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Self-control in old age: A grounded theory study

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Abstract

Background: Self-control is associated with multiple positive outcomes. There are several studies on self-control, yet no literature describing the mechanism of self-control in old age.

Objective: This study aims to develop a substantive theory on the exercise of self-control in old age.

Methods: Grounded Theory methodology developed by Glaser & Strauss was utilized in the conduct of this study with ten (10) older adults as participants following the set of inclusion and exclusion criteria. Individual in-depth interviews of 30-45 minutes were observed to gather the needed verbatim narrative responses from each participant after careful consideration of the ethical procedures approved by the University research ethics board. Major themes with their respective sub-themes were generated after rigorous analysis of the participants' responses following the steps provided by Glaser & Strauss in conducting grounded theory studies.

Results: This study resulted in the formulation of three propositions such as: (1) Older adults exercise self-control differently, (2) several personal motivations are involved in the exercise of self-control, and (3) the exercise of self-control leads to life satisfaction. From the propositions emerged the Theory of Self-control in Old age, which states that the process of self-control encompasses the human capability of exercising self-restraint to overrun different types of desires, passions, and temptations. The theory posits that older adults vary in their exercise of self-control depending upon their personal motivations. The theory also assumes that the exercise of self-control results in life satisfaction as displaying self-control is attributed to a host of positive life outcomes.

Conclusion: The present study has important implications in the field of gerontology and health care services since the older population is growing, and so does the demand for health care services. The need to understand the choices and decisions of older adult clients is fundamental in individualizing the health care services that may be designed and provided for them.

Keywords

self-control; grounded theory; old age; inductive approach; nursing

In life, human beings struggle to make optimal decisions so often, which require the exertion of self-control. Self-control is crucial before making any personal decision or choice (De Ridder et al., 2012). The decisions may involve economic choices, decisions about lifestyle preferences, moral choices, and personal predilections (Baumeister et al., 2007). Self-control is mainly the restraint that people use on their desires and impulses (Baumeister, 2012). More specifically, it is the capability to overrule or override one's response. Self-control is a self-initiated practice in which the individual himself instigates the process (Duckworth et al., 2014).

Late-life is often seen as a stage where there are multiple losses in various life domains. Empirical evidence shows that a decrease in physical function and cognitive ability is prevalent in late life, attributed to the biological changes in aging (Baltes & Mayer, 2001; Sadang & Palompon, 2021; Salthouse, 1996; Schaie, 1989). Considerably, the decline of the physical function of old people as well as the older adults' mental agility is linked with the aging changes at the biological level (Baumeister & Alquist, 2009). Resultantly, there is a decrease and loss of physical and cognitive functioning. As defined in this study, self-control is a cognitive process governing one's emotions, actions, and feelings. Notably, the exercise of

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self-control involves cognitive function. The link between the cognitive decline in aging and the capacity to exercise self-control in old age remains largely unknown although this might have a bearing on the older adults' decisions affecting health, financial, social, and other life domains. Self-control is consequential; thus, this essential concept needs further investigation (Baumeister et al., 2007).

Population growth and longevity of older people mean that the health care decisions they make, the investments they focus on, and the general choices they take in life will become increasingly important to the society other than themselves (Boals et al., 2011). The exercise of self-control comes into the picture when an older adult is faced with a decision to take. The decisions to control, restrain, suppress or act out are but consequential and will affect the older adult himself and other people (Tangney et al., 2004). Remarkably, older adults display various life decisions in terms of their physical health, how they engage socially with others, in financial matters, and others (Sadang & Palompon, 2021). Varied life avenues require the demonstration of self-control. The practice, according to many researchers, yields positive outcomes (Tangney et al., 2004). Although this is common knowledge, yet many older adults come up with poor choices in terms of health practices, fail in financial management, and sometimes have a strained relationship with other people as a result of the poor exercise of self-control (De Ridder et al., 2012). This requires deeper understanding and investigation. Since the exercise of self-control is consequential, the idea of delving deeper into this concept is not only vital but relevant.

Existing literature states that self-control is an essential element for attaining one's goals, being successful in one's undertaking, and resisting one's selfish and one's potentially harmful impulses. Since desires and temptations are ever-present, there is a need to exercise self-control. Although there were studies on children's self-control in relation to their success in later life (Mischel & Ebbsen, 1970; Mischel et al., 1989), the mechanism of self-control in old age has not been well documented. Hence, the knowledge on the exercise of self-control in old age in terms of their health practices and behaviors and their social and financial dealings requires deep elaboration. The foregoing clearly shows the need to investigate the mechanism of self-control in old age to provide an elaborate description of how it is exercised in later life and its impact on the various life aspects of older adults. Hence, the purpose of this study was to generate a substantive theory of self-control among older adults in old age. The knowledge thereof will provide a succinct idea and understanding about this human quality trait which is deemed essential before making optimal life decisions.

The present study has important implications in the field of gerontology and also in health care services since the older population is growing over the past years. Hence, there is an expectation obviously of a growing demand for health care services. So, there is a need for health care professionals to understand elderly clients. The need to

understand the choices and decisions of older adult clients is fundamental in individualizing the health care services that may be designed and provided for them.

Methods

Design

The Grounded Theory method developed by Glaser and Strauss (1967) was followed in undertaking this research study with the main aim of generating a substantive theory of self-control in old age. Systematic collection of qualitative data was employed to selected participants to gather datasets by carrying out a one-on-one in-depth interview to obtain a rich description of how people in old age exercise self-control. In this research study, the participants' subjective experiences were explored to better understand their exercise of self-control in late life (Streubert & Carpenter, 2011). The purpose of Grounded Theory is to explore and describe a phenomenon in naturalistic settings. The target of Grounded Theory is to reach a conceptual theory that can explain and predict the experiences of the interview persons in relation to their life conditions (Glaser & Strauss, 1967). Moreover, an inductive approach to theory development was utilized. The process involved in this study included gathering qualitative data, analyzing the data collected, developing hypotheses and propositions, and finally generating a substantive theory (Streubert & Carpenter, 2011). The theory develops and evolves during the actual research process as an interplay between data collection and analysis ensues.

Participants

The participants were selected following inclusion criteria, which included the following: (a) willingness to participate in the research study, (b) 60 years old and above, (c) resident of Iligan City, (d) no cognitive disabilities, and (e) able to articulate and express thoughts, ideas and experiences. The cognitive level was assessed through the usage of a short portable mental questionnaire (Pfeiffer, 1975). Exclusion criteria were: (a) those who were cognitively impaired, (b) physically and psychologically frail, and (c) those who were unwilling to participate in the study.

Sampling

Theoretical sampling was employed in the study involving ten (10) older adults from Iligan City, Philippines. Theoretical sampling is the process of generating theory from the data (Glaser & Strauss, 1967). In this study, theoretical sampling was methodologically followed throughout the interview process.

Data Gathering Process

A face-to-face interview using an in-depth interview was conducted by the researcher in collecting qualitative data. The interview session was carried out within 30-45 minutes until data saturation was reached and theoretical sampling

was attained. The conversation was recorded in an audio recorder, and permission was sought to record the conversation explaining its necessity to capture every single detail of the dialogue. A semi-structured interview style was employed, and guide questions were used.

Ethical Considerations

Ethics approval of the protocol by the Cebu Normal University- Research Ethics Committee (CNU-REC) with CNU-REC code 229/2019-02 Caorong was secured as part of the research protocol. Permission and approval from the Office of the Senior Citizens Affairs (OSCA) – Iligan Chapter president was also observed prior to the conduct of this study. Each of the participants was given a copy of the informed consent duly approved by the CNU-REC. The researcher comprehensively explained the content of the informed consent in the dialect that the participant understood. After a thorough explanation and discussion, the participants were asked to sign the informed consent form. The researcher assured that participation is voluntary and that at any given rate if the study participant should wish to stop participating, it should be recognized and respected.

Analysis

After having gone through some initial analysis of the data gathered, the researcher made some notes on what key concepts needed elaboration. The research participants were then asked about the concepts that needed elaboration until key and important concepts were described, elaborated, and clarified. When there was a redundancy of the information gathered from the research participants, this signaled that there was already data saturation. Constant comparison was made by comparing the findings with the existing findings. This method was essential in constructing theoretical categories which represented the core categories or concepts of the study on self-control in old age (Streubert & Carpenter, 2011).

Grounded Theory involves several steps such as coding, memo writing, theoretical sampling, and the method of constant comparison (Glaser & Strauss, 1967). In this study, reading the qualitative data several times was done, and for chunks of data that had been gathered, labels were then made. The labels were based on the meaning that emerged from the data. After open coding one set of data, interconnections between categories and codes were created. The process is called axial coding. At this stage of the data analysis, the researcher integrated the categories identified in the axial coding process. The selection of the core categories was made by systematically relating the categories discovered. Moreover, the categories were then validated through finding existing relationships. Further development was made by filling in categories that require more refinement and development (Streubert & Carpenter, 2011).

Memo writing was an essential aspect of the coding process (Glaser & Strauss, 1967). This was initiated as soon as coding was started. It involved theorizing and

commenting about the codes. Reflections and ideas about codes and relationships between codes were made, which created the link between raw data and formal theorizing and hypothesis creation (Streubert & Carpenter, 2011). The research participants' perceptions, ideas, and experiences of self-control were explored and investigated using open ended-questions. The guide questions were primarily rooted from the main research question, which was 'how do individuals in old-age exercise self-control'. The idea was to ground the data which were systematically collected to describe self-control in old age. Moreover, probing questions or statements were used to prompt answers and explanations. Statements such as 'please elaborate or expound', 'tell me more', 'can you please clarify', 'what was the outcome', 'please, expound', 'I'd like to hear more', etc. were used.

Results and Discussion

In this section, the basic description of the participants and their self-control process are presented. Ten older adults who were residents of Iligan City were recruited to join the research. All of the older adults who participated were within the age range of 62-92 years. Fifty percent (50%) of the participants were male. Table 1 indicates the basic information of the participants.

Table 1 Participants' Profile

Code	Age	Gender	Religion	Marital status
TOM	64	Male	Islam	Married
ZEN	69	Female	Iglesia ni Cristo	Widowed
ROB	63	Male	Roman Catholic	Widowed
REM	76	Female	Roman Catholic	Widowed
DEB	64	Female	Seventh Day Adventist	Married
DAN	92	Male	Islam	Married
MAX	78	Male	Roman Catholic	Married
TEL	62	Female	Protestant	Widowed
CEL	70	Female	Islam	Separated
TED	78	Male	Roman Catholic	Married

Through constant comparative analysis, theoretical categories emerged, which were essential in the identification of the core theoretical categories which would substantiate the theory of control in old age. Four theoretical categories were formulated from the sixteen sub-categories identified about the theory of self-control in old age, namely: (1) self-introspection and assessment, (2) decision and choice of action, (3) action, reaction and conduct as an indication of self-control, and (4) outcome and impact of self-control.

Theoretical Category 1: Self-introspection and Assessment

The process of self-control is initiated by an older adult who engages personally in self-introspection and assessment. By introspection, the cognitive thought process is activated

when a situation arises. This involves self-appraisal by an older adult concerning the advent of the situation or experience. Self-introspection primarily involves examination or assessment of one's thought and emotional processes. The reflection involves looking into and considering one's experience, valuing one's moral standards, and taking into consideration the lessons gained from the past experiences.

Sub-category 1: *Involvement of thinking and assessment*

In exercising self-control, the older adults engaged the thought process through thinking and considering the next course of action or response. The display of self-control by the older adults involves not only the concept of thinking but also discerning in deep thought the possibilities and consequences of one's action or response. This stage of the process encompasses the process of assessment.

"You really have to engage in thinking. Thereafter, you can make a decision. It is really a personal decision and that you are aware that there are consequences of your choices and decision which would impact you." **ROB**

Sub-category 2: *Valuing moral standards*

This pertains to the strong influence and consideration of moral standards in self-control exercised by the older participants. As many older adults have a strong sense of spirituality, their exercise of self-control is driven by a highly personal motive of being afraid to commit sins and because of the fear of God and wanting to please Him.

"Well, the motivation for a religious person, for example, is avoidance of sin because the moment you don't control yourself, you transgress the criteria of moral... or you violate the sharia (law). That's the bottom line." **TOM**

Sub-category 3: *Knowledge and lessons gained through experience*

The learnings gained from their past experiences gave them significant reasons to avoid experiencing the same situation again, such as having experienced conflict within the family as well as suffering due to poor health choices before.

"Hypothetically, you can control, or you can tame yourself to exercise self-control. You learn from exercising it. And you develop already that kind of self-discipline. You can now internalize through yourself the virtue of discipline or the virtue of self-control how to attain self-control." **TOM**

Theoretical Category 2: *Decision and Choice of Action*

Self-control as a process involves the ability of an individual to govern one's actions, feelings, or emotions. The process also involves deciding and choosing the next course of action. The choice of action comes out after having engaged in self-introspection or assessment. The decision is as well influenced by thinking of the positive and negative consequences of the actions. Furthermore, deciding the next course of action includes the consideration of the

health-related changes as well as the current circumstance that the older adult is experiencing. The decision is also driven by outer and inner personal motives.

Sub-category 1: *Involvement of personal decision and choice*

The exercise of self-control involves decision-making and choosing the next course of action or behavior to employ. The individual himself does the exercise of self-control. Older adults view self-control as a process involving personal decisions and choices. The decision process includes weighing the pros and cons of a certain action or the negative or positive consequences of the decision before coming up with a choice on what to take and do as the next course of action.

"Self-control is a mental process. For instance, in a certain situation, I choose not to get affected since I am afraid of another (heart) attack. In such a case, I really weigh things out. For example, I would not readily react to provocations to abate a situation because it could very well lead to conflict. Self-control is a cognitive process. It is a self-initiated process."

ROB

Sub-category 2: *Thinking of the consequence of one's decision*

In the exercise of self-control, before the older adult decides what to do next, he looks at the possible consequences of his decision and his choice of action. The older adult's choice of action is in consideration of the consequences both positive and negative of one's decision and choice of action.

"Before going to America, I was actually engaged in all sorts of vices. I was involved in drinking intoxicants and gambling. I did all those vices, but when I left the country, I also left those vices. I controlled myself to leave those vices so that I would not have any problems with my family and children. My family remains intact after leaving those vices. I actually now live a comfortable life." **TED**

Sub-category 3: *Consideration of age and health-related changes*

Older adults go through several changes in cognition, emotion, physical strength, and health, among other human aspects. The decision and choice of action by the study participants were actually influenced by their current state of health as they now are keen on considering the different changes they are experiencing. Current changes in the aspect of health, for instance, had made them become motivated to demonstrate more self-control. They have changed their old practices to what now is necessary and recommended for them to do.

"I usually do physical exercises every morning for 15-20 minutes. I usually force myself to get up so that I could expose my body to the sunlight before 8 am. This is so that I would be exposed to the sunlight for Vitamin D." **REM**

Sub-category 4: *Consideration of current life circumstance*

This category reflects that older adults go through varied life circumstances. Obligations and duties do not stop with aging. Certain responsibilities and obligations by older adults need to be fulfilled and accomplished. Many older adults exercise self-control to carry through their responsibilities in life.

"If I won't control my spending and just squander my money carelessly, then for sure I will not have enough money for future use. Although I wanted to eat rice, I restrain myself because eating rice could potentially cause my sugar to rise. I am also financially incapable of affording rice for myself and my helper's consumption." **REM**

Sub-category 5: *Inner motivations of the exercise of self-control*

According to the participants, their exercise of self-control includes inner motivations. Such inner motivation included the want to avoid sin and to abide by moral standards. Fear of God also surfaced as an inner motive in self-control exercise as well as giving value to the Divine commands.

"The number one reason why I exercise self-control is because of fear to commit sin to God. I also don't like any trouble, and I don't want to experience a headache." **REM**

Sub-category 6: *Various outer motivations of the exercise of self-control*

Other than the inner motives of exercising self-control, various outer motivations of the exercise thereof were also discovered. The various outer motivations in the exercise of self-control among the study participants included wanting to maintain social relationships intact, promoting health status, and managing financial resources well for future use.

"If I would not control my spending and just squander my money carelessly, I would not have enough funds for future use. There are really times that I suffer an asthma attack. During those times, there is really a need for me to purchase my asthma medication which costs over a thousand pesos. So, I really need to have some money on those times." **REM**

Theoretical Category 3: *Action, Reaction or Conduct as Indications of Self-control*

The third theoretical category reflects the decision and choice of the individual who exercises self-control. These are manifested or indicated in his or her actions, reactions, or conduct. Under this theoretical category are sub-categories such as restraining the self from acting out, resisting temptation and passion, and suppressing inner feeling, involving struggles to control the self as well as the changing degree of self-control. The third theoretical category is supported by the following subcategories below:

Sub-category 1: *Restraining self from acting out*

This sub-category reflects the manifestation of self-restraint by an individual who exercises control in terms of his actions. By restraining himself, he is engaged in a deliberate action of his choosing. The choice of action is processed within himself taking on different considerations such as the possible consequences.

"Sometimes I get angry with my husband over minor things such as when our kitchen is messy. At home, I really like things to be in their proper places, but my husband has this habit of putting candy wrappers on my vases which I dislike. When that happens, I gently reprimand him. I now have self-restraint, but before, I usually throw things at him and sometimes even give him a smack." **DEB**

Sub-category 2: *Resisting temptation and passion*

Human beings are surrounded by different and varying types of desires, passions, and temptations. However, there are temptations and desires that need to be resisted because of the harm they could bring. This is where the exercise of self-control is needed. The exercise of self-control against the desires and passion of an individual entails struggle and effort.

"Well, of course, with the basic control is fasting. It should also be observed throughout your daily life. For example, if you can control partaking food like this one (points at the food on the table) ... learning from this virtue for your daily life, you can control not taking any food like taking any sweets, palatable food, cold drinks and all that. You can control yourself even if it is palatable or satisfying through drinking cold water. I don't even care for cold water or sweets or chocolate. I don't care for those. I just take vegetable, and I cannot even finish a cup of rice. So that is the result of fasting." **TOM**

Sub-category 3: *Suppressing inner feelings*

Expressing emotions and feelings are inherent in a man. There are constant engagements and interactions among people anytime and anywhere. The experience may often evoke the expression of feelings and emotions, yet, consequently, certain situations necessitate the exercise of self-control to keep the good social relationship going and avoid unnecessary expressions of words that may not be received well by others.

"I know how to control myself. For instance, when provoked, I am aware that I should not get angry because it could cause my blood pressure to rise. In such a case, what I do is restrain myself. When it comes to food prohibitions, I just eat a little to ease my desire. That, I think is practicing self-control." **ROB**

Sub-category 4: *The changing degrees of self-control*

This subcategory entails the varying degrees and levels of the display of self-control among older adults. There are older adult participants who had more self-control, or their level of self-control now had increased due to age. Yet, some older adults also are less able to control themselves by giving in to desires and whims. Hence the older

participants really have varying degrees or levels of self-control.

"There is actually a great impact that my self-control now has increased. For instance, before I really wanted that those who are indebted to me will really pay me back. Nowadays, I still allow other people to borrow money from me, yet I consider lending people money like an act of charity." **REM**

Sub-category 5: *Struggles in controlling self*

For older people, exercising self-control involves the element of struggle. This occurs because there are outward and inward pressures of either satisfying one's desire or refraining from doing something or acting out, which requires effort and conscientiousness.

"For example, I am not in contact with my wife, and you are still an organism (me). What is the mechanism of self-control that you are not in contact with your wife? No cohabiting. No sexual pleasure. You cannot also commit Zina (adultery) because that is haram (prohibited)...I don't look at naked bodies. If it's in front of me, I look away, and it's very hard, especially for the male. I turn away. I have interest, but I refrain. Who is not interested after all?" **TOM**

Theoretical Category 4: Outcome and Impact of Self-control

The final theoretical category encompasses the different outcomes, results, and impact of exercising self-control. Many of the older adults expressed that exercising self-control led to positive outcomes. However, there are negative outcomes as well of displaying low self-control. Additionally, the results of displaying self-control as emphasized by the older adults do not only impact other people but also relatively impact them. They even conveyed that exercising self-control made them feel happy and satisfied.

Sub-category 1: *Feeling of satisfaction and happiness*

This subcategory is the reflection of the ultimate result of exercising self-control which is the feeling of happiness and satisfaction. Several older adults who joined the study stated when asked, 'what do they feel upon exercising self-control?', that they feel happy and satisfied. This may be due to them doing actions they are so strongly motivated to act about or behave a certain way that they feel strong about, giving them happiness and satisfaction. Furthermore, not all older adults happen to have perfect self-control. There are older people who display a lesser degree of self-control given a situation. The next subcategory under this last theoretical category exhibits the consequences of not practicing control or having less self-control.

"I feel happy because I can please Allah. I can please the Lord, and Allah loves the people who exercise self-control. He loves people who renounce the world. So...you control, you fast, you renounce, you deprive yourself... that would make Allah very happy." **TOM**

Sub-category 2: *Consequences of losing control*

The results of having less or no self-control are generally linked to negative consequences such as conflicts with other people, trouble, and strained relationships with others people. These occurrences were experienced by the older adults themselves, as discovered from the in-depth interview.

"I really cannot control my self especially when it comes to reprimanding my children. I will not stop saying things until I have said what I needed to say to my children, even if it is hurtful to them. That is my weakness. I also am not able to control myself when I am angry at my spouse." **DEB**

With the establishment of the core categories supported by the identified subcategories and the participants' narrations, comes now the understanding of the process of self-control in old age. The process begins with the older adults engaging initially in what is called self-introspection followed by the act of choosing and deciding. The decision and choice of the older adults will then be reflected in their actions and conduct, which would then yield some outcome and impact.

Hypotheses Derived from the Results

The generation of the substantive theory was derived through employing the constant comparative analysis method of the qualitative data, which were systematically gathered. The analysis resulted in the identification and formulation of subcategories and theoretical categories respectively, which in turn became the basis of developing and generating the research hypotheses. The developed hypotheses showcase the relationships between variables identified which emerged from grounding the qualitative data sets. The exploration and analysis resulted in the following hypotheses:

Hypothesis 1: *Self-control is a personal decision which is self-initiated by an older adult driven by one's own personal motive*

The hypothesis identified depicts that the exercise of self-control by an older adult is self-initiated—each older adult exercises self-control differently. The driving force for the exercise and practice of self-control depends on one's own personal motives or specific personal goals. This assumption was induced from the narratives of the selected study participants. Some participants practice or exercise self-control in order to maintain good relations with other people, while others practice self-control to follow moral standards or in consideration of the health-related changes they experience.

The different personal motivations of the older adults in their exercise of self-control are highly personal. They significantly vary in their personal motivations. The personal motivations to exercise self-control are influenced by past experiences and the lessons gained from those experiences.

Axial Coding Process The Self-Control Process in Old-Age

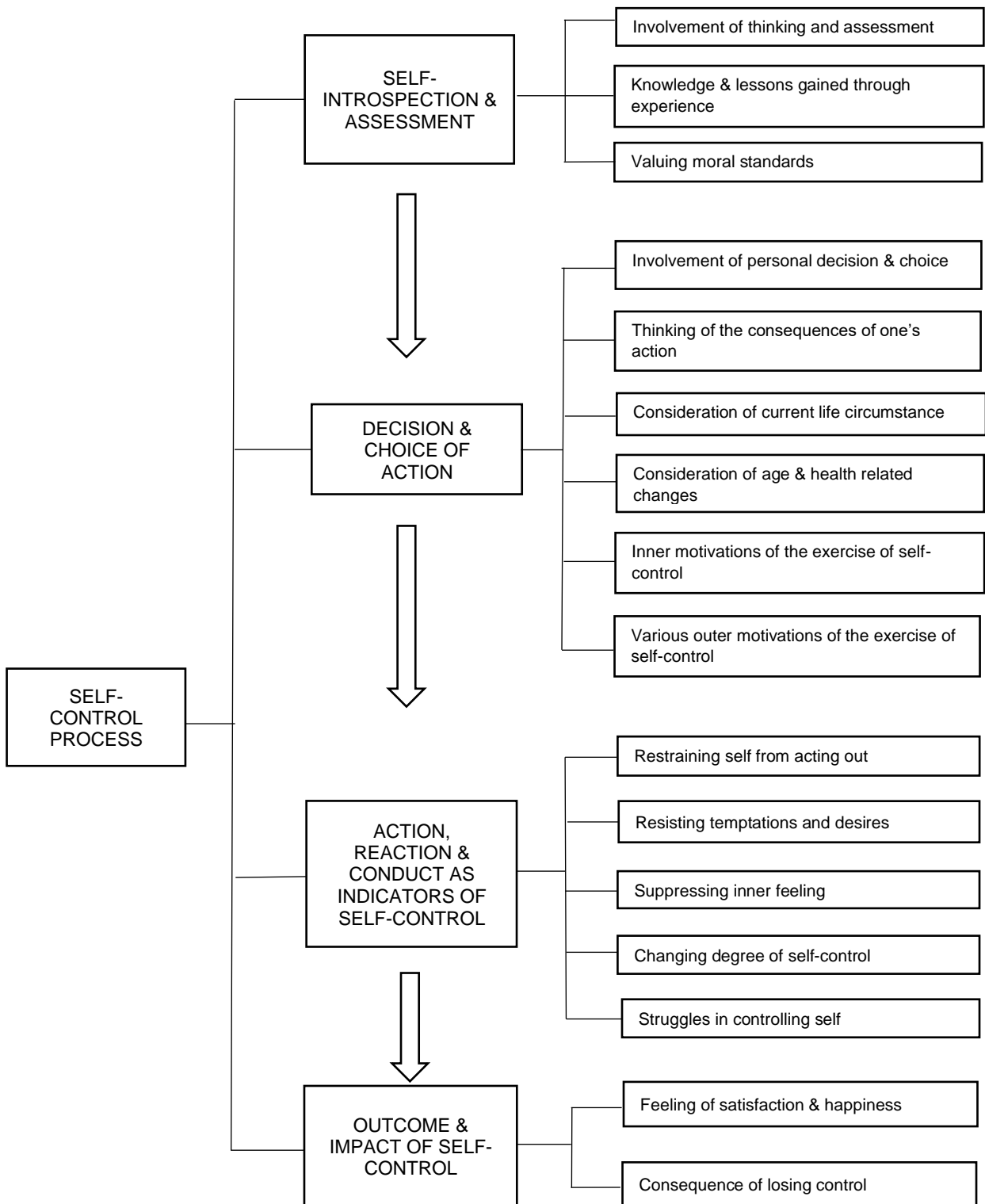


Figure 1 The schematic diagram of the axial coding process

Hypothesis 2: *There is a relationship between health status, interpersonal relationships, spirituality, financial status, and the exercise of self-control among older adults*

It was established from the data collected one motivation of the older adults in their exercise of self-control is the consideration of the health-related changes they now experience in late life. Some research participants revealed that they are now more careful in terms of their food intake. They avoid doing things that may aggravate their current health condition or health issues. They further revealed that they had to struggle to engage in physical exercises to improve their health status and avoid foods not recommended for them to eat even if the food is of their liking.

On the other hand, they are aware that they are already in their sunset years, and this realization increases their spiritual connection. Many participants said that they restrain themselves from giving in to some of their desires since they are afraid of God and are therefore afraid to commit sins. When confronted with situations where giving in would lead them to commit sin, they would readily exercise and practice self-control to avoid sinning.

Hypothesis 3: *Older adults who have high self-control have better life satisfaction*

When asked what emotions they feel when they exercise self-control in a given situation, several participants answered that they feel happy and have personal satisfaction. As an example, they said that avoiding argumentation or refraining from speaking back ill words has preserved their good relationships with other people, and as a result, they feel happy. Maintaining good relationships with loved ones, family, relatives, neighbors, and other people are considerable factors for life satisfaction.

Propositions Derived from the Hypotheses

The following are the propositions formulated from the generated hypotheses grounded from the qualitative data obtained.

Proposition 1: *Older adults exercise self-control differently*

The first proposition was derived from the first hypothesis, which states that self-control is a personal decision which is self-initiated by an older adult driven by one's own personal motive. People exert self-control on a daily basis across different life domains such as in health, in their interpersonal relationships and dealings, in financial matters, and others. Since human beings are in constant interaction with their environment, the exercise of self-control is vital. Human beings possess the capability of exercising self-control which involves the thought process of decision making and choosing which action or behavior to exercise, display or demonstrate. The exercise of self-control differs from one older adult to another as individuals have different personal motives and capabilities and are unique in many ways.

Self-control, according to [Vohs and Baumeister \(2004\)](#), is the ability of a person to suppress or inhibit behaviors or responses intentionally and consciously. Similarly, self-control is seen as the capacity of an individual to alter responses in terms of morals, values, ideals, and expectations of other people behind some long-term goals ([Baumeister et al., 2007](#)). In the field of psychology and philosophy, there is a contention that self-control is needed to suppress an immediate urge to consume. Not smoking cigarettes, not drinking alcoholic beverages, or not consuming fatty foods are just some examples of exhibiting self-control. Those who claim to show self-control prefer rewards or benefits in the future, such as longer lives and better health ([Henden, 2008](#)).

The term self-control is often used in many disciplines, which may often also refer to self-regulation, conscience, willpower, and delayed satisfaction ([Moffitt et al., 2011](#)). As defined by [Henden \(2008\)](#), self-control refers to a person's capacity in a lesser or larger degree. There are individuals with a low level of self-control who may have distinct characteristics in terms of attitude and behavior. These individuals may also have the tendency to pursue immediate gratification rather than delaying it. There are also explorations in the behavioral science that inspect self-control demonstration in early childhood and determine the changes of the self-control practice during the life course ([Jackson et al., 2009](#); [Kochanska et al., 2001](#)). Persons with high self-control, on the other hand, are seen to be more successful in handling relationships with other people as well as having more satisfying relations with them ([Finkel & Campbell, 2001](#)). The impact of exercising self-control also to cope with stress and maintain psychological health is also found to be positive ([Englert & Bertrams, 2015](#)).

Several researches consider self-control to range from poor to good behavioral control ([Dick et al., 2010](#)). Many investigators had the assumption which suggests that an individual's ability to regulate self or not differs in a qualitative sense ([Friese & Hofmann, 2009](#); [Hofmann et al., 2009](#); [Strack & Deutsch, 2004](#)). Good self-control is said to involve a conscious regulatory process that includes several subcomponents. They include one's ability to adjust and monitor one's behavior when anticipating results, delaying gratification, suppressing problematic behavior, and being goal-directed. On the other side, individuals who are unable to control themselves are more spontaneous with their actions sidetracking the necessity of conscious planning. They are also unable to delay gratification or even appropriately modify responses ([Pearson et al., 2013](#)).

In accomplishing daily-mundane tasks, which often require decision-making, self-control is indeed needed. However, many people find it extra challenging to exert self-control which leads to failure in accomplishing tasks such as eating healthy, doing exercise to saving money ([Baumeister et al., 1998](#); [Baumeister et al., 2007](#); [Carver & Scheier, 2001](#)).

Proposition 2: *There are various motivations involved in the exercise of self-control*

The next proposition was developed from the assumption that there is a relationship between health status, interpersonal relationships, spirituality, financial status, and the exercise of self-control among older adults. It could be argued that there are various motivations behind the exercise of self-control by an individual. The inner drives and motivations come in different forms as human beings inherently have different aspirations and life goals and aims.

Self-control is established as a person's ability to regulate his own thoughts, actions, and feelings (De Ridder et al., 2012). Moreover, the practice of self-control helps resolve motivational conflicts experienced by an individual between short-term and long-term goals (Fujita, 2011). Persons who are good at controlling themselves easily resist temptations that would otherwise be in conflict with the valued long-term pursuits. Essentially, persons of this type are certainly engaged in action and behaviors that help achieve or attain goals and motivations.

Motivations are classified as either intrinsic or extrinsic. The reason behind the action or behavior of a person in a particular way is driven by his or her motivations. Intrinsic motivation implies that an individual engages in activity because the person finds it enjoyable, satisfying, or interesting as his or her inner motivation. On the other hand, extrinsic motivation means that a person is driven to do things that will lead him to achieve some personal gains such as money (Deci & Ryan, 1985; Ryan & Deci, 2000).

Henden (2008) suggested that self-control involves the notion of a person having the capacity to bring one's action in line with his intention in seemingly competing motivations. This could be elucidated when a person has the intention to resist, for instance, another cigarette and was able to resist it despite having a strong desire for it. Edmund argues that self-control is a form of intentional control over one's behavior; thus, self-control is a person's ability to control himself.

According to Baumeister et al. (2007), there is a need to resist temptations as these may bring about long-term consequences. For instance, one must attempt to resist the temptation to eat unhealthy food, or to go to sleep for extended hours or act in a violent manner since undeniably failure to repel impulses and temptations may lead to crime, alcoholism, teen pregnancy, drug addiction, venereal diseases or underachievement in education among other (Baumeister & Alquist, 2009; Baumeister et al., 2007).

Proposition 3: *The exercise of self-control leads to life satisfaction*

The hypothesis that older adults who exercise self-control have better life satisfaction is the basis for the above proposition. Findings of this current study show that older adults who exercise self-restraint on matters they feel strong about and are motivated to do about find themselves feeling happy after exercising self-control. The

feeling of happiness is associated with the positive outcomes of the exercise of self-control, such as maintaining good interpersonal relationships.

Self-control is a strong determining factor for success in life (De Ridder et al., 2012). There are a number of adaptive outcomes associated with the exercise of self-control which include better interpersonal relationships, better physical health, and better intellectual performance (Finkel & Campbell, 2001; Schmeichel et al., 2003; Will Crescioni et al., 2011). Exercising high self-control is a pertinent aspect of a person's behavior for a person to have a successful and healthy life (De Ridder et al., 2012; Tangney et al., 2004). It was found out that behaviors such as minimized aggression, reduced criminality (Dewall et al., 2007), better interactions (Finkel & Campbell, 2001), less abuse of alcohol, smoking, and other prohibited substances (Sayette, 2004), and high self-esteem and improved interpersonal skills were all related to the practice of high self-control. Moreover, Hofmann et al. (2014) stated that self-control is a person's ability to override one's inner response and to interrupt undesirable behavioral inclinations or impulses.

Additionally, greater self-control is also positively attributed to psychological adjustments and negatively predicts psychopathology (Tangney et al., 2004). It was also found out that the more self-control a person exhibits, the fewer are the experiences of symptoms and stress while having better mental health (Boals et al., 2011). This finding was corroborated by the results of the study by Jensen-Campbell and Malcolm (2007) and Bogg and Roberts (2004), that there is a link between self-control and higher quality and satisfying relationships. The essence of self-control in reaching significant life outcomes is widely known. Empirical evidence shows that high self-control practice positively predicts well-being, satisfaction with life, and positive affect. High self-control here means the ability of a person to regulate his thoughts, feelings, and behaviors (De Ridder et al., 2012; Hofmann et al., 2014).

There is a well-established relationship between self-control and optimal functioning (Tangney et al., 2004). They also posited that people's capacity to practice self-control displays their adaptive nature, which has some implications that they also live more happy and healthy lives. Moreover, there is also evidence pointing out that people with a higher level of self-control are seen to feel satisfied with their lives as well as experience positive emotions more than those who have low levels of self-control (De Ridder et al., 2012; Hofmann et al., 2014). Additionally, self-control was seen by many researchers to be elemental in one's personality trait. Having conscientiousness is attributed to longevity, physical health, and other relevant health behaviors (Bogg & Roberts, 2004; Friedman et al., 1993; Goodwin & Friedman, 2006). Succinctly, self-control is a catchall essential human trait necessary for attaining a good life; thus, self-control demonstration is associated with a number of positive life outcomes.

The Theory of Self-control in Old age

The theory of self-control in old age assumes that self-control is a self-initiated process of governing one's actions, emotions, and feelings driven by one's own personal motives. It is also assumed that older adults exercise self-control differently as there are various personal motivations involved in the exercise thereof. Moreover, it is posited that the exercise of self-control among older adults leads to life satisfaction. The theory suggests that the ability to exercise self-control involves introspection and assessment and the thought process of deciding and choosing what actions or behavior to display, and the individual himself does the exercise of self-control. The theory suggests that self-control involves deciding and choosing an action or behavior that is highly grounded on the person's inner drive and personal motivations. It also involves weighing and assessing possible consequences of one's action before initiating a response or action.

The theory generated could be classified as a middle-range theory since it addresses specific phenomena by explaining what exercise of self-control is in old age, why it occurs, and how it occurs among older adults. This middle-range theory on the exercise of self-control in old age suggests that older adults vary in their exercise of self-control. The degree of self-control is linked to one's own personal motives and one's attainment of specific aims and life objectives. The theory further suggests that there are different factors and motivations involved in the exercise of self-control among older adults. The display of self-control presupposes various personal motives such as attaining personal interest and general well-being, maintaining social status or standing, having better interpersonal relationships, accomplishing personal obligations and responsibilities, and having better health. Furthermore, the theory assumes that the practice or exercise of self-control results in personal satisfaction as displaying self-control is attributed to a host of positive life outcomes.

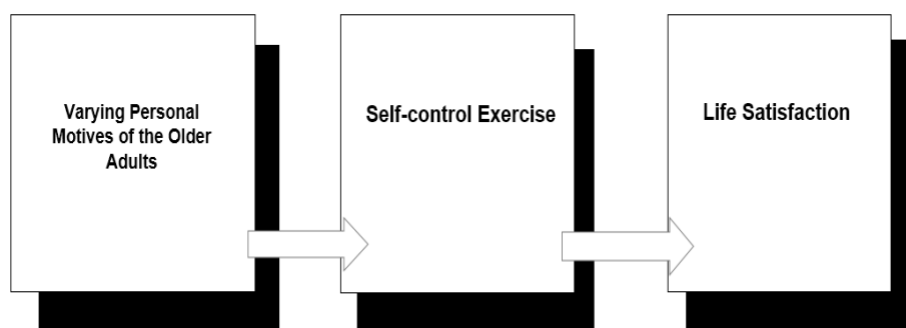


Figure 2 Schematic diagram of the Theory of Self-control in Old age

The diagram shows that the exercise of self-control among older adults entails the involvement of varying motivational factors. It is assumed in the theory that the motivating factors include the aspect of wanting to maintain health, accomplishing obligations, maintaining social status, having better relationships, and attaining general well-being. As seen in the figure, attaining life satisfaction is an outcome for exercising self-control, as presented in Figure 2.

Conclusion

The exercise of self-control in old age is a necessary aspect of any choices and decisions in life besides being consequential. The choices and decisions of older people in varied life avenues necessitate the practice of self-control as outcomes will have an impact not only on them but also on other individuals and society in general. Older people are not exempt but are also faced constantly with life decisions and choices in terms of their physical health, social relationships, and economic choices as such the practice of self-control is necessary as positive outcomes are expected. The present study has important implications

in the field of gerontology and health care services since the older population is growing, and so does the demand for health care services. The need to understand the choices and decisions of older adults is foundational in individualizing health care services. Further, the theory also provides a broader view and a better perspective in understanding older adults in their life choices and decisions.

Declaration of Conflicting Interest

There is no conflict of interest.

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Data Availability Statement

The full transcribed verbatim responses of the participants were kept in a password-protected computer during the analysis of this research work and was permanently deleted after the completion of her dissertation paper for confidentiality and ethical purposes.

References

- Baltes, P. B., & Mayer, K. U. (2001). *The Berlin aging study: Aging from 70 to 100*. New York, NY, US: Cambridge University Press.
- Baumeister, R. F. (2012). Self-control—The moral muscle. *The Psychologist*, 25(2), 112–115.
- Baumeister, R. F., & Alquist, J. L. (2009). Is there a downside to good self-control? *Self and Identity*, 8(2-3), 115-130. <https://doi.org/10.1080/15298860802501474>
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252-1265. <https://doi.org/10.1037/0022-3514.74.5.1252>
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16(6), 351-355. <https://doi.org/10.1111/j.1467-8721.2007.00534.x>
- Boals, A., Vandellen, M. R., & Banks, J. B. (2011). The relationship between self-control and health: The mediating effect of avoidant coping. *Psychology & Health*, 26(8), 1049-1062. <https://doi.org/10.1080/08870446.2010.529139>
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin*, 130(6), 887-919. <https://doi.org/10.1037/0033-2909.130.6.887>
- Carver, C. S., & Scheier, M. F. (2001). *On the self-regulation of behavior*. New York, NY: Cambridge University Press.
- De Ridder, D. T. D., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012). Taking stock of self-control: A meta-analysis of how trait self-control relates to a wide range of behaviors. *Personality and Social Psychology Review*, 16(1), 76-99. <https://doi.org/10.1177/1088868311418749>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- DeWall, C. N., Baumeister, R. F., Stillman, T. F., & Gailliot, M. T. (2007). Violence restrained: Effects of self-regulation and its depletion on aggression. *Journal of Experimental Social Psychology*, 43(1), 62-76. <https://doi.org/10.1016/j.jesp.2005.12.005>
- Dick, D. M., Smith, G., Olausson, P., Mitchell, S. H., Leeman, R. F., O'Malley, S. S., & Sher, K. (2010). Understanding the construct of impulsivity and its relationship to alcohol use disorders. *Addiction Biology*, 15(2), 217-226. <https://doi.org/10.1111/j.1369-1600.2009.00190.x>
- Duckworth, A. L., Gendler, T. S., & Gross, J. J. (2014). Self-control in school-age children. *Educational Psychologist*, 49(3), 199-217. <https://doi.org/10.1080/00461520.2014.926225>
- Englert, C., & Bertrams, A. (2015). Integrating attentional control theory and the strength model of self-control. *Frontiers in Psychology*, 6, 824. <https://doi.org/10.3389/fpsyg.2015.00824>
- Finkel, E. J., & Campbell, W. K. (2001). Self-control and accommodation in close relationships: An interdependence analysis. *Journal of Personality and Social Psychology*, 81(2), 263-277. <https://doi.org/10.1037/0022-3514.81.2.263>
- Friedman, H. S., Tucker, J. S., Tomlinson-Keasey, C., Schwartz, J. E., Wingard, D. L., & Criqui, M. H. (1993). Does childhood personality predict longevity? *Journal of Personality and Social Psychology*, 65(1), 176-185. <https://doi.org/10.1037/0022-3514.65.1.176>
- Frieese, M., & Hofmann, W. (2009). Control me or I will control you: Impulses, trait self-control, and the guidance of behavior. *Journal of Research in Personality*, 43(5), 795-805. <https://doi.org/10.1016/j.jrp.2009.07.004>
- Fujita, K. (2011). On conceptualizing self-control as more than the effortful inhibition of impulses. *Personality and Social Psychology Review*, 15(4), 352-366. <https://doi.org/10.1177/1088868311411165>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing.
- Goodwin, R. D., & Friedman, H. S. (2006). Health status and the five-factor personality traits in a nationally representative sample. *Journal of Health Psychology*, 11(5), 643-654. <https://doi.org/10.1177/1359105306066610>
- Henden, E. (2008). What is self-control? *Philosophical Psychology*, 21(1), 69-90. <https://doi.org/10.1080/09515080701874092>
- Hofmann, W., Frieese, M., & Strack, F. (2009). Impulse and self-control from a dual-systems perspective. *Perspectives on Psychological Science*, 4(2), 162-176. <https://doi.org/10.1111/j.1745-6924.2009.01116.x>
- Hofmann, W., Luhmann, M., Fisher, R. R., Vohs, K. D., & Baumeister, R. F. (2014). Yes, but are they happy? Effects of trait self-control on affective well-being and life satisfaction. *Journal of Personality*, 82(4), 265-277. <https://doi.org/10.1111/jopy.12050>
- Jackson, J. J., Bogg, T., Walton, K. E., Wood, D., Harms, P. D., Lodi-Smith, J., . . . Roberts, B. W. (2009). Not all conscientiousness scales change alike: A multimethod, multisample study of age differences in the facets of conscientiousness. *Journal of Personality and Social Psychology*, 96(2), 446-459. <https://doi.org/10.1037/a0014156>
- Jensen-Campbell, L. A., & Malcolm, K. T. (2007). The importance of conscientiousness in adolescent interpersonal relationships. *Personality and Social Psychology Bulletin*, 33(3), 368-383. <https://doi.org/10.1177/0146167206296104>
- Kochanska, G., Coy, K. C., & Murray, K. T. (2001). The development of self-regulation in the first four years of life. *Child Development*, 72(4), 1091-1111. <https://doi.org/10.1111/1467-8624.00336>
- Mischel, W., & Ebbesen, E. B. (1970). Attention in delay of gratification. *Journal of Personality and Social Psychology*, 16(2), 329-337. <https://doi.org/10.1037/h0029815>
- Mischel, W., Shoda, Y., & Rodriguez, M. I. (1989). Delay of gratification in children. *Science*, 244(4907), 933-938. <https://doi.org/10.1126/science.2658056>
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., . . . Ross, S. (2011). A gradient of childhood

- self-control predicts health, wealth, and public safety. *Proceedings of the national Academy of Sciences*, 108(7), 2693-2698. <https://doi.org/10.1073/pnas.1010076108>
- Pearson, M. R., Kite, B. A., & Henson, J. M. (2013). Predictive effects of good self-control and poor regulation on alcohol-related outcomes: Do protective behavioral strategies mediate? *Psychology of Addictive Behaviors*, 27(1), 81-89. <https://doi.org/10.1037/a0028818>
- Pfeiffer, E. (1975). A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. *Journal of the American Geriatrics Society*, 23(10), 433-441. <https://doi.org/10.1111/j.1532-5415.1975.tb00927.x>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. <https://doi.org/10.1037//0003-066x.55.1.68>
- Sadang, J. M., & Palompon, D. R. (2021). The development of Need–Threat Internal Resiliency Theory in COVID-19 crisis utilizing deductive axiomatic approach. *Belitung Nursing Journal*, 7(2), 72-77. <https://doi.org/10.33546/bnj.1300>
- Salthouse, T. A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological Review*, 103(3), 403-428. <https://doi.org/10.1037/0033-295X.103.3.403>
- Sayette, M. A. (2004). Self-regulatory failure and addiction. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation* (pp. 447-465). New York: Guilford Press.
- Schaie, K. W. (1989). The hazards of cognitive aging. *The Gerontologist*, 29(4), 484-493. <https://doi.org/10.1093/geront/29.4.484>
- Schmeichel, B. J., Vohs, K. D., & Baumeister, R. F. (2003). Intellectual performance and ego depletion: Role of the self in logical reasoning and other information processing. *Journal of Personality and Social Psychology*, 85(1), 33-46. <https://doi.org/10.1037/0022-3514.85.1.33>
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review*, 8(3), 220-247. https://doi.org/10.1207/s15327957pspr0803_1
- Streubert, H. J., & Carpenter, D. R. (2011). *Qualitative research in nursing: Advancing the humanistic imperative* (5th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271-324. <https://doi.org/10.1111/j.0022-3506.2004.00263.x>
- Vohs, K. D., & Baumeister, R. F. (2004). Self-Control. In C. D. Spielberger (Ed.), *Encyclopedia of Applied Psychology* (pp. 369-373). New York: Elsevier.
- Will Crescioni, A., Ehrlinger, J., Alquist, J. L., Conlon, K. E., Baumeister, R. F., Schatschneider, C., & Dutton, G. R. (2011). High trait self-control predicts positive health behaviors and success in weight loss. *Journal of Health Psychology*, 16(5), 750-759. <https://doi.org/10.1177/1359105310390247>

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