kaayo og mga gamit niya, plus gifts from her classmates before, friends (i don't know where are her friends now), suitors, and relatives.*

> Our place here is very full of her belongings, plus gifts from her classmates before, friends (I don't know where her friends are now), suitors, and relatives).

One family member shared that she observed her sister being so sensitive every time her clutter was fixed or touched by any family member. She expressed that her sister was angry and emotional once her things were loose or misplaced because of touching her.

> *Before her decluttering therapy started she has a lot of old things that not use. A thing that shouldn't be hidden anymore.*
>
> Before her decluttering therapy started she has a lot of old things that not use. A thing that shouldn't be hidden anymore.

Difficulty discarding. The result of difficulty discarding after the therapy reveals changes in hoarding disorder symptoms. The behavioral indicator of this change behavior was seen in the dispatch materials of the participant during the therapeutic session. This evaluation was the basis of deciding in dispatching the materials. In Frost et al.'s (2011) study, the researcher explains that the hallmark symptom of hoarding disorder is the reluctance to discard personal possessions, including objects that non-hoarding individuals might consider to be worthless or having little intrinsic value. Although the reasons for saving objects tend to be similar to those described by non-hoarding individuals, for individuals with hoarding behavior, these beliefs are more intense and rigid and applied to a more significant number of possessions. Attempts to discard usually cause substantial emotional distress and are frequently avoided.

On the difficulty discarding, the family member noticed that the participants had a problem letting go of old elementary books and other reading materials since elementary to high school references. And these materials cluttered the area of the participants. Although the participants were aware of the unvalued items, they still kept material.

> *Nagka tipun-og iyang mga gamit because even if dili na magamit, dili gihapon malabay. Because she always saying "sayang mama because it was a gift from ano" or "sayang ma, may be i can use this puhon".*
>
> The belongings are piling up because even if they are no longer usable, they still can't be thrown away. Because she always saying "sayang mama because it was a gift from ano" or "sayang ma, may be I can use this puhon"

The participants were assisted using the matrix that evaluates the feeling content of the materials. Once the emotion was stabilized, the decision followed, and discarding took place.

Emotion Dysregulation. The result of the Decluttering Therapy on hoarding disorder symptoms reveals decreased symptoms of emotion dysregulation after the intervention. The significant negative emotions associated with hoarding disorder and the behavioral sequelae of these emotions (difficulty discarding and acquiring) suggest a role for deficits in emotion regulation suggested in the study of Gross (2020). This research identifies the used decluttering technique as an essential tool in emotion regulation. The result reveals the process of changing the experience or expression of emotion via several strategies, including situation selection, situation modification, attentional deployment, cognitive change, and response modulation (Gross, 2020). The significant role of emotion in hoarding disorder resided with the premise of linking memory and emotion. The difficulty of discarding, acquisition, and clutter resides with the emotional domain. Each of these behavioral symptoms of hoarding corresponds with the intensity of emotion. During the therapy, the participants confess that the reasons for not discarding are the memories and intense feelings of the materials; this is also true in the acquisition. The participants shared that current emotion influences their decision to

purchase; such emotion was boredom, another emotion was excitement and sadness. These mentioned emotions are common and can easily be felt. When a person fails to recognize this vulnerability, they engage in excessive acquisition and difficulty discarding. A clinical study was conducted which aims to investigate the clinical characteristics of hoarding behavior and emotion regulation. The result of the study revealed that elevated levels of hoarding were reported for 22 percent of the sample. Elevated hoarding scored significantly higher on emotionally unstable participants. Emotion dysregulation predicted hoarding symptomology over-and-above the contributions to other comorbidities. The findings suggest a behavioral and emotional dysregulation pattern for hoarding behavior and provide further insight into the relationships (Hamblin, Lewin, Salloum, Crawford, McBride, & Storch, 2015).

