
| RESEARCH ARTICLE

Correlation Between Reinforcers and Level of Self-Esteem

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| ABSTRACT

This study, conducted during the academic year 2022-2023 at the University of Cebu Main Campus, aimed to establish the correlation between effective reinforcers and the self-esteem of fourth-year psychology students. Utilizing the Slovin formula, a sample size of 120 students was selected from the total population of 166. The Descriptive Correlational Method was employed to explore the connection between effective reinforcers and self-esteem, with a focus on these senior students who might be susceptible to academic stress and burnout. The study employed the Rosenberg Self-Esteem questionnaire for self-esteem assessment and conducted a pilot test to ensure questionnaire reliability. Data were collected via Google Forms, and a chi-square test was utilized to assess the relationship between student profiles, self-esteem, and effective reinforcers. Also, the Wilcoxon Signed Rank Test was run to determine the relationship between self-esteem and effective reinforcers. The results revealed that natural reinforcers were the most effective in boosting self-esteem, with no significant relationship between student output and the variables. However, a significant connection was found between self-esteem and effective reinforcers. This study underscores the vital role of effective reinforcers in enhancing self-esteem.

| KEYWORDS

Reinforcers, Level of Self-esteem, Descriptive-correlational Study, Quantitative Study

| ARTICLE INFORMATION

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1. Introduction

People have placed great importance on the learning process because it is where transformation begins, and many ways have developed to make learning processes more efficient. One of the strategies is called reinforcement, which refers to anything that increases the likelihood of an action occurring. It has been utilized in various aspects of daily life to improve learning, promote appropriate behavior, or generate task-oriented behavior (Larriba-Quest, 2017). It is employed to make the desired behavior of a person occur in the future. It was divided into many sorts as it became more widespread and used by more individuals to assess its efficacy. One of the types of reinforcement is positive reinforcement, which is further broken down into several reinforcers, which include social reinforcers, physical reinforcers, natural reinforcers, and token reinforcers. The behavioral psychology concept of reinforcement can be employed to teach and reinforce activities. This sort of reinforcement provides a pleasurable or desired stimulus after an activity. This procedure can be implemented as a component of a structured training program, but it can also happen spontaneously in real-world circumstances (Cherry, 2022).

A reinforcer helps people see their potential more clearly and be more self-directed, which may help them feel more confident. Individuals with a high sense of self-worth may trust his or her reasoning and judgment and are more likely to make wise decisions.

In turn, this promotes the development of stronger professional and interpersonal bonds and, as a result, a pleasant work environment (Banerjee, 2022). Many types of reinforcement can help increase self-esteem. It may be having a good salary, achievements, encouragement, or even how you appear. In Singapore, teachers are reinforced by the practical teaching experience they receive after completing their training. Adequate evidence-based preparation, strict admission standards, ongoing professional development, and support for teacher professionalism at the school level are all necessary for high teacher quality. In exchange for this, they will get increased compensation and an opportunity for upskilling. In a time of tough educational reform, shifting perspectives on learning, and new roles for teachers as learning designers, these policies and practices are especially crucial. The excellent standing of teachers in Singapore and the consistently good performance of Singapore pupils on international exams are both influenced by teacher policies and practices (Chong & Gopinathan, 2019).

Furthermore, a person finds satisfaction in achieving their goals since it can satisfy their needs and wants. They can also develop their potential and improve their self-esteem to become better. Every year, more Filipino nurses decide to work abroad for higher salaries and to widen their career knowledge. This is due to the lack of compensation in the country. In addition, there are not enough jobs in the Philippines to support the population. As a result, working abroad helps Filipino nurses strengthen their financial stability. It may also help them become more independent and self-assured as they will be responsible for their welfare, which could be a challenging but rewarding experience.

