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Clutter and Self-Extension Tendencies: Predictors of Life Satisfaction among Emerging Adults

Juline A. Girts
DePaul University, jaygirts@gmail.com

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Abstract

The current study explored factors that may contribute to emerging adult's satisfaction in life, in terms of *clutter* (an overabundance of possessions), and *extent of self-identity* developed within personal possessions. The current study investigated participant's tendencies and attitude towards cluttering behavior's impact on their overall life satisfaction (H1). Also investigated was overall life satisfaction contingent on participant's reported extent of their self-identity manifested within their personal possessions, or how much they incorporated their self-identity within object belongings (H2). Cluttering behavior is similar to a key criteria of hoarding disorder (inability to part with personal possession, regardless of value). Previous research suggests that people diagnosed with hoarding disorder oftentimes experience negative life outcomes, in addition to low life satisfaction because of overabundance of possessions. The current study investigated life satisfaction in relation to possession mismanagement of 44 women, 15 men, and one person identifying as transgender, who are considered *emerging adults* (age range = 18 to 29 years old). A regression model, and correlation model were used to assess hypotheses. Results found that no significant relationship present for either H1 or H2. However in a proposed research question, it was found that a difference in reported satisfaction with life was present when comparing the youngest and oldest participants.

Introduction

Possessions are considered essential components of a household in order to “make a house a home.” A statement such as this promotes that both people and things within a home may facilitate the comfort experienced at home. Possessions inside a home living space may be decorative (vases, statues), sentimental (paintings, photographs), or practical (furniture, dishes). Possessions may also offer insight of who lives within the home; perhaps providing a glimpse of the dweller’s style or interests. Little or no belongings in a home may make the spaces appear vacant, uninhabited. Objects promote the home to be livable in its simplest form, and provides comfort for the people that live within that space, specifically speaking to the psychological sense of home (Sigmon, Whitcomb & Synder, 2002). However, solace at home may not be the experience for those living with *too many* possessions (Roster, Ferrari & Jurkat, 2016).

Object acquisition research is found within fields such as consumer psychology and mental health. For instance, the tendency of having too many things in one space, or an excess of items or an overabundance of possessions, may be referred to as *clutter* (Frost, Steketee, Tolin & Renaud, 2008; Rosenholtz, Li & Nakano, 2007; Maycroft, 2009). Clutter is also described by Fernandez de la Cruz, Nordsletten, Billotti, and Mataix-Cols (2013) and Steketee and Frost (2003) as a “large group of unrelated or semi-related objects, piled together in a disorganized way in spaces that are supposed to be used for other purposes than what it is actually being used for.” Clutter is often coupled with research topics that also include maladaptive acquisition and possession mismanagement traits, such as hoarding disorder, squalor, or chronic disorganization, since they all have

issues surrounding possessions (Halliday & Snowden, 2009; Frost et al., 2008, Kohlberg, 2006). These listed conditions hold unique sets of characteristics, all including some form of possession management and/or acquisition issue as hallmark characteristics. How possessions manifest into issue is curious, in a way it requires the question of when do the possessions become too much?

Items are acquired often in two main ways that contribute to cluttered spaces: by direct (self-purchase, self-acquisition) or indirect (inheritance, gifts) accumulation (Ekerdt, Addington & Hayter, 2011). Regardless of how items are obtained, consequences from possession overload may be negative. Individuals living with large volume of possessions in their home spaces may often lead to cramped living spaces because of the overabundance of possessions. Clutter may accumulate in common living spaces such as a kitchen, dining room, living rooms, or bedrooms. When objects begin to accumulate in a given area that surpasses the area's original intention for space, the area is deemed cluttered (Fernandez de la Cruz et al., 2013). General clutter in a home living space may be the outcome of maladaptive behavior, poor decision-making skills, chronic disorganization, or the inability to discard or part with items (Frost et al., 2008; Kohlberg, 2006; Shaw, Timpano, Steketee, Tolin & Frost, 2015). Too many possessions within a given space, or not having *enough* space for belongings are hypothetical scenarios in which clutter may manifest. The lack of actively discarding items over time also may contribute to clutter developing because of the item buildup in a space, with little or no disposing of items to make room for the new (Ekerdt et al., 2011; Ekerdt, Sergeant, Dingel & Bowen, 2004; Maycroff,

2009). Contributing factors that harbor a less than ideal cluttered living space are important to equally include within the conversation of possession psychology.

The Psychology of Too Many Possessions: Clutter Behavior (Outside of Hoarding)

To get through a typical day, the average person requires objects to achieve their routines: toothbrush, shoes, coffee, keys, jacket, transportation, digital device, desk, etc. Something somewhere means something to someone, regardless of their demographic. Psychology at its basic definition, in brief, is the study of the human mind's complexities of function, unconscious and conscious thought, emotions, and behavior. Possessions, therefore are connected in a complex way to psychology: we may feel a certain way such as happiness when a gift (object) is received, frustration or anger when we do not have access to our keys (object), or sadness when a favorite possession is broken or no longer in existence because of damage. Heightened psychological distress or grief is common during natural disasters when people lose everything they own. People often report feeling violated, angry, or helpless after being victims of theft. Possessions are vital to include in psychology because relationships with possessions parallel established psychological constructs, such as attachment, identity, and consumerism.

Research efforts focused on possessions in relation to psychology is important because daily life calls for use of objects, but also how those objects pose issues of inappropriate attachment and unhealthy consumption. In turn, possessions may become harmful: they may have the opportunity to disrupt daily living or may provoke distress to individuals impacted by maladaptive object

accumulation. Possession mismanagement research is largely focused on the diagnosable hoarding disorder. Therefore, research literature is not as robust for non-hoarding clutter situations: people who struggle with possession mismanagement but do not meeting hoarding disorder diagnostic criteria. Existing as a smaller scope of research, this brings cluttering tendencies and possession mismanagement research forward, furthering exploration of psychological and lifestyle outcomes within this research niche.

Usage of Self-Storage: Market Trends

Item mismanagement and overabundance of possessions appears problematic, shown through current market trends of noticeable increases of occupied storage units. It was estimated that one in ten families rent a self-storage locker of some type for their excess of possessions (SSA, 2013). The nonprofit organization “The Self-Storage Association” research team is dedicated to observing market trends both in the United States, and internationally. Established in 1975, the purpose of the Self-Storage Association (SSA) is to serve as an educational, advocacy, and communication platform regarding the self-storage industry. In a review of the SSA’s 2013 Self-Storage Demand Study, Egan (2013) reported that 46% of self-storage customers were long term customers, almost a 10% increase from the recent 2007’s SSA Self-Storage Demand Study. It was also found that short term renter percentage decreased from 54% to 44% between the years of 2013 and 2007.

This review of market trends of increased use of storage facilities suggests that possession mismanagement does exist in the form of overabundance of possessions in some form. The key concept of importance is that people have

enough possessions to keep utilizing storage facilities, instead of their homes or their own property for whatever reason. The growing need to help manage possessions contributed to the initiation of careers surrounding possession management.