Strong emotional attachment to possessions is the core characteristic of hoarding. Individuals with hoarding disorder tend towards poorer emotion regulation capacity, experience negative emotions acutely and perceive negative emotions as more threatening. Individuals diagnosed with hoarding disorder reports emotional deprivation and experiences of sudden traumatic loss. An understandable explanation for hoarding disorder is that individuals whose early childhood attachment bonds have been disrupted in some manner refocus these attachment bonds on their material possessions. This acts as an emotional containment mechanism promoting feelings of safety, security, identity, and control, with the stability of material possessions an attractive counterpoint to the transience and unpredictability that can be associated with interpersonal relationships.

The observation of the family members on emotion dysregulation expressed in the sharing of one of the family members.

> *Everytime na may tinatapon kami na gamit nya ay magagalit sya, para syang naiirita, parang ang bigat ng pakiramdam nya. Naka busangot palagi dahil na siguro sa palagi nlng siya pinagsasabihan ng magulang namin ng dahil sa kanyang mga gamit.*
>
> Every time we throw something away that he uses, he gets angry, he seems irritated, it seems like the weight of his feelings. He feels bad because he receives a lot of scolding from our parents.

Significant Distress. Among the symptoms of hoarding disorder, significant distress showed a direct change based on the descriptive value of impairment. This improved condition was seen in the participants' narratives when asked about their experiences in decluttering therapy. The participants shared that the therapy contributed a lot to managing hoarding behavior. The therapy helped the participants gain self-regulated behavior that managed hoarding symptoms. The therapy also provided self-directed motives that guide their decisions. In general, the therapy allowed the participants to self-realize material passion in their lives, especially in restoring relations among family members.

A study conducted by Rasmussen, Steketee, et al. (2014) reveals embarrassment on clutter or avoidance of criticism among familial conflicts. Many individuals with hoarding disorder avoid inviting friends, family, or repair workers to their homes, contributing to social isolation. Hoarding Disorder may also increase rates of intrafamilial conflict and rejection of the hoarding individual. Family members may be upset by excessive time spent on acquiring or in response to financial debt related to compulsive buying. Family members may become frustrated with the patient's reluctance or inability to change in one extensive survey (Steketee, Tolin, Frost, & Fitch, 2014). The proof of this study happened with the participants before the therapy. In the narratives of the participants, they experienced conflict with their family members. Such instances were related to clutter and unpaid online purchases. A notable conflict usually happened between the participant's co-occupants in the room. One participant shared that she experiences fights with her sister because of the clutter and disorganized materials in the room. Another sharing from one participant's mother, because of the unpaid online parcel, that conflict sprouts arguments between the participant and her mother. All of this conflict with the family is brought by the symptoms of hoarding disorder. Once the symptoms are addressed, clutter and unpaid parcels

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are solved, and the relationship is restored. The narratives support the observation of family members on the participants. The significant change noted by the family members, from clutter, acquisition, and discarding, benefits from attending Decluttering Therapy.

The same instances were seen among other observations of the family members of the participants. The tension in the family and significant distress were inevitable in this situation. According to the family members, the participants experience several conflicts among the family members; this includes quarrels among sisters, reprimand among mothers, and distress on the side of the participants. All of this conflict was rooted in the hoarding disorder symptoms.

> *Usahay kasab-an siya sa iyang mama, pero naanad rapud iyang mama, she had work kasi before kaya sobrang gastos plus sa mama niya na pera. Ubang money niya is spent for food and ang uban sa mga nonsense nga butang (iyang own money).*
>
> Sometimes she blames her mom, but her mom got used to it; she had worked before, so it was too expensive, plus her mom's money. Some of her money was spent on food and some on nonsense things (his own money).