Most common reinforcers focus on meeting an individual's needs. Everything is related to compensation for their work or developing the skills they need to become what they want. In recent times, a variety of inventive strategies have emerged with the aim of motivating the younger generation to follow their interests and strive for self-improvement in pursuit of their goals. In order to make sure that children learn effectively, education systems and strategic teaching are prioritized. They can guarantee that pupils will reach their goals and excel in their studies, skills, and learning in this method. Additionally, some organizations support self-awareness and support people in recognizing their skills in areas like singing, dancing, artistic competitions, etc. They employ reinforcers in order to engage individuals better. Furthermore, many companies go the extra mile to maintain a close bond with their staff members and help them develop their professional capabilities. They compensate their staff well and raise their salaries in accordance with performance.

This study will examine the relationship between self-esteem and effective reinforcers in a sample of randomly chosen fourth-year students. These variables will help us identify whether or not a person needs a reinforcer and, if so, what type of reinforcer they need to feel more confident in themselves and the work at hand.

2. Theoretical background

This study is anchored in the Operant Conditioning Theory of B.F. Skinner with two supporting theories, specifically the Humanistic Theory of Carl Rogers and the Self-Determination Theory of Deci and Ryan.

The Operant Conditioning theory of motivation and reinforcement, as defined by Skinner (1953), is the presentation or removal of a stimulus to sustain or strengthen the likelihood that a behavior will occur. Instrumental conditioning is sometimes referred to as a learning method that uses rewards and punishment to alter a person's behavior. This method is to make an action into practice; a behavior that is followed by pleasant outcomes is most likely to be repeated, while a behavior that is followed by an unpleasant result is less likely to replicate. Moreover, according to Skinner's theory, positive and negative reinforcement are the two types. A stimulus is referred to as a "positive reinforcer" if it improves the probability of a behavior occurring again when delivered right after the behavior (Blackwell & Manar, 2015). It is a positive parenting approach employed for various goals and in a wide range of circumstances because it builds on the positive behaviors that have already been shown and rewards the person you are trying to train's innate propensities for good behavior, according to B.F. Skinner's "Learning and Conditioning" is well known for describing the principles of operant conditioning. Skinner believed that the environment determines behavior. In his view, people have consistent behavior patterns because they have particular response tendencies. This implies that with the passage of time, individuals acquire specific behavioral patterns. Behaviors with positive consequences tend to increase, while behaviors with negative consequences tend to decrease (Conroy, 2017). Furthermore, this theory of motivation describes the behavior and how a person acts (Amutan, 2014). Its repeated actions make people think they can do certain things to the best of their abilities. This study will focus more on positive reinforcement and reinforcers than negative reinforcement. According to this theory, a positive reinforcer can motivate a person to complete a task. After executing the assigned tasks, the potential advantages can make an individual's behavior more reactive. This ability will lead to self-assurance and aid in a person's understanding of themselves.

McLeod (2018) stated that positive reinforcement strengthens a reaction or behavior by rewarding it, resulting in the repetition of the desired behavior.

Positive reinforcement can be divided into four forms, and training is based on operant conditioning theory. The positive stimulus, also known as a reinforcer, differentiates between these four types: social reinforcers, tangible reinforcers, token reinforcers, and natural reinforcers. The Social Reinforcer involves others expressing and praising the action that has been done; the Tangible Reinforcer is considered a small gift that is given to the person for their excellent behavior; the Token Reinforcer requires awards for performing the specific behavior in exchange for something of value; and lastly, Natural Reinforcers are innate or occur directly as a response to behavior (Cherry, 2021). Social reinforcers include parent-given compliments when a child finishes a task and positive written comments from a teacher to a student. Treats, toys, and trophies are examples of tangible reinforcements. Tangible reinforcements, as the name suggests, can be seen and felt. This would include edible rewards such as ice cream for an excellent report card. Token reinforcements can be gathered and exchanged for personal value-adding items. Since money can be exchanged for valuable objects and accumulated or gained in response to a behavior (working), money is an example of token reinforcement. Children may be given a set amount of stickers or fake coins at school or home, with the option to exchange them for an item they value. Rewards that manifest naturally due to behavior are known as natural reinforcements. Without any manufacturing or preparation, the conduct alone generates the reward. Excellent social contact is likely increased if one person smiles and greets another. The first person has the knowledge necessary to smile more often when encountering other people.