Field of Professional Organizing

If organizational and possession management skills were learned during early life, the field of professional organizing would not likely exist. A market exists because there is a need for a service. Professional assistance combat situations of possession mismanagement such as clutter, chronic disorganization, hoarding, and squalor (Dozier & Ayers, 2015; Halliday & Snowden, 2009; Kolberg, 2006; Roster, 2015). Organizations such as *National Association of Productivity & Organizing* (NAPO) and *Institute for Challenging Disorganization* (ICD) exist because of a need for help with managing possessions in communities throughout the country and globe. These striving establishments are created to teach, educate, and certify professionals in the field of Professional Organizing or Organizing Consulting, as their work is directly related to organization and possession management of their clients. These professionals support clients who may be experiencing mental distress, mental health issues, or chronic cluttering problems that are not clinically significant. Professionals in this career field are able to differentiate the severity of clutter and possession mismanagement to best prepare a solution.

Complex possession situations should continue to be included in research of acquisition issues resulting in cluttered living spaces, even if it is not clinically diagnosable as hoarding disorder. Possession mismanagement research allows for

continued investigation of how some acquisition behavior is maladaptive, and how findings may be applied to similar, yet different situations, such as clutter behavior issues not connected to hoarding.

Clutter or Hoarding?: Similar, Yet Different Concepts

Hoarding disorder research has established explicit hallmark behaviors and conditions of diagnostic criteria that must be validated before a living situation can be clinically deemed as hoarding (American Psychiatric Association, 2013). Part of the diagnosis list includes the inability to part with items, (see Appendix E for full DSM-5 diagnostics criteria). The persistent difficulty discarding possessions may then manifest into living spaces becoming cluttered because of the influx of objects in the home. This is one example of what a portion of hoarding disorder scenario may include, although other established criteria from the DSM-5 *must* also be met before a situation can be considered hoarding. When copious amounts of clutter are present, coupled with *all other* remaining criteria for hoarding disorder, then and only then, the person may be clinically assessed for this disorder. If the other diagnostic criteria are not met, but there is a clear overabundance of possessions, a clutter or chronic disorganization issue may instead be present, not hoarding.

Similarities may exist in the behaviors related to managing possessions in both types of situations (non-hoarding clutter and hoarding), however the dynamics behind the behavior, and the level of life impact are drastically different. This may allow inferences then to be made regarding connections between the two situations. Similarities may include dysfunctional acquisition and

possession accrument, difficulty categorizing objects, and similarly experienced negative outcomes.

Dysfunctional Acquisition and Possession Accrument

One likeness between clutter behavior and established hoarding disorder is the difficulty parting with possessions, as well as odd acquisition tendencies.

Hoarding disorder criteria includes the inability to discard possessions, oftentimes resulting in cluttered living spaces that are no longer usable for the area's original intended purpose (American Psychiatric Association, 2013). Part of the persistent difficulty to discard possessions derives from the perception that the items need to be saved, as through dysfunctional acquisition. This idea is further discussed by Tolin (2011), pertaining to the impulsive actions of acquiring more possessions, and being unable to recognize that the acquisition is a maladaptive choice. The lack of insight towards acquiring unnecessary items can be relative to impulsivity and compulsive actions (Tolin, 2011).

Items saved oftentimes are illogical to keep, have no actual value, and at times may become hazardous to the resident(s). As acquisition behavior may develop into hoarding disorder, the presence of untrue or distorted thoughts surrounding possessions reinforces the clutter to remain (Wheaton, Fabricant, Berman & Abramowitz, 2013; Steketee, Frost & Kyrios, 2003). Hoarding disorder is also identified as an anxiety eliciting experience where the inability to part with possessions is from a strong sense of connection to belongings, causing distress (American Psychiatric Association, 2013). This research exhibits an unhealthy and inappropriate view of objects, suggesting a problematic situation

from distorted views of item acquisition, keeping items, and a difficulty disposing items.

Diagnosed hoarding situation is extreme in the severity of dysfunctional acquisition, in comparison to in home cluttering behavior, because the actual diagnosis is reserved for severe cases of cluttering that is coupled with other unhealthy behavior or thoughts (found in the full criteria). To compare, problems contributing to home clutter of non-hoarders may occur because of busy life styles that do not allow for managing items, or the individuals in the home lacking skills to organize their space. Themes found in Belk et al. (2007) illuminate why people may have overabundance of possessions. Those interviewed suggested either they accrued their items from having the money to spend on more items, or because they lack the resources to go through, dispose, or organize their things (Belk et al., 2007). Poor possession mismanagement resulting in cluttered living spaces of functioning individuals does not elicit the same concern of that with hoarding disorder. Clutter at home may cause life to run inefficiently and for individuals to feel overwhelmed, but it does not cause true impairment of daily living which is true of those dealing with hoarding disorder.

Decision Making Deficits with Item Categorization

General challenges with judgement extends to the concern of possession mismanagement within hoarding disorder, and those struggling with chronic disorganization issues resulting in cluttered spaces at home. Difficulty making decisions may impact the ability to categorize what items should go where, what could be kept, and what should be discarded. For example, some dealing with hoarding disorder may experience issues with decision making that takes the form

of procrastination, planning difficulties, or trouble with tasked organization for goal accomplishment (Hartl, Duffany, Allen, Steketee & Frost, 2005; Gilliam & Tolin, 2010). Decision making issues related to procrastination may bring additional conundrums: Ferrari, Roster, Crum, and Pardo (2017) found that people struggling with procrastination reported having an overabundance of possessions, and that they viewed their clutter negatively.

Furthermore, individuals with hoarding disorder specifically experience issues with executive functioning, which in general include skills a person has in order to manage themselves and their resources (Hartl et al., 2005; Gilliam & Tolin, 2010). Executive functioning (planning, completing a task) may then be considered as a skillset needed for categorizing objects in some way, specifically to maintain possessions in living spaces. For example, executive functioning may take the form of identifying the situation as needing to be dealt with, planning action, and completing the project. Challenges with executive functioning may have an impact on those with general clutter in the home and those facing hoarding disorder, as executive functioning and decision making are linked to categorization deficits (discussed earlier). This is absolutely problematic for those with hoarding disorder but may also be problematic for those dealing with clutter issues in their home that is not a hoarding situation.

In an example from a hypothetical household setting, a typical scenario may be that items identified as no longer needed in the home may be reviewed to either be discarded or donated. This is not necessarily a shared experience for those that hoard because the items are not viewed as options to be discarded (Nordsletten et al., 2013). How may the inability to categorize items negatively

impact people with hoarding disorder, or even basic cluttering problems? Often the person living in a hoarding situation is unable to clearly categorize items for cleaning or organization purposes. It is a hard task for hoarders to recognize items with no value, items that are health hazards, and items that could be acceptable to keep. People dealing with this disorder have a difficult time differentiating what possessions are valuable and which ones do not hold any value or worth (Steketee, Frost & Kyrios, 2003).

Challenges with differentiating between items that can be kept and items that should be discarded may result in certain items remaining in a hoarder's household that could put health at risk. This situation may reach extreme levels when the person with hoarding disorder's inability to categorize waste and non-waste items creates an unsanitary living area, compromising human health (such as rotting food, waste, and other raw garbage). There is an obvious lack of categorizing skills so much so that the distress associated with the possibility of parting with items trump the rationale of what is safe to keep in the home. In review of decision making, categorizing, and discarding items, it is understandable how these issues may manifest into a cluttered and compromised living environment.

To compare, categorizing deficits found in hoarding disorder situations are not just unique to that disorder. General clutter in a household might be the result of poor categorization skills that do not cause impairment in daily living (such as mismanagement in hoarding disorder). Common item buildup does not immediately promote risky behaviors or outcomes, as it is not a severe situation like hoarding disorder. Categorization deficits for task completion, (such as

organizing or discarding items in possession mismanagement) may also be present in clutter situations that do not qualify for hoarding disorder.

Neurocognitive disorders that impact memory and other cognitive declines may also contribute to in home clutter and categorization issues that are not deemed hoarding situations (see Appendix E, Item F). Having a poor organization skillset resulting in a standalone issue with categorization is not the same as clinically significant issues present in hoarding disorder.

Other Negative Outcomes of Possession Mismanagement

Possession research is based on what information might be derived from hoarding research, then be applied to situations that are less severe but still problematic. When *too many* possessions exist, issues on clutter situations emerge that are related to clinical diagnosis of hoarding. These similarities reflect the potential impacts clutter and chronic disorganization may have on people that struggle with possession management, yet they do not meet the hoarding disorder criteria. Additionally, possession mismanagement may impact the other people and surrounding environments. The inability to differentiate what should be discarded may impact general health, safety, intrapersonal challenges, and social implications.

Environment Hazards. Hoarding is a severe condition that causes impairment in daily functioning to the person diagnosed (APA, 2013; Frost, Hristova, Steketee & Tolin, 2013; Snowdon, Pertusa, Mataix-Cols, 2012). The behaviors and tendencies of hoarding reach farther than just the individual: they may negatively impact persons in the same living environment and the surrounding community. The safety and hazard levels of an environment inform

the situation's severity of clutter. In non-hoarding scenario, clutter may decrease the usability of a certain space, not allowing the space to be used as intended. Diagnostic Item D for hoarding disorder includes language around the disruption of daily living contributing to the inability to maintain a safe environment for both the self and others (APA, 2013). Lesser levels of general clutter may disrupt some daily functioning, but to a lesser extent compared to a hoarding situation in terms of tripping hazards, personal health, structure fire, and sanitation (Gilliam & Tolin, 2010). In hoarding cases, conditions of living are incredibly compromised. For instance, living spaces may be unsanitary and hazardous to the point where the health and well-being of the residents becomes jeopardized. The overall space of living may be found in poor condition, with majority of accumulated items either dirty or broken.

Occupants living within or near a hoarding environment are exposed to health risks that develop. Dangerous living conditions of places where hoarding has occurred is a problem to the people living in the space, and for the surrounding community (Mataix-Cols et al, 2010; Maycroft, 2009; Hawks, Naylor, Coulter & Bearden, 2012). Waste and raw garbage is often found in these living spaces because of the inability to discard items properly. Garbage may in turn attract rodents, vermin, and insects, adding to the negative effects towards the health outcomes for individuals and the community. Other risks might include insect bites, skin irritations, lung and sinus problems, and chemical exposure (Varness, 2012). At risk populations, such as elderly and children, may experience threatening encounters since they are more so susceptible to infection, toxins, and disease, in comparison to healthy adults (Storch et al., 2011; Frost,

Steketee & Grisham, 2004). These types of living environments allow opportunity for pathogens to be inhaled, resulting in possible respiratory issues. Mobility risks while navigating through the household because of the clutter on the floor is also a hazard. Challenges of balance and unstable walking platforms also impact residents, as mobility to safely navigate through a home may be compromised. Navigation issues also come into discussion in terms of ability to access medication, food, and hydration.

Other dangerous living conditions from the overabundance of possessions include fire hazards within the home structure. Items may be flammable, blocking heat sources, and may cover faulty cords or wires. Entrapment in the case of a fire outbreak in the home of a hoarder is possible because of the large volume of possessions coupled with poor upkeep of the home. Particular to community hazards, fire danger could impact surrounding neighbors if there are structures are in close proximity. Although the fire and health risks are often within hoarding situation, an overabundance of possessions of chronic disorganization resulting in massive clutter may also be a platform for the same risks. In theory, both situations are similar in the sense that item mismanagement is present, however the largest difference is the severity level of compromised living space.

Emotionality and Comorbidity. *Emotionality, the observable behavioral and physiological component of emotion, and comorbidity, the presence of multiple health conditions in one person,* are both established aspects associated with hoarding disorder. Timpano, Shaw, Cogle, and Fitch (2014) suggested that hoarding is associated with dysfunction in emotion regulation, especially for negative emotionality. In their research, people diagnosed with hoarding disorder

reported a lower tolerance for negative emotions. Hoarders often viewed negative emotionality as threatening to them, which was different in the perception of emotions of non-hoarders. These outcomes suggest that the perception of the same situation differed between hoarder, non-hoarder.

Anxiety, depression, or stress may be experienced by people in cluttered situations (Medley et al., 2013; Timpano et al., 2014; Tolin, 2011; Kolberg, J. 2006; Frost, Kyrios, McCarthy & Matthews, 2007). The depth of psychological impacts researched within hoarding disorder may be more robust compared to non-hoarding clutter behaviors. Common psychopathologies that comorbid with hoarding disorder include anxiety disorders, depression, and obsessive-compulsive disorder (American Psychiatric Association, 2013). Throughout the disorder's lifespan, comorbidity of obsessive-compulsive disorder was found in about 20% of those diagnosed with hoarding disorder (Gordon, Salkovskis & Oldfield, 2013; Hall, Tolin, Frost & Steketee, 2013). In comparison, persons with cluttering tendencies also face issues with item acquisition. They may feel similar levels of distress about the possibility of parting with possessions in their daily living, similar to hoarding disorder. Without meeting the full hoarding diagnostic criteria, an individual with clutter tendencies may experience mental health difficulties. Clutter may become overwhelming, creating feelings of disarray, distress, or anxiousness (Medley et al., 2013; Mataix-Cols et al., 2010; Rosenholtz et al., 2007). Having more than what is needed may become a burden for persons when the daily functioning needs at home is impacted from object overabundance. Persons struggling with chronic disorganization resulting in possession

mismanagement may also face conditions such as ADD, ADHD, PTSD, and other executive functioning related issues field (Kolhberg, 2006).

Social Implications. Individuals suffer from possession mismanagement, but so do their network of loved ones. Criteria D of hoarding disorder suggests that the distress present impairs social and occupational functioning.

Relationships with family members, friends, and partners suffer in cases of hoarding disorder. Tensions in relationships may stem from the person with hoarding disorder's inability to recognize the detrimental nature of their behavior, or lack of interest in seeking professional services. Family members who are aware of the hoarding situation may try to intervene but may quickly discover there is no quick solution or reasoning with the person with hoarding disorder (Tolin et al., 2008). Criteria C in the DSM-5 states that if a place is decluttered and cleaned, it is a product of friends or family member's efforts, not the main person who is struggling with the disorder. Animosity may also develop as the interest and focus of attention shifts away from family/friend relationships to possessions obsession. Relationship strains may also stem from financial issues related to hoarding disorder such as paying for house cleaning services, professional organizers, or waste removal. Hoarding disorder criteria includes social or occupational impairment (Appendix E), which may impact the ability to hold employment. With inconsistent or no income, this may also be a contributing factor to familial and economic strain.

Financial strain may also take the form of over-purchasing relative to dysfunctional accumulation. Buying tendencies because of shopping addiction or compulsive buying are negative contributors to hoarding and financial situation

(Klontz, J., Britt, Archuleta & Klontz, T., 2012). Poor management of spending habits overwhelms finances, and in turn overwhelms the place of where the items are stored. However, relationship and financial issues may not be exclusive to diagnosed hoarders, and may also be present in situations of cluttering issues not qualified for hoarding disorder. A surplus of purchased items may lead to the need for more space to store them. Purchasing space such as a storage shed, or a self-storage unit are common ways people deal with their overabundance of possessions, as discussed earlier. Acquiring more space is both costly and a type of enabling behavior that does not address the core issue of dysfunctional accrue ment of things. Financial implications of buying more space, instead of minimizing total possessions may inadvertently impact relationships with people who try to assist with the possession issues. Financial complications of excessive buying, over-spending, and running out of space for possessions are probable financial struggles related to possession mismanagement.

The final social implication of possession mismanagement is relative to outcomes of dealing with negative emotions and emotional discomfort: isolation. Since hoarders have a reduced threshold to deal with negative emotions, a consequence of avoidant behavior *away* from these negative emotions may result in isolation tendencies. Avoidant behavior may serve as a catalyst towards social isolation commonly found in hoarding disorder (Timpano et al., 2014; Medley et al., 2013). Distress in terms of social isolation and loneliness is a possible outcome of hoarding disorder (Gilliam & Tolin, 2010). Possession mismanagement in the home was found to have a negative impact on resident's

emotionality in terms of isolating behavior tendencies (Thornock, Nelson, Robinson & Hart, 2013).

Summary. In review, clutter may be coupled with other symptomatic components listed in hoarding disorder diagnosis criterion, but with lower severity of concerns. Possession mismanagement, (regardless if in mild, moderate, or severe state) has both psychological and environmental impact. Cluttered living spaces may cause distress and other negative outcomes without meeting the full diagnosis criteria for hoarding. Excessive acquisition resulting in home space clutter share similarities with hoarding disorder. However, the main difference centers around the level of clinical distress, comorbidity of other psychopathologies, and present health hazards. For instance, hoarding includes intense compulsive acquisition behavior, which may become severely problematic in terms of sanitation and difficulties with daily living activities. General clutter within a home, and hoarding, are similar in aspects such as possession mismanagement resulting in clutter, and possession attachment resulting in the difficulty to part with possessions.

Although there are similarities regarding possession mismanagement between cluttering behavior and diagnosed hoarding disorder, significantly more published research focuses on hoarding disorder, than chronic disorganization. Therefore, growing research continues to explore similarities other than the root connection of possession mismanagement. The opportunity for better understanding of the lived experience of persons who do not meet the full criteria for hoarding disorder, but still have clutter tendencies, may be beneficial in terms of support and services. When a particular type of maladaptive behavior is not

classified as a mental disorder, (but that behavior may be coupled with other unhealthy factors) it is appropriate to evaluate what other parallels may be present in terms of outcomes. Not meeting all criterion for a clinical diagnosis should not dismiss the psychological adjustment importance of the less severe levels of maladaptive behavior.

Current Possession-Clutter Scales

It is important to note similarities of cluttering tendencies and clinical hoarding in the sense that cluttering behavior is present in both basic possession clutter tendencies, and more extreme hoarding disorder. Research measures have been plentiful for hoarding tendencies, as this behavior has been heavily researched and included in the DSM for decades in various forms of representation. Oftentimes hoarding specific measures can be related to those that clutter, since the behavior of cluttering and acquiring possessions are also found within those that have hoarding disorder, not just those that have clutter (with no diagnosed hoarding disorder). Some commonly used research measures specific to hoarding disorder situations include the *Activities of Daily Living in Hoarding Scale* (Frost et al., 2013), and the *Compulsive Acquisition Scale* (Frost et al., 2007). In addition, the *Clutter Hoarding Scale* developed from The Institute for Challenging Disorganization (Roster et al., 2016) has also been used to assess certain client living situations of hoarding.

Though, in regard to cluttering behavior and possession acquisition problems in home, past literature includes some measurement options of scales used to assess clutter present in the home, as well as the behavior of accumulating clutter. One measure, *Clutter Image Rating* (CIR) prompts a person to self-

identify how similar their living environment visually compares to various provided images representing different examples of clutter levels (Frost et al., 2008). The CIR measure is helpful when the person has an awareness (meaning not in denial about their situation) of their clutter tendencies, and can accurately self-report their clutter. The CIR does not capture the person's attitudes, behavior, or life impact due to their clutter level in home.

The *Savings Inventory-Revised* (SI-R) has been used specifically for measure of acquisition behavior (Frost et al., 2004). In the SI-R measure, individuals self-report on their levels of clutter severity, if they have difficulty getting rid of their possessions, and their viewpoint of personal possession acquirement. The SI-R does not capture how the person feels about their clutter or any emotional reaction, any cognitive impacts their clutter may have on them, and does not capture what life impact the clutter may have on the individual.

Another example is the *Saving Cognition Inventory* (SCI) and is a measure developed to capture emotional attachment with possessions, along with an attempt to capture cognitive related impacts from clutter, such as memory (Steketee et al., 2003). The SCI does delve into investigating the beliefs about possessions, as well as the emotional attachment one may have with their possessions. This avenue of exploration is similar to where the research gap is, but only captures part of the puzzle focusing on emotions in terms of possessions. The SCI does not further capture what life impacts in daily living or lifestyle clutter may have on individuals, or the physical or cognitive impairments that may be present in that living situation because of the clutter.

Last noted for types of current scales currently used to assess clutter is the *Environmental Cleanliness and Clutter Scale (ESSC)*. Halliday and Snowdon (2009) developed The ECCS for one of the most extreme types of situation to assess: domestic squalor. Squalor is defined as an extreme living condition of dirt, filth, posing a hazard to those living within the environment and those that enter the living spaces (Snowdon et al., 2012). The ECCS has been tested with co-reliability between observers for validity in an attempt to modify previous unpublished scales and streamline how squalor living environments are assessed by professionals. This extreme domestic living environment may also include the traces of vermin and excrement, being an extreme health hazard to people, animals, and the environment.

Although squalor is a severe condition in comparison to basic cluttering and disorganization situations described within the other scales of CIR, the SI-R, and the SCI, The ECCS does still attempt to capture the extent of clutter within the home living space. It is important to highlight this scale as it does require the observer to report the “reduced accessibility due to clutter,” and the opinion of “accumulated items having little or no value.” The remaining items include room by room review for cleanliness, usability, and healthy use of the space.

While The CIR, The SI-R, The SCI, and The ECCS are examples of valid and reliable measures attempting to capture the extent of clutter in domestic settings, they do not necessarily address an in depth understanding about the tendencies or attitudes of cluttering, and instead more so focus on if clutter is present and to what extent. In addition, these scales do not fully capture how clutter may impact lifestyle, or other possible impairments that may be present

because of in home clutter, with the exception being The ECCS reviewing the safety of the home living condition due to health hazards present.

Clutter Quality of Life Scale

To answer this need for a self-assessment scale that captured insight on a more inclusive life impact of clutter, the *Institute for Challenging Disorganization* (formerly the National Study Group on Chronic Disorganization) created and published a scientifically valid self-assessment measure with the leading members of the organization. The particular measure, *Clutter Quality of Life Scale*, explores the emotional, social, and individual consequences that clutter may have on a person within their household setting. It is also used to capture any possible impact that clutter may have on a person's well-being and usability of home living spaces. The Clutter Quality of Life Scale furthers the narrative and explorative research of personal differences in regard to possession clutter through a factor analysis. Roster et al. (2016) found three subscales identified within the 11 items surrounding the social, emotional, and physical impacts of cluttered living spaces. Each subscale includes annotation and example of maladaptive behaviors or negative consequences due to the personal clutter, showcasing the various impacts clutter may.