Another experience felt by the participants with hoarding disorder symptoms during the COVID-19 pandemic was the *Psychological Difficulties*. These difficulties were characterized by difficulty in functioning, feeling of abandonment/loss, difficulty managing life, difficulty moving forward, self-blame, difficulty to think, loss of interest, and elicit traumatic experience. These findings were present in study conducted by Taylor et al. (2018), which reveals prominent themes that support psychological difficulties in the experience of hoarding behavior. Problems are identifying and describing feelings, unhelpful attitudes toward feeling loos, avoidance-based strategies in managing life, and a perceived lack of effective emotion regulation strategies (Taylor, Theiler, Nedeljkovic, &Moulding, 2018). A study conducted by Tolin et al. (2018) suggests that self-reported deficits characterize hoarding in difficulty to think and unfavorable experiences brought by traumatic events (Tolin, Frost, Steketee, & Fitch, 2008). Traumatic or stressful events may also play a role in the onset and expression of hoarding (Tolin, 2011). Cromer, Schmidt, and Murphy (2007) found that hoarders were significantly more likely than non-hoarders to report experiencing at least one traumatic life event. They further found that patients who were determined to be hoarders and also had experienced traumatic life events had greater hoarding severity than those who had not experienced trauma (Cromer et al.). Related studies have also shown evidence of problematic food hoarding behaviors among children in foster care (Casey, Cook-Cottone, & Beck-Joslyn, 2012). While more research is needed, evidence supports the notion that whether from direct experience or modeling from caregivers, hoarding behaviors can emerge in response to troublesome life events, poverty, or financial trauma. The resulting fear of not having enough can lead to an irresistible urge to excessively acquire and persistently hold onto resources to protect oneself from a period of future potential lack.

Another experience shared by the respondent on hoarding disorder during the pandemic relates to *cognitive dissonance*. Most of the respondents shared that they are aware of their unhealthy behavior, uncontrolled acquisition, and difficulty discarding. However, they tend to ignore the awareness and escape the intense feeling. Such behavior includes allocating space of their materials but ended up having more clutter and perceived future used. The research conducted in assessing the cognitive impairment of hoarding disorder among older clients reveals that cognitive dissonance has contributed to the participants' dysfunctional behavior. Results of that study mentioned that cognitive dissonance occurs whenever an individual simultaneously holds two psychologically inconsistent cognitions, wherein the hoarding behavior (Gilliam et al., 2011; Muroff et al., 2012; Muroff et al., 2009).

Experience of participants in Decluttering Therapy. The result of the qualitative analysis on the

participants' experience in attending the Decluttering Therapy reveals four major themes; this includes self–directed behavior, self-regulation, self-realization, and techniques in Decluttering therapy. The experience of the participants in Decluttering Therapy elicits *self–directed behavior* for the participants. This self-directed behavior allowed the participants to use the skills in the cognitive domain in dealing with hoarding symptoms. Self-directed behavior of the participants means the participants' motivation to achieve the goal of the therapy, which is to declutter one target area with their home. The motivation serves as the fire to accomplish the intent of attending the session and the necessity to convert the target area into a functional one. The participants shared that she needs to convert the room to a functional area for the family in one sharing. Prior to therapy, the room was full of old personal materials from different people, which had many good and bad memories; this intense memory and emotion hindered the participants from decluttering. Further, after the therapy, a psychoeducation session was provided to the participants to reinforced their motivation. Apart from motivation, *self-discipline* was also elicited from the transcription. Self-discipline was one of the most common responses from the participants; this means that to overcome hoarding disorder, individuals need to be self-disciplined. This behavior was seen to be important in dealing with uncontrolled acquisition, clutter, and difficulty discarding. Decision-making was also seen as common among the responses of the participants. The role of decision-making Decluttering therapy was significant; this is considered as part of the doing phase skills. Measurement of successful decluttering progress is the ability of the participants to throughout helpful decision.

Another central theme elicited during the decluttering therapy was *self-regulation.* The participants' experience in self-regulation was evident in the participants' efforts in finding ways not to be distracted in doing the decluttering activity. Based on the participants' narratives, the majority of them look for ways not to be distracted in doing the decluttering; such distractions include interruption when parents ask them to do something. This interruption distracts the participants from finishing or lose the momentum of decluttering. Thus, the participants inform the family member of their scheduled decluttering or signage informing the family of the ongoing decluttering. In self-regulating the hoarding symptoms, the participants control hoarding symptoms by identifying the cues: uncontrolled acquisition. The participants acknowledge that keeping an excess amount of money in the wallet exposed them to purchasing. One participant shared that she lends the money so that she will not be tempted to buy. One essential self–regulated behavior that the participants learned was assessing the value of the material. This means that in a situation where the participants were exposed to hoarding symptoms, they evaluate the value of the material; this happens in either acquisition or discarding.