Furthermore, small or big interactions with the surrounding people can influence their behavior. According to the Humanistic Theory of Carl Rogers (1959), environmental factors and interactions with people close to us may affect our self-worth and self-esteem. Rogers contends that a child's interactions with parents shape how they perceive themselves as adults. As a child matures, contact with influential people will affect their perception. An individual with high self-esteem welcomes challenges, occasionally accepts misfortune and sorrow, and is genuine with others (McLeod, 2014). In addition, he stated that a person's behavior is influenced by their propensity for self-actualization, which drives them to work hard and realize all of their potentials. In this system, people build a self-concept or self-conceptualization structure. People with a negative self-concept tend to be unhappy with who they are, whereas those with a positive self-concept feel comfortable and secure. Based on the humanistic perspective, each concept makes up the self. Three elements comprise the self-concept: self-esteem, self-image, and the idea of self. Self-esteem comprises what a person thinks about themselves. The impact of one's body image on their inner personality is a component of their self-image. A person who desires to be something is called their ideal self.

The way someone views themselves, or their self-belief, is important. People base their identities on their past experiences, their current situation, and their expectations for the future. Self-Concept is dynamic and changes with time. The self-concept changes when a person goes through emotionally difficult circumstances. As stated by Rogers, the self-concept is affected by three things, which are the early environment of an individual, the internal world, and the external world. This highlights the significance of the environment in which a person develops and the ability of this aspect to improve self-esteem. A person's perspective of oneself will also be influenced by the people around them, their beliefs, and their circumstances.

Additionally, Rogers (1959) strongly believed that a person cannot "grow" unless they are in an environment that promotes integrity (openness and self-disclosure), acceptance (being seen and treated with unshakable positive esteem), and empathy (being heard and understood). People are considered to be in a state of inconsistency if a significant amount of their overall experience is unpleasant to them and is rejected or distorted in their self-image. A person can develop more self-assurance by receiving constructive criticism for their actions.

Furthermore, the Self-Determination Theory by Deci & Ryan (2000), which provides a comprehensive framework for the study of human motivation and personality, believes that people are motivated-oriented. This theory contends that individuals can be identified provided competence and relatedness are met (Lopez-Garrido, 2021). Several mentors strive to motivate their mentees while individuals battle to find energy, mobilize effort, and persevere in their daily duties. As a result, several methods of encouraging people have been developed. The self-determination theory underlines that motivation provides energy, direction, persistence, and enforceability. Although motivation is frequently considered a unique entity, a close review reveals that people are motivated to act by various circumstances, each with their own experiences and outcomes. Their value on an activity may inspire or put them under severe external pressure. An enduring interest or a bribe can encourage them to act. They may work out of a desire to succeed or out of a fear of being watched (Deci & Ryan, 2000). Self-determination is individuals' capacity to make

decisions and run their own lives. Being self-determined makes a person feel more in control, which may make them feel as though other people are in command of their lives.

Moreover, persons can become self-determined when their autonomy, competence, and connection demands are met. People often attribute their sense of self-determination to their autonomy, which they define as the capacity to take decisive action that would bring about genuine change. People must also exhibit competence by mastering tasks and learning new abilities. They also need to have a sense of attachment and belong to other people to establish connections and relatedness. This psychological growth does not happen automatically. Although some people may be inclined toward such progress, it needs ongoing support. Extrinsic motivators and positive feedback from people are the factors that can help psychological growth. However, an individual also needs to be intrinsically motivated since internally generated goals help fulfill the psychological needs of autonomy, competence, and relatedness. For example, most artistic individuals cite the love of one's work as essential, making intrinsic motivation necessary since it helps in persistence, seeing a project through, and ensuring solution analysis. Positive affect also goes hand in hand with intrinsic motivation.

Individuals endeavor to broaden their self-awareness and comprehension by assimilating fresh experiences, nurturing their needs, desires, and passions, and forging connections with both others and the external world. To put it differently, Self-Determination Theory (SDT) is grounded in the belief that individuals are constantly engaged in a dynamic interplay with the social environment. They are simultaneously working to fulfill their needs and reacting to the environmental conditions that can either facilitate or hinder their need satisfaction (Legault, 2017).