Negative perceptions of one's accumulation of things may be experienced through different emotional responses. Reactions to personal clutter include a wide variety: shame, guilt, and anger are commonly expressed in people dealing with hoarding specific problems (Timpano et al., 2014). Frustration may stem from the shame or guilt because of self-blame (if there is awareness of the clutter problem) asking oneself, "*why am I unable to keep my possessions organized?*"

or “*what am I supposed to do with all this stuff?*” Feeling overwhelmed or unhappy because of having too many possessions may promote the development of negative feelings about the self, the home, and the cluttered possessions in general. Emotions connected with personal clutter may also derive from the stereotypes around being disorganized or the inability to manage personal possessions, since these characteristics are more commonly understood by the general public within hoarding behavior. Having a problem with household clutter is not equivalent to diagnosable hoarding disorder, the general population may be more familiar with what hoarding. They may then attribute the same attitudes towards those that clutter as they do hoarders because the differences between the two are not apparent to lay persons. The general public may be more familiar with the term or situation of hoarding because of media, such as popular television show “Hoarders.”

Preconceived notions around maladaptive or abnormal behavior regarding possessions, coupled with the misunderstanding of what hoarding is and is not may leave people to question “*why can't they just clean up?*” or “*why can't they just get rid of their stuff?*” because they may be unfamiliar with the different situations. Before hoarding type behavior was recognized earlier in the DSM with obsessive-compulsive disorder, it was historically misunderstood. This includes falsehoods about control, where it was believed people could take control of the problem situation, when in reality the hoarding type condition was due to mental health issues. For example, hoarding was a misjudged situation that the person/household was earlier stigmatized with laziness, being dirty, or being crazy before mental health was a somewhat understood issue in society. Even

though research has somewhat progressed to understand the maladaptive behaviors of acquisition, misinterpretations are still present. In overview of the many problematic outcomes clutter may bring to someone's life, understanding what possible role clutter may have in terms of satisfaction with life is crucial to the research literature.

Satisfaction with Life Scale

Sense of well-being and happiness with life in general may take different subjective forms. Diener, Emmons, Larsen, and Griffin's (1985) concept of *Satisfaction with Life* attempts to capture respondent's reported opinion of their current existing well-being in a Likert-type scale. Perception of the self and how life satisfaction is captured in the scale with the benefit of being of use for all population demographics, (Diener et al., 1985; Diener, Suh, Lucas & Smith, 1999; Diener, 2000).

The concept of satisfaction with life, and general wellness may then be connected to living environment. Furthermore, if the living environment includes household clutter than negatively impacts the person, there may be low reporting of satisfaction with life. *Include hoarding disorder literature in conjunction with wellness, satisfaction of life reporting, and also a brief connection of subjective well-being.* Mental strain may be endured in a cluttered living area, and it may be predicted that it will also cause strain to a person's wellness.

Self-Extension Tendency Scale

Objects in the home living space often provide some insight on the individual because the objects may be a reflection of who they are, their personality, and what they represent the person's interests, hobbies, or personal

history. Possessions in home living spaces often represent elements of personal style or personal items that reflect an identity, such as religion. The extent of why possessions become important vary, as well as how a person may be connected to the object. Some items may matter very little, whereas some items are actually really important to the person. Experiences can shape who we are and who we have been in the past, especially when a memory is assigned to an object that resonates who we are as a person. Something as insignificant as a rock taken home from the river to signify the representation of a family trip will elicit the emotions and memory of the vacation. The consideration of possessions being connected to one's own sense of self outlines the understanding of how we may be emotionally attached to our possessions, such in the case of emotional reaction when personal items are damaged, stolen, or lost (Belk, 1988; Belk 1989).

Understanding the degree to which the self is represented through possessions may provide insight on the emotions attached to objects (especially as related to clutter). *Self-Extension Tendency* is a construct essentially exploring how we extend our identity into our possessions as we identify parts of our self within the object. This concept of viewing parts of the self within objects in a person's possession, as an attempt to capture objectively how much individuals identify themselves with objects they have in their possession (Ferraro, Escalas & Bettman, 2011). A valid and reliable measure, *Object Reflection of Self*, was developed to ascertain identity of a person and how much they see themselves in their possessions (Ferraro et al., 2011). Personal possessions are a central aspect of life and a source of personal identity.

The extent of which a person identifies with their objects in their surroundings might suggest how a person may react to having too many things *in* their immediate surrounding of home living spaces. This may become a problem when the focus of items contributes to the self-identity. Persons who are aware of their self-identified objects or attachment to objects may view their clutter differently than those individuals that do not resonate with their possessions. However person's with low levels of extending their self-identity to objects may be less likely to engage in negative feelings about having too many possessions because they shift focus away from objects. A deficit may be present for the exploration of emotionality related to clutter applied self-identity application to clutter tendencies.

Rationale

The present study investigated the behaviors, tendencies, and emotional indicators relative to clutter (CQLS), and self-extension through objects (SET). Clutter and self-extension may provide insight on life satisfaction (SWL) with *emerging adults*. Emerging adults refers to a population of people aged 20 to 30 (Arnett, 2007). Everyone to some extent has personal possessions, and therefore it is noteworthy to explore possible impacts on well-being and life satisfaction regarding possessions, provided the previous research in possession mismanagement.

Exploring possible outcomes of having an overabundance of possessions is a beneficial, considering the large awareness of hoarding disorder in mental health research and clutter being part of the overall hoarding diagnosis. However,

although the literature is heavy in research regarding hoarding disorder, what about the consequences to for those that who are non-hoarders that clutter?

In sum, evidence of negative outcomes related to hoarding disorder are established within the literature. However, what about the outcomes of object accumulation contributing to household clutter when behavior, beliefs, and attitudes exhibited *do not* meet criteria for hoarding disorder?

Statement of Hypotheses

Hypothesis 1:

Clutter tendencies will significantly predict life satisfaction among emerging adults.

Hypothesis 2:

The perception of the self as an extension of one's possession will significantly predict life satisfaction among emerging adults.

Research Question:

Is there a difference in reported satisfaction with life change within emerging adults for the youngest (18 years old) versus the oldest (29 years old)?

Method

Participants

A sample of 345 undergraduate psychology students responded to an online survey. However, a disproportionate missing data of participants who did not complete majority of each psychometric scale used for hypothesis testing were removed. The final sample used for statistical reporting was 60 participants (Female $n = 44$, 73.3%; Male $n = 15$, 25%; Transgender $n = 1$, 1.7%). These participants attended a Midwestern, Catholic University. All participants were of the age of 18 years to age 29 ($M = 20.91$, $SD = 2.81$). Most students ($n = 40$) reported they attended the university since the beginning of their collegiate career as an incoming freshman.

Majority of participants (51.7%) reported they were in the first two years of college. In terms of ethnic/racial identity, 36 (60%) participants self-identified as European-American, 10 (16.7%) as Hispanic/Latino students, 6 (10%) as Bi-racial, 4 (6.7%) as Black/African American, and 4 (6.7%) identifying as Asian/Pacific Islander. Participants self-identified their religious affiliation as mostly Christian ($n = 33$, 55%), followed by 12 Agnostic (20%), not currently holding a worldview or religion/none at 10 students (16.6%), five as Atheist (8.3%), four reporting of Islamic faith (6.7%), three reported as being Spiritual with no title (5%), two Judaism (3.3%), and one Hinduism (1.7%).

The length of time participants reported living in their current residency ranged from less than a year to over two decades ($M = 10.02$ years, $SD = 7.992$ years). Fifteen participants (25%) lived in their current living space for a year or less, eight reported 2-5 years (13.3%), 10 reported living there for 6-10 years

(16.7%), 20 reported 11-20 years (33.3%) and four reported living in their current living space for over 21 years (6.7%). The highest reported current dwelling type was a detached single-family house ($n = 23$, 38.3%) or apartment ($n = 23$, 38.3%). Also, 12 students (20%) reported living in Campus Housing and two (3.3%) reported Townhouse/Condo. When asked about the type of residential community participants grew up in, most students ($n = 44$, 73.3%) reported growing up in a suburban community, while 15 (25%) students reported urban, and one responded rural/farming (1.7%).

Psychometric Measures

Clutter Quality of Life Scale. Participants responded to the 11-item *Clutter Quality of Life Scale* which explores an individual's emotionality, attitudes, and usability of home spaces regarding home-based clutter (Roster et al., 2016). Participants responded to items on their tendencies, perception, and attitudes pertaining to personal clutter in a living space. Sample items such as “*I feel guilty when I think about the clutter in my home*” and “*I feel depressed by the clutter in my home,*” were each rated on a 7-point Likert-type scale, (1 = *strongly disagree*, 7 = *strongly agree*). See Appendix A for the full scale.

The *Clutter Quality of Life Scale* is a valid and reliable measure used by the Institute for Challenging Disorganization's professional members who are leading professionals in the field: professional organizers certified to work with individuals with ADD, ADHD, chronic disorganization, and individuals who hoard (Roster, et al., 2016; Roster, 2015). The current study reported an internal consistency Cronbach alpha level of 0.94.

Self-Extension Tendency Scale. The *Self-Extension Tendency* inventory was developed from Ferraro et al., (2010) derived from Sprott and Spangenberg's (2009) Brand Engagement in Self-Concept Scale. Self-extension tendency investigates the extent, in percentage, how participants view the relationship between themselves and their possessions, as one's possessions are a central aspect of life. The main source of personal identity and possessions derived from Belk's (1988, 1989) early research on possessions and extension of the self. This eight item scale asked participants to respond to items by moving a cursor along a bar to indicate a numeric percentage value between zero and 100, (0 = *not at all true about me*, 100 = *completely true about me*). Sample statements such as "*Part of me is defined by the special possessions in my life,*" and "*My favorite possessions are an important indication of who I am*" are items that participants responded to. Refer to Appendix B for the full scale.

The total eight items are averaged to find the final value score of participant's responses. Low scores (minimum possible score = 0) reflect a low tendency with identifying relationships between participants and their possessions. Higher scores (maximum possible score = 800) indicate a person's higher tendency to view their possessions and self-link. The higher the mean of the individual's response reflects higher percentages reported throughout the measure. Ferraro et al., (2010) reported a Cronbach alpha level of 0.92, suggesting good scale reliability. The current study reported an internal consistency Cronbach alpha level of 0.95.

Satisfaction with Life Scale. Diener et al., (1985) *Satisfaction with Life Scale*, a 5-item scale capturing an individual's satisfaction with their life through

a variety of statements, also was included for analyses. Participants responded (1 = *strongly disagree*, 7 = *strongly agree*) to five statements. Sample items such as “*In most ways my life is close to my ideal*” and “*I am satisfied with my life*” are included in this measure. Participant scores can range from overall *extremely dissatisfied* with a sum of 5, and to overall *extremely satisfied* with a total score of 35. Scores of each item are then added for overall score. A Cronbach alpha level of 0.87 was reported (Diener et al., 1985). The current study reported an internal consistency Cronbach alpha level of 0.85. See Appendix C for all items.

Procedure

Recruitment. All participants were enrolled undergraduate college students invited to participate through the university’s human participant pool for online research studies. Specifically, students enrolled in introductory psychology courses volunteered to participate in the online survey by accessing the web-based survey. They accessed this through their personal login credentials for SONA System, a participant pool management website. SONA allowed students to view survey information and sign up to participate in research studies of their choice. After participants created their personal account, they were able to select and then view a brief description explaining the purpose of the study, since this was not publicly available to access (see Appendix F for full description of study presented to participant SONA dashboard). Participants were not excluded based on race, religious identity, gender identity, or any other demographic question.

Data collection. All data was collected through the web-based survey software Qualtrics. After selecting the unique web link accessed through SONA, student participants first were presented with the research study’s statement of

purpose, item response confidentiality, and consent form to indicate their participation was voluntary and could be discontinued at any time (see Adult Consent to Participate in Research Form in Appendix G).

After agreeing to the consent statement, participants completed a set of measures that took approximately 45 minutes. These valid and reliable measures explored the respondent's clutter tendencies, emotions, self-identity, satisfaction with their life, and self-identity through possessions (see specific psychometrics scales in above section). Participants also completed brief demographic questions (for demographic questions included in the survey, please see Appendix D). After students submitted their responses, they were directed to a separate Qualtrics survey. Here, participants were prompted to enter their unique SONA identification number in order to receive one hour of research credit.

An original data set of 345 students was collected. However, because of high levels of missing data, only 60 usable cases completed all three target measure used in this study. Inclusion to the final data set of 60 participants was determined by whether a person responded to at least half of the items within all three measures from the original model (Clutter Quality of Life Scale, Self-Extension Tendency Scale, and Satisfaction of Life Scale). Sample Means Substitution was then applied for missing values.

Results

This study investigated possible impacts of attitude and behavior towards cluttering on beliefs of life satisfaction. The current study identified the effect of self-identity placed within personal possession on attitude and behavior towards cluttering. Additionally, this research study investigated differences in reported satisfaction with life and participant's reported age.

Preliminary Analyses

In order to investigate possible relationships between selected scales, correlations were ran between Clutter Quality of Life ($M = 43.06$, $SD = 22.24$), Satisfaction with Life ($M = 23.27$, $SD = 6.08$), and Self-Extension Tendency ($M = 398.26$, $SD = 204.45$). No significant correlations were found to report (see Table 1).

Table 1

Correlations between selected scales in proposed hypotheses models.

Scale	1	2	3
1. Satisfaction with Life	[0.85]	-.099	-.166
2. Clutter Quality of Life		[0.94]	-.074
3. Self-Extension Tendency			[0.95]

Note: $p < .05$, $p < .001$

N=60

[Author Alpha]

Hypothesis Testing

Hypothesis I: Clutter tendencies will significantly predict life satisfaction among emerging adults.

It was predicted that participant's Clutter Quality of Life reporting would significantly predict their Satisfaction with Life. To investigate satisfaction with life reported by participants, a regression analysis was run. Clutter attitude and behavior tendencies was represented in the original model as being a possible significant predictor of participant's reported satisfaction with life. It was found that reported clutter attitude and behavior tendencies was not a significant predictor of life satisfaction, $F(1,58) = 1.636, p > .05$, with an R^2 of .027.

Hypothesis II: The perception of the self as an extension of one's possession will significantly predict life satisfaction among emerging adults.

It was predicted that participant's Self-Extension Tendency reporting would significantly predict their Satisfaction with Life. To investigate satisfaction with life reporting, a regression analysis was run as perception of the self as an extension of one's possessions being a possible significant predictor of satisfaction with life. It was found that perception of the self as an extension of one's possessions was not a significant predictor of life satisfaction, $F(1,58) = .571, p > .05$, with an R^2 of .010.

Research Question

Is there a difference in reported satisfaction with life within the current sample's youngest (18 years old) to the oldest (29 years old)?

Mean comparison for reported satisfaction with life was compared by age from the current data sample. It was found that individuals at 18 years old reported higher satisfaction with life ($M = 25.17$, $SD = 5.64$), compared to individuals at 29 years old ($M = 20.75$, $SD = 8.02$).

Table 2

Mean Sum Scales Between Younger and Older Participants.

Scale	<i>Younger</i> 18 Years Old <i>n = 49</i>		<i>Older</i> 29 Years Old <i>n = 11</i>	
	M	SD	M	SD
1. Satisfaction with Life	25.17	5.64	20.75	8.02
2. Clutter Quality of Life	25.67	11.01	50.25	14.97
3. Self-Extension Tendency	462.34	266.15	499.75	151.16

**Note M and SD to represent mean and standard deviation*

Discussion

The goal of this study was to explore reported life satisfaction predicted from reported cluttering behavior tendency among emerging adult women and men. The current study also explored the outcome of life satisfaction contingent on reported extent of self-identification with personal belongings. Possible age differences within young adult group in reported life satisfaction also was investigated.

Hypothesis 1

It was predicted that clutter attitude and behavior tendencies would significantly predict reported life satisfaction, by a sample of emerging adults. However, the hypothesis was not supported and no significance was found. This finding was interesting, as cluttered environments may elicit anxious and upsetting emotions. It is established in the hoarding disorder literature that the overwhelming presence of clutter may contribute to negative emotional outcomes (Frost et al., 2007; Medley et al., 2013; Timpano et al., 2014). However, perception of clutter may impact outcomes. If cluttered living spaces do exist in the home, a person's perception of their home clutter may or may not be personally bothersome. Some people may view their clutter as problematic and distressing, while other people may not experience negative outcomes.

Results of the present study may be attributed to the possibility that clutter may not exist in some people's homes, meaning a person has no need to engage in overabundance within their living spaces. To compare, Crum and Ferrari (2019) found that within an adult sample, (n=1,394) reported clutter behaviors and attitudes mediated a relationship found with satisfaction with life and

psychological sense of home. Here, this may suggest a larger role that cluttering tendencies and attitudes may contribute when individuals advance from the emerging adult section of their life, into later life. The age range in Crum and Ferrari (2019) was 21 to 81 (M age =50.33), while the current study's mean age was 20. Further, Ferrari and Roster (2018) reviewed contributing factors that may impact cluttering tendencies and behaviors in a span of three different samples ranging in college, younger, and older adults. In that study it was found that clutter may negatively impact a person's satisfaction with life, especially as age increases. This is a similar finding to the current study's research question to review how satisfaction with life may differ in comparison to youngest and older.

Hypothesis 2

It was predicted that the perception of the self as an extension of one's personal possessions would significantly predict reported life satisfaction among an emerging adult sample. The data from the present study did not support this hypothesis.

In regards to possessions and identify, the way people orient differently with their environment may contribute to the lack of significant results found for Hypothesis 2. Self-extension tendency, or how much of our personal identity do we extend into our personal items, is rooted in "things" (Ferraro et al., 2011). The extent to which a person orients with objects in their surroundings may suggest how a person reacts to having too many things in their immediate surroundings (i.e., home living space). Graziano, Habashi, and Woodcock (2011) proposed a psychological concept focused on how individual interacted with their surrounding environments. Graziano et al., (2011) suggested some people may be

more “thing orientated” (may be more so inclined towards the objects in their environment), where as others may be more “person oriented” suggesting more focus towards people in a given environment. This concept suggests people may concentrate their attention in different ways in an environment. Perhaps then, some individuals may exhibit of extension of the self towards objects, because they are more “thing oriented.”

The concepts of how people orient with their surroundings may provide insight of how individuals engage with their possessions, and how exposure to possession mismanagement may or may not alter satisfaction with life attitudes. Attitudes towards personal clutter in the home may vary from person to person due to the perception of their clutter, and how attached they may feel to it (or their level of “extent of self”). Humans relate to the objects surrounding us in our lives differently based on attachment or sentimental feelings. Minimalistic trends, and large reduction of possessions may also attribute to life satisfaction not being predicted by the extension of the self through possessions.

Research Question

The research question from the present study inquires if any age differences within the emerging adult sample might be reported on life satisfaction. There was a reported difference in comparison to the youngest and oldest participant in the sample (youngest participant had higher satisfaction with life, whereas oldest participant had a lower reported satisfaction with life score). This difference may be attributed to general life span awareness as a person ages, or transitions during emerging adulthood phase of life.

The emerging adult population in general is established particularly within the 20's, which includes the quarter life crisis that has been a reported phenomenon. Here, instead of a midlife crisis, the individual struggles to identify meaning, purpose, or identity within their career as they approach their 30's. Reported life satisfaction was lower in the highest ages, which may be attributed to existential dread, nihilism, or awareness of death.

Limitations

A few reasons may contribute to the limitations of this particular study. One limitation may be the sample data was incomplete for the selected scales, resulting in only 60 cases (approximately 17% of total cases gathered) being used in the hypothesis testing, and to explore the research question. Also, emerging adult population in general is a transition time for many people, especially college students (Arnett, 2007). Living arrangements may change academic year to academic year, impacting the 1) amount of belongings they are able to take with them, 2) total living space available to exercise cluttering behavior tendencies. Some students may be commuting from their childhood homes, whereas others may live in campus housing or homeless while attending college. To further this notion, age differences (emerging adult compared to older age adult) may impact the findings as adults are oftentimes more settled in one space and can afford larger spaces where possessions may accumulate. Older adults in midlife may be more likely to have both an established career and home living environment.

Future Research

The current study provides ideas for future research focusing specifically on the emerging adult population and their cluttering behavior and their

possession management (perhaps both attending and not attending college).

Although significant findings were not present for the hypotheses, the findings may suggest a need for a larger sample. The current student furthers the curiosity of the major life stage differences of emerging adults on the way they may live and interact with possessions, establish their identities, and their outlooks on life, comparative to other life stage populations (mid-life, late life, etc).

Learning about possession management (inclusive of both hoarding and non-hoarding specific situations), is a helpful life skill. Furthering possession management research may help foster educational skill building at early ages that work towards reducing clutter early in life, teaching and maintaining organization in the home, and developing practices to address the individual's distress that may be present because of clutter. Organization and possession management skills are usually introduced (if not already learned in the home) in an education setting for basic tidiness of a classroom. Most educational curriculum does not integrate the skills of how to organize belongings at home, or how to manage personal items. Instead, orderly skills specific to the classroom are taught as expectations by educators for material organization, such as books or backpacks. These classroom specific skills taught are exclusive to the focus of regulated academic mandated curriculum that educators are responsible for, usually for standardized state testing preparation. As children age through the education system, there may be little or no opportunity to learn what healthy behavior may look like in terms of possession organization or management. Learning behavior both in childhood and as emerging adults, the lived experience and education may have an impact in terms of possession management and organization.

Clutter behavior tendencies are important to research in depth outside of the bracket of designated hoarding disorder because support, assistance, and resources are may be helpful to those in need of solutions especially if chronic disorganization is also present. While the act of cluttering is not recognized as its own independent mental health disorder at this time, it is helpful to review that clutter behavior is included in hoarding disorder diagnosis criteria. Specifically, traces of cluttering behavior are found among the criteria of the psychological health condition: hoarding disorder

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Appendix A

Sample measure of the Clutter Quality of Life Scale items (Roster, Ferrari, & Jurak, 2016).

1. I have to move things in order to accomplish tasks in my home.
2. I avoid having people come to my home because of the clutter.
3. I don't get to use spaces in my home the way I would like to because of clutter.
4. My family life has suffered as a result of the clutter in my home.
5. I feel overwhelmed by the clutter in my home.
6. I'm worried about the amount of clutter in my home.
7. I can't find things when I need them because of the clutter.
8. I feel guilty when I think about the clutter in my home.
9. I have neglected taking care of things that need to be done in my home because of the clutter.
10. I don't have family members over as much as I would like because of the clutter in my home.
11. I feel depressed by the clutter in my home.

Appendix B

Eight sample measure of the Self-Extension Tendency Scale items (citation).

1. I have a special bond with my possessions.
2. I consider my favorite possessions to be part of myself.
3. I often feel a personal connection between my special possessions and me.
4. Part of me is defined by the special possessions in my life.
5. I feel as if I have a close personal connection with the possessions I most prefer.
6. I can identify with important possessions in my life.
7. There are links between my special possessions and how I view myself.
8. My favorite possessions are an important indication of who I am.

Appendix C

Five items of the Satisfaction with Life Scale (citation).

1. In most ways my life is close to ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in my life.
5. If I could live my life over, I would change almost nothing.

Appendix D

Sample of demographic question items within survey.

Please indicate your gender.

How old are you? Please tell us in years.

What is your year in school?

Transferred?

What year did you transfer?

What is your race/ethnicity? (Please select all that apply).

Regarding your current worldview, with which of the following descriptors do you most closely identify.

What type of residential community did you grow up in?

What type of community location did you grow up in?

How many years have you resided in your current community?

Which of the following best describes the type of dwelling in which you currently reside? Please select one.

Appendix E

Criterion for Hoarding Disorder as found in the DSM-5.

- (A) Persistent difficulty discarding or parting with possessions, regardless of their actual value.
- (B) This difficulty is due to a perceived need to save the items and to distress associated with discarding them.
- (C) The difficulty discarding possessions results in the accumulation of possessions that congest and clutter active living areas and substantially compromises their intended use. If living areas are uncluttered, it is only because of the interventions of third parties (such as family members, cleaners, authorities).
- (D) The hoarding causes clinically significant distress or impairment in social, occupational, or other areas of functioning (includes maintaining a safe environment for self and others).
- (E) The hoarding is not attributable to another medical condition such as brain injury, cerebrovascular disease, or Prader-Willi syndrome).
- (F) The hoarding is not better explained by the symptoms of another mental disorder such as obsessions in obsessive compulsive disorder, decreased energy from major depressive disorder, delusions from schizophrenia, cognitive deficits in major neurocognitive disorders, etc).

Appendix F

Brief information on the study that students viewed on SONA System.

Study Name	*HOME*
Description	We are conducting a exploring individual differences in the beliefs, expectancies, and opinions about home. If you agree to be in this study, you will be asked to fill out an anonymous, on-line questionnaire that should take about 45 minutes or less of your time. Please complete the study when you sign up for it, and have your ID number ready. You will receive credit after the participation deadline has ended.
Web Study	This is an online study. Participants are not given the study URL until after they sign up.

Appendix G

A Sample of Adult Consent to Participate in Research Form that was provided to all participants prior to participating in the research study.

ADULT CONSENT TO PARTICIPATE IN RESEARCH

HOME: Beliefs and Opinions

Principal Investigator: Joseph R. Ferrari, Ph.D., Vincent DePaul Distinguished Professor of Psychology

Institution: DePaul University, USA

In Collaboration With: Juline Girts, a Master's Candidate in General Psychology.

What is the purpose of this research?

We are asking you to be in a research study because we are trying to learn more about individual differences in beliefs, expectancies, and opinions about psychological sense of home. This study is being conducted by Joe Ferrari, Ph.D., and Juline Girts, a graduate student, at DePaul University. There may be other people on the research team assisting with the study.

We hope to include about 800 people in the research.

Why are you being asked to be in the research?

You are invited to participate in this study because you have been identified as an undergraduate student at DePaul University through the psychology participant pool. You must be age 18 or older to be in this study. This study is not approved for the enrollment of people under the age of 18.

What is involved in being in the research study?

If you agree to be in this study, being in the research involves filling out surveys with questions about your beliefs, expectancies, and attitudes about home, as well as a few basic demographic questions about you (gender, year in school, etc.). If there is a question you do not want to answer, you may skip it.

How much time will this take?

This study will take about 45 minutes or less of your time. Your information will be anonymous, and our survey will not record your IP address.

Are there any risks involved in participating in this study?

Being in this study does not involve any risks other than what you would encounter in daily life. You may feel uncomfortable or embarrassed about answering certain questions. You do not have to answer any question you do not want to. There is the possibility that others may find out what you have said, but we have put protections in place to prevent this from happening.

Your information will be anonymous, and our survey will not record your IP address.

Are there any benefits to participating in this study?

You will not personally benefit from being in this study.

Is there any kind of payment, reimbursement or credit for being in this study?

You will be given a 1 hour credit for your participation in the research if you fully complete the survey. If you withdraw early from the survey, you will not receive credit. After you have completed the survey, you will be taken to a separate page where you will enter your psychology subject pool number so that you can get credit for being in the study. The number will not be directly linked to your survey responses.

Can you decide not to participate?

Your participation is voluntary, which means you can choose not to participate. There will be no negative consequences if you decide not to participate or change your mind later after you begin the study. You can withdraw your participation at any time prior to submitting your survey. If you change your mind later while answering the survey, you may simply exit the survey. Once you submit your responses, we will be unable to remove your data later from the study because all data is anonymous and we will not know which data belongs to you. Your decision whether or not to be in the research will not affect your grades at DePaul University.

Who will see my study information and how will the confidentiality of the information collected for the research be protected?

The research records will be kept and stored securely. Your information will be combined with information from other people taking part in the study. When we write about the study or publish a paper to share the research with other researchers, we will write about the combined information we have gathered. We will not include your name or any information that will directly identify you. We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. However, some people might review or copy our records that may identify you in order to make sure we are following the required rules, laws, and regulations. For example, the DePaul University Institutional Review Board may review your information. If they look at our records, they will keep your information confidential.

Who should be contacted for more information about the research?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study or you want to get additional information or provide input about this research, you can contact the researchers, Joseph R. Ferrari, Ph.D., jferrari@depaul.edu, Phone: (773) 325-4244, or Juline Girts jgirts@depaul.edu.

This research has been reviewed and approved by the DePaul Institutional Review Board (IRB). If you have questions about your rights as a research subject you may contact Susan

Loess-Perez, DePaul University's Director of Research Compliance, in the Office of Research Services at 312-362-7593 or by email at sloesspe@depaul.edu.

You may also contact DePaul's Office of Research Services if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.

You may print this information for your records.

Statement of Consent:

I have read the above information. I understand the purpose of the study as well as the risks and benefits of my participation.

Please click on the first box if you consent to be in the study.

If you do not consent to be in the study, just click the last box.

I consent to be in this study, please take me to the survey

I **DO NOT** consent to be in this study please do not take me to the survey