Self–realization, the participant's experience in the entire therapy, was the realization of the presence of materials. The majority of them realized that they should control the materials and not the other way around. They also realized to let go of material possession because it created dysfunctional behavior for them. In general, the participants learned the usefulness of therapeutic sessions and their benefits. In a study conducted by Harvard University (Hicks, 2020) among students with hoarding behavior, the researcher explores the anecdotal accounts on decluttering or removing physical distractions from living spaces to help individuals looking for improved well-being. The result of the study reveals a significant effect on the behavior of the participants. After exposure to decluttering activity, the changes in behavior on confidence, self-regulation, directedness, productivity, and self-realization in relationship happiness compared to mindfulness meditation. Decreased material possession and feeling of overwhelm were also noted.

The participants' experience in attending the therapy boils to the effectiveness of Decluttering Therapy through its techniques and strategy. According to the participants, Decluttering therapy uses approaches that enable the participants to assess and examine hoarding behavior. The matrixes used in the therapy allowed them to process their thinking, feeling, and doing behavior. These matrixes target the three domains of helping solve symptoms of hoarding behavior. According to the participants, the matrix allowed them to examine their thoughts dealing with acquisition, clutter and discarding. The matrix also managed to deal with their emotions, particularly the intense ones. In general, the use of matrixes and the input session helped the participants overcome hoarding symptoms. These findings were consistent with the research conducted by Eghbali, Zare, Bakhtiari, Monirpoor, & Ganjali (2013) on the effectiveness of matrix interventions in improving hoarding

treatment. The objective of the study is to evaluate the effectiveness of matrix group interventions in improving hoarding treatment. The study results reveal that matrix group interventions increase the effectiveness of hoarding treatment by reducing the symptoms of clutter, acquisition, discarding, distress behavior, and emotion dysregulation.

Experience of Participants in Online Group Therapy. The participants' experience in online group therapy was facilitated to identify the benefits, challenges, and other areas of improvement. The qualitative analysis results reveal three themes: the effectiveness of decluttering therapy technique, a hindrance to online therapy, and benefits of online therapy. In attending the online therapy, the participants experience the effective implementation of decluttering approach. During therapy, the participants experience the therapeutic alliance among the group members; the members manage to learn from each other. The participants also shared how online experiences address hoarding symptoms using decluttering therapy. The benefits of conducting the therapy online revealed positive effects to the participants. The benefits of online therapy realized personal capacity, awareness of personal guided motive, self-improvements, and the realization of reasons for participation. The video conferencing approach was enough to send the message of hope to all members of the therapeutic group. Consequently, the participants also expressed that online technology was also effective, although the physical connection was nonexistent. The technology helped the participants to connect and find support among the group. There was a strong evidence for the use of online therapy services as a component of integrative and collaborative patient care (Fortney et al., 2015). The value proposition of online group therapy is that it can effectively respond to the mental health needs of people in isolation, quarantine, or restricted mobility while reducing patient and clinician infection risk. Thus, online therapy adheres to social distancing, avoids care interruptions, and maximizes public health outcomes (Whaibeh, Mahmoud, &Naal, 2020).

Apart from sharing the effectiveness of online therapy as a medium of Decluttering therapy, the participants share the hindrances in implementing the online group therapy. One of the significant hindrances was the internet connection; during the entire session, the participants' experience of low internet connection brought heavy rains, network upgrading, and other issues in internet connectivity. Other than issues in internet connection, the participants also experience unscheduled occasions that hinder them from attending the session. In the initial session of the participants, they experienced shame; all of them felt aloof since they didn’t know each other. However, this feeling was resolve after the succeeding sessions. The limitations in online therapy was supported by the studies conducted by Racine et al. (2020). In this study, the lack of access to reliable technology, lack of a private or confidential space for sessions, and reluctance to process psychological conditions in the absence of a safe environment, are all barriers to conducting effective treatment over tele-mental health (Racine, Hartwick, Collin-Vézina, & Madigan, 2020). Another standard limitation of Tele-mental health is on technical components of the device. Despite advances in video conferencing software programs, technical issues appear to be the most prevalent (Greene, Morland, Macdonald, Frueh, Grubbs, Rosen & Craig, 2017). Providers have noted video, audio, and latency issues and an inflexible video camera as barriers to patient care (Hughes, Gorman, Ren, Khalid, Clayton, 2019).