Meanwhile, this section discusses the related studies and literature about reinforcement and self-esteem. Reinforcement is becoming a more popular method of motivating oneself to engage in the desired action. Individuals utilize it as a tool to help them achieve their objectives. Different organizations have used this strategy since it is believed that favorably reinforced behaviors are more likely to be repeated than those not. However, mentioning that the reinforcer depends on the user and the circumstances is significant. Token reinforcers—items or symbolic items exchanged for goods or services—are typical reinforcers, often utilized in numerous contexts. This reinforcer is highly relevant to behavioral economics since tokens can be seen as a form of currency from an economic standpoint, earning and exchanging for other goods. It was also claimed that token reinforcers are well adapted for general reinforcement functions as they have been used effectively for behavior management and motivation in teaching and training settings (Hackenberg, 2009). On the other hand, natural reinforcers come from positive activities that stimulate positive behaviors. The natural effects of positive behavior start to reinforce themselves. According to an organization that specializes in teaching students with autism and disabilities, it is crucial to reduce the number of artificial reinforcers and replace them with more naturally occurring consequence reinforcers. When children engage in desired activities, outcomes may include simple things to obtain in their environment. This instance is similar to the social reinforcer since it will reduce the use of artificial reinforcers. Speaking engagement is exclusively employed by a social reinforcer to drive the other person. Feedback can be in the form of action, such as smiles, acceptance, praise, and attention from others in response to a good deed. The more constructive criticism a person receives, the more motivated they are to improve. A tangible reinforcer is another type of reinforcer. It is a tangible reward given after an action that increases the likelihood that the behavior will be repeated. Access to desired products that may not be connected to the specific activity encourages a person's positive behavior. Reinforcement has constantly been used, and it serves as a simple tactic used mostly by proctors, teachers, and even management companies to ensure that learning proceeds as intended. Additionally, it can serve as a basis for determining whether or not a person is performing the proper duty. Thus, it aids in developing a person's potential to identify their strengths.

Additionally, these reinforcers help people increase their self-esteem, as it is essential to understand oneself to realize one's potential. Logarta (2012) states that self-esteem is crucial for a child's development. When people enter adulthood, they often fear taking opportunities offered because they feel they are less than ideal. She also highlighted how their parents' criticism negatively influenced their children's view of themselves. Consequently, by criticizing the child, they are turning them into a shell that is very insecure, afraid of life, and terrified of making a mistake rather than a thriving, active person. They are frequently reprimanded for everything they do, so occasionally, they need clarification about what they might be doing incorrectly. Positive and negative reinforcement lead to an increase in behavior or operant (Flora, 2004). Despite being commonly rejected because people think it is inhumane and overly simplistic, reinforcement is a potent instrument that improves the human condition when applied to a circumstance. Whether triggered accidentally or on purpose, reinforcement possibilities significantly impact many actions. When they are utilized purposefully, the change from undesirable to desirable behavior can be life-changing (Doughty & Shields, 2009).

Furthermore, the Drugfree (2020) website claims that being acknowledged and valued for one's efforts can lead to a healthy sense of self-esteem and greater well-being. Parents must be aware of and deliberate about the positive reinforcers they will use with their children. A positive reinforcer is effective when it can significantly affect a young adult's self-esteem. Reinforcers for older teens and young adults include paying for college classes or books, car expenditures, concert or sporting event tickets, and assistance with health care bills like the dentist and eyeglasses or vision care.

Positive reinforcement is being utilized, especially in schools. Many schools employ positive reinforcement techniques to educate students on accepting accountability for their actions. Even though it is widely used, many experts criticize the usefulness of the behavior management system. Some experts claim that rewarding behavior may harm a student's education by providing students with simple assignments and encouraging them. Students are less likely to undertake more challenging projects where they might need help after completing those simple tasks. The same reinforcement will be given. Advocates contend that encouraging behavior makes students more helpful, helping children become responsible, self-controlled, and productive members of the classroom environment.