Scope and Delimitation

This study assesses the efficacy of Decluttering Therapy on hoarding disorder symptoms. Another psychological condition apart from hoarding disorder is not included.
The quantitative findings of the present study must be considered with respect to the following limitations.

First, our small sample size does not allow us to generalize findings to a wider population. Although most participants were female, which is consistent with the tendency for more women than men to seek treatment for Hoarding Disorder (Tolin et al., 2015), these results should be replicated in a larger, more diverse sample. Likewise, this study should be replicated with individuals who have more severe clutter within their homes.

Second, we did not collect information regarding comorbid disorders. Future research may seek to clarify the role of known comorbidities such as anxiety and depression.

Third, the did not conduct long-term follow-up assessments, and thus, the study cannot assert whether this program has long-lasting effects. However, with the positive change of behavior based on pretest and posttest score, an extended longitudinal study assessing the differences between immediate and longer-term post-treatment outcomes is required.

Finally, we did not compare our results to group members who did not receive home sessions as we did not randomly assign people to groups (i.e., participants
self-selected if they met eligibility criteria). However, as meaningful were observed only after receiving home visits, but not from the start of group CBT to the start of home visits, we have some indication that the Clutter Buddies program produced benefit over and above
group CBT.

Differentiation of Contextualized Decluttering Therapy from Standard CBT Protocols

To clarify the unique theoretical and practical contributions of this investigation, the newly contextualized Decluttering Therapy must be explicitly distinguished from established Cognitive Behavioral Therapy (CBT) protocols for Hoarding Disorder (e.g., Steketee & Frost, 2007; Tolin et al., 2014). While traditional CBT frameworks rely heavily on individualistic, direct confrontation of cognitive distortions and in-person clinician-guided exposure, the present adaptation systematically modified these components across structural, cultural, and delivery dimensions. Culturally, the intervention embedded the Filipino core interpersonal value of Pakiramdam (shared relational sensitivity and intuitive empathy), replacing direct behavioral confrontation with non-confrontational pacing and private check-ins during moments of discarding distress. Methodologically, standard Western illustrative vignettes were replaced with customized CBT Matrix Worksheets that explicitly mapped emotional triggers—such as pandemic-related stress—to online app purchasing habits and physical clutter accumulation. Furthermore, the delivery format transitioned from traditional face-to-face office or home visits to virtual group sessions, leveraging peer normalization while guiding participants through real-time decluttering within their actual home environments. By defining these boundaries, the preliminary improvements observed in this study can be understood not merely as a replication of standard CBT, but as evidence supporting a culturally tailored, virtual delivery model specifically calibrated for the target demographic.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary and concluding reports of the study. Further, a recommendation was also presented for future endeavors on the effectiveness of Decluttering Therapy.

Summary

This study measures the effectiveness of Decluttering Therapy among college students with hoarding disorder symptoms during the COVID-19 pandemic. The therapeutic approach's effectiveness revealed a significant decreased of hoarding symptoms by analyzing the prior clinical impairment. Among the 281 student surveyed, 51 met the criteria for both anxiety and hoarding disorder symptoms. The 51 students were invited for an orientation and only 15 students attended. Among the 15, only nine complied with the documentary requirements. The nine participants participated in the initial meetings of the therapeutic group; however, two of the participants withdrew from the session in its initial phased (phase 1). Thus, the actual participants of the study are seven students with hoarding disorder symptoms. The nine participants undergo the Decluttering Therapy designed with 12 sessions adapted and contextual from Cognitive Behavioral Therapy Therapist Guide. The experimental embedded mixed-method design was used to evaluate Decluttering Therapy's effectiveness and described participants' lived experience on the following condition, experience with Hoarding Disorder symptoms during COVID-19 pandemic, experience in Decluttering Therapy, and experience in online group therapy. Testing Decluttering Therapy using Hoarding Rating Scale (HRS) in pre and post-test assessment was utilized. While, interview transcripts were analyzed using a phenomenological methodology. The findings included hoarding experience during the COVID-19 pandemic, three themes: 1)

elevation of hoarding symptoms, 2) psychological difficulty, 3) cognitive dissonance. Experience in Decluttering Therapy, four themes: 1) self–directed behavior, 2) self–regulation, 3) self-realization, 4) techniques in Decluttering Therapy. Experience in online group therapy, three themes: 1) decluttering therapeutic technique, 2) hindrance in online therapy, 3) benefits of online therapy. Observation of family members, four themes: 1) presence of hoarding symptoms, 2) awareness of the psychological condition, 3) positive effects of Decluttering Therapy, 4) familial supportive attitude.

Conclusion

Grounded from the result of this study, conclusions were highlighted as evaluation to the effectiveness of Decluttering Therapy on hoarding disorder symptoms. Below are the findings of the study.

After 12 sessions in Decluttering Therapy it was revealed that there have been marked improvements according to symptoms Hoarding Disorder which includes uncontrolled acquisition, clutter, difficulty discarding, emotion dysregulation, and considerable distress. This improvement was based on pretest and posttest comparison.

Online group therapy was seen to contribute improvements in dealing with the psychological issues of the adolescent. Further, the results show that this new finding on Decluttering Therapy provides additional evidence on the effectiveness of standardized CBT- Group Therapy for Hoarding Disorder. The significant contribution of this study to the existing evidence was the methodology of administering the standard module that was done entirely online.

The respondent's experience of hoarding disorder symptoms during the COVID-19 pandemic elicits three significant themes: elevation of hoarding symptoms, psychological difficulties, and cognitive dissonance. The respondent's experience in Decluttering Therapy reveals four major themes: self-directed behavior, self-regulation, self-realization, and techniques. These findings were seen to be connected with the decrease of hoarding symptoms after the intervention. The participants' experience in online therapy reveals three significant themes: effective experience in Decluttering Therapy, benefits of online therapy, and hindrance in online therapy. The general experience of participants in online therapy was positive and created a favorable response.

Recommendation

Based on the findings and conclusions derived, the following recommendations are suggested:

1. The COVID-19 pandemic exacerbated symptoms of hoarding disorder, contributing to psychological dysfunction, familial conflict, compromised living conditions, and financial strain. Given the preliminary improvements observed in this study, mental health professionals are encouraged to consider culturally adapted Decluttering Therapy as a supportive therapeutic tool in addressing hoarding symptoms.
2. Online group therapy demonstrated remarkable feasibility and positive outcomes in mitigating hoarding symptoms. Mental health practitioners and organizations are recommended to leverage secure virtual platforms as a viable methodology for delivering group therapy, particularly for clients facing mobility, geographical, or pandemic-related constraints.
3. In light of the widespread adoption of online transactions, accessible e-commerce applications, and digital payment systems, future research should specifically examine the impact of digital shopping platforms on hoarding severity, particularly as a driver of uncontrolled acquisition among young adults.
4. For school academic officials, student affairs, and guidance offices, findings indicate that physical clutter and environmental disorganization in students' learning spaces negatively affect mood, academic engagement, and overall psychological disposition. Furthermore, college students often navigate complex household budgeting dynamics. Educational institutions are recommended to integrate clutter management and mental health support into institutional wellness agendas to provide proactive, accessible interventions.

5. For parents and guardians, qualitative findings highlight that adolescent and young adult students are particularly vulnerable to impulse buying and uncontrolled acquisition. Parents and guardians are encouraged to foster financial literacy and gently monitor spending behaviors to promote healthy money handling and prevent clutter accumulation.
6. Given the preliminary nature and single-group pretest-posttest design of the present study, future research should utilize larger sample sizes, randomized controlled trial (RCT) or active comparison group designs, fully validated outcome measures, systematic assessments of comorbid anxiety and depression, formal treatment fidelity evaluations, and long-term follow-up assessments to establish definitive causal effectiveness and treatment maintenance.

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