These reinforcers are also used in the workplace, where employers strive to improve employee productivity. It has frequently been proposed that employee motivation, work-related attitudes, and actions significantly influence an individual's self-esteem, created around work and organizational experiences. Daniels (2016) states that positive reinforcement is the "most powerful leadership tool." An employer can affect and modify an employee's behavior through reinforcement. Employees who behave well for the company should be rewarded, while those who behave poorly should face appropriate discipline to avoid future instances of those behaviors. Positive reinforcement also includes providing a bonus or other compensation to an employee. This kind of reinforcement encourages employees to continue practicing the desired behavior. When management offers them positive reinforcement for a well-done job, employees are more likely to be open to change. Management may also reinforce their workers by giving them recognition for a job well done, which may bring out the best in them and keep them engaged. Positive reinforcement is a great way to show appreciation for the staff members since it helps them feel like a part of the team to reduce employee turnover and the proportion of disengaged workers (Seruela, 2022).

Reinforcers and self-esteem are related because imposing reinforcers on individuals encourages them to perform confidently. The entertainment industry ensures that its artists are well supported since artists have particular occupational and lifestyle stresses and obstacles that can negatively impact self-esteem. The population of artists has a critical need for healthy coping mechanisms, powerful self-evaluation tools, support, education, and treatments geared at addressing the issue of self-esteem. Higher self-esteem can help artists manage stress better, have better physical and mental health, and be better able to create and perform. The performer can then deliver a powerful performance for their audience. They are capable of using their abilities, and they believe in their potential. Having confidence, or learning to create confidence, is one of performers' most potent selling talents and coping skills. Most actors have developed a high degree of self-confidence by overcoming criticism and rejection. Additionally, the management ensures that those absurd negative remarks can be addressed and that more constructive criticism from the audience is being heard.

Additionally, B.F. Skinner's theory of operant conditioning is particularly relevant when considering pedagogical activities such as sports coaching. Positive reinforcement in a coaching context can encompass actions such as a coach offering praise or rewards to an athlete for successfully performing a specific technique, essentially introducing a pleasant stimulus to reinforce desired behavior. Studies investigating coaching behaviors have clarified that the consistent application of positive reinforcement, such as praise, combined with the elimination of negative reinforcement, plays a fundamental role in coaching methodologies (Leeder, 2022). Positive reinforcement strengthens desired behaviors and promotes the development of positive motivation for success as opposed to the effect of negative reinforcement, which can spark the fear of failure. Reinforcement and performance feedback requires coaches to identify specific behaviors essential to the individual's success, choose appropriate positive reinforcement for those behaviors, and give them out accordingly (Cleere, 2018).

In a lesson transcript of Moulton (2019), it states that Cooley (1902) and Mead (1934) developed related theories that influenced the development of symbolic interactionism. According to symbolic interactionism, people tend to base their ideas and actions on other individuals and objects depending on the significance or value they ascribe to those subjects. This claim means that, through time, self-esteem is developed if an individual is surrounded by positivity, including positive reinforcement. It has been observed that when children are raised with praise and commended for their positive behavior, they grow up confident.

St. Peter's Preparatory School (2019) website posted about the advantages of positive reinforcement, where it states that positive reinforcement aids the child's progress in their sense of identity and increases their self-esteem, both of which are crucial for all ages, but mainly for the later years of life when a person's younger years will serve as the foundation for their sense of identity.

According to the study conducted by Rabideau (2005), motivation is described as the driving factor behind an individual's behavior. An individual's desires and needs significantly affect their direction of conduct. Goals for achievement can influence how a person conducts a task and signify a desire to demonstrate competence. Therefore, it is crucial to identify the reinforcers that can contribute to someone having strong self-esteem. On the contrary, a person with low self-esteem is more likely to feel bad about themselves. Someone with poor self-esteem is more inclined to have negative feelings about themselves. Research suggests that feeling good about oneself, especially as a child, goes a long way toward assisting the person in adapting to life's adversities (Vanbuskirk, 2021).

As stated by Taku & McDiarmid (2015), the assurance of one's worth, competence, and capacity for success is known as self-esteem. It correlates with academic achievement and factors like life satisfaction and happiness. In addition, an individual's trust and positive mindset toward themselves are relevant to their self-esteem. For an individual to accomplish and achieve goals, self-esteem should be enhanced first to make such things happen. Our personalities include a personal sensitivity known as self-esteem, which results from our successes in difficult life circumstances (Minev et al., 2018). A person's impression of oneself, which could be positive or negative, is known as self-esteem (Riggio et al., 1990; Abel, 1996; Orth et al., 2012). From a developmental perspective, self-esteem was determined to be generally strong during childhood, dips in adolescence, climbs during adulthood, and decreases in old age from a developmental perspective (Wagner et al., 2013; Robins & Trzesniewski, 2003; Orth & Robins, 2014). For instance, people with a high sense of self-worth are happier, more upbeat, and more motivated than those with a poor sense of self-worth and have fewer symptoms of despair, anxiety, and unhappiness (Pyszczynski et al., 2004).

On the other hand, the ill effects of low self-esteem have been extensively studied, with low self-esteem found to result in inferiority, dissatisfaction, and unhappiness in life; emotional instability; aggression; decreased level of well-being; decreased ability to handle difficulties; and a vulnerability to a host of psychiatric disorders (Abdel-Khalek, 2016). Additionally, individuals with weak self-esteem seem more worried and pessimistic, have a negative outlook on the future, foresee failure, and feel even worse about themselves when they fail (Balat & Akman, 2004). Individuals with low self-esteem are vulnerable to disappointments, doubt their abilities, and experience extreme exhaustion (Orth et al., 2016). Individuals with low self-esteem seem to find it hard to accept praise and criticism, quit their jobs at the first sign of disappointment, are reluctant to try new things, and are particularly vulnerable to negative peer pressure (Yavuzer, 2000).

Self-esteem is a phrase that is frequently employed. Guardians, educators, and many others have focused on boosting self-esteem because they believe doing so will have many positive effects (Baumeister et al., 2003). Individuals with higher self-esteem are more attractive and create good first impressions than those with low self-esteem. In addition, people who are comfortable with themselves are more capable of accomplishing their goals, and people with solid self-esteem are optimistic about the future (Mann et al., 2004). Self-esteem is more than just understanding who the person is. Self-evaluation is necessary for mental and social health. It has an impact on aspirations, personal goals, and social interactions. People's self-perceptions and assessments shape who they are, what they can do, and who they can become. These powerful inner forces act as an internal compass, guiding and nurturing people through life and directing their behavior.

Research has shown that significant life achievements in employment, interrelations, and health are all connected favorably with self-esteem, which has been referred to as an individual's subjective assessment of his or her worth" (Trzesniewski et al., 2013). More precisely, long-term research demonstrates that having a high sense of self-esteem reduces the risk of depression and forecasts future relationship satisfaction, career success, and physical health in the future (Marshall et al., 2014; Orth et al., 2012; Sowislo et al., 2013; Trzesniewski et al., 2006). Individuals with high levels of self-esteem were even less prone to feel hopeless and anxious, and they had more excellent moral beliefs than individuals with low self-esteem. Positive psychological effects, such as depression and social exclusion, can be avoided with high self-esteem (Arslan, 2020). It strongly influences psychological adjustment for individuals.

Additionally, it enhances a person's capacity to assess and attain their goals through their abilities. In a study done in the U.S. between 1986 and 2002, respondents' levels of agreement with sentences like "I have a positive attitude toward myself," which indicates high self-esteem, "Overall, I tend to believe that I am a failure," and "I occasionally feel like I am not very good," which

indicates low self-esteem, were used to evaluate respondents' levels of self-esteem. A study of latent growth curves indicates that self-esteem typically develops during youth and middle adulthood, peaks at age 60, and then declines in old age (Lyubomirsky et al., 2006; Smokowski et al., 2014; Mirjalili et al., 2011; Erol & Orth, 2011).

Whenever a pleasant activity accompanies a specific action and increases the future likelihood of that behavior, that is when positive reinforcement happens (Mckay & Fanning, 2016). Since praise and affirmations are substantial rewards after the desired behavior, there is a big chance that a person who receives a reward will do it again, making them confident in their actions. Additionally, many people have employed positive reinforcement to enable people to exhibit their desired behaviors. Positive reinforcement has been done in a variety of contexts as well, including those in the household, classroom, and neighborhood (Wood et al., 2011). A person's self-esteem can be impacted by good and negative feedback from those around them (Brainwave Music, 2022). When an individual receives positive reinforcement for something, their confidence increases. Positive reinforcement is one of the ways teachers can use to assist students with stress at school and at home. We deal with online classes where it is difficult for teachers and students to maintain their motivation despite the distance. When teachers respond favorably to their pupils' good acts, it encourages them to repeat those actions more repeatedly, called Positive Reinforcement. In previous research, positive reinforcement is beneficial in increasing students' positive conduct during the learning process. Positive reinforcement can take many forms, including a gift, an award, or verbal and written compliments; therefore, teachers and parents must use positive reinforcement at school and home (Sigler & Aamidor, 2005). Giving students positive feedback has been shown to have several advantages in the learning process. These benefits include: a) strengthening relationships between teachers and students; b) sparking and boosting student motivation; c) raising student self-esteem; and d) improving student concentration (Kodak et al., 2007; Bernier et al., 2012; Hulac et al., 2016; Mantasiah et al., 2021).

A study by Conroy et al. (2009) found that teachers who effectively build positive relationships with their students through praise and positive reinforcement can assist students in learning and enhance the classroom climate as a whole. Most teachers utilize praise as a positive reinforcement during everyday classroom interactions with their students. In addition, many teachers often praise their students for using positive behaviors socially and academically. The reinforcement supplied aims to boost learning motivation and academic achievement standards. Children's low or nonexistent motivation can be rekindled by providing positive reinforcement for their learning and encouraging them to study more successfully. According to their research, teachers can employ positive reinforcement to boost students' enthusiasm and classroom behavior.

Chitiyo and Wheeler (2009) stated that positive reinforcement is more beneficial and that it is up to the teachers to create a welcoming classroom climate where children love learning. Wheatley et al. (2009) conducted a study that revealed the effectiveness of positive reinforcement in altering students' behavior, supporting the current study's findings. According to two studies published in 2004 and 2007, positive reinforcement and negative punishment are helpful tools when applied correctly and in the right circumstances. They argue that using several rewards and punishments is more effective than just one (Salvy et al., 2004; Ducharm et al., 2007).

The studies selected for inclusion in a scoping review study conducted from January to February of the same year in 2019 focused on using positive reinforcement to maintain troublesome behavior in the classroom. Positive reinforcement techniques included praise (41%), feedback (33%), and other classroom management research (25%). The operant learning concept of Skinner has implications for improving the likelihood of desired behavior in the classroom. A study was conducted to discover how positive reinforcement affects pupils' spelling exam performance. The researcher introduced the positive reinforcement system, where a chance is given to the students to select their rewards. According to the t-test, as it was used to understand the results better when students received positive reinforcement in the form of prizes, their grades on their Friday spelling exam improved significantly. It shows that students' spelling test scores improved when they obtained positive reinforcement in the form of prizes, as opposed to when they did not receive such reinforcement on their Friday spelling test.

According to Ahmed (2020), positive reinforcement is usually established in the workplace. Employees' self-worth rises when they receive positive reinforcement for their exceptional performance. Because an external motivator like their manager appreciates them, they are proud and content with who they are and what they can do. Employed people who feel confident of their talents may broaden their skill set, sign up for continuing education courses, and earn extra certificates. These acts enhance the workplace by assisting individuals in climbing the career ladder and advancing their careers while developing highly qualified personnel. In addition, employee performance is tied to positive reinforcement, which is highly effective at strengthening and increasing

behaviors. Salary, performance-based incentives, and fringe benefits are the most common reinforcers (Wei & Yazdanifard, 2014). These factors motivate employees to give their all to the company and perform at their best.

Additionally, positive reinforcement makes one feel good about themselves, especially after performing well. A confident person with high self-esteem is likelier to succeed (Young Scholars Academy, 2019). They will learn they are naturally unique and can perform even better than feeling guilty about and focusing on what went wrong. Positive reinforcement is one factor that can help a person have high self-esteem if reinforcers are constantly used.

3. Objective of the study

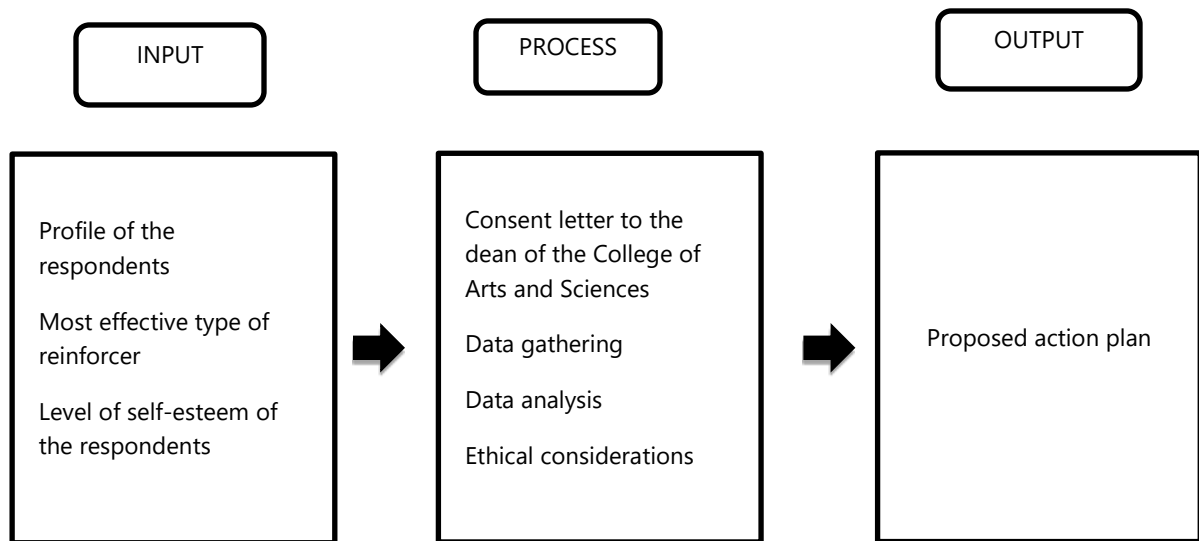
The primary objective of this research was to examine the relationship between effective reinforcers and the self-esteem of fourth-year psychology students at the University of Cebu-Main Campus during the academic year 2022-2023. The study specifically focused on various aspects of the respondents' profiles, including gender and socio-economic background, as well as their preferences for different types of positive reinforcers, such as Natural reinforcers, Social reinforcers, Tangible reinforcers, and Token reinforcers. Furthermore, the investigation delved into the levels of self-esteem within this context and explored the interconnections between the respondents' profiles, effective reinforcers, and self-esteem levels.

4. Methodology

This section presents specific information regarding the utilized research design, the research environment, how the research respondents are selected and sampled, the research instrument for the data collection, and the methods used in analyzing the data. In addition, the research procedure covers the data collection and data analysis.

4.1 Research Design

The descriptive correlational research design was employed in this study since it is frequently used in investigations that seek to establish the relationship between various variables and present static images of situations. Furthermore, this is a quantitative research study to identify the correlation between effective reinforcers and self-esteem and to know the most effective reinforcer for self-esteem. The researchers collected the data through a standardized, research-made survey questionnaire distributed to the respondents online.



Flow of the Study

4.2 Research Environment

The researchers conducted their study on the University of Cebu-Main campus since the researchers could quickly reach their respondents because they are from this campus. The UC-Main campus is situated along Sanciango St. and J. Alcantara St., Cebu City, Philippines, and offers 32 regularly updated courses as of 2022 that are distinguished in different college departments. The College of Arts and Sciences, located on the 2nd floor of the Don Manuel Gotianuy Building, was the department on which this research study focused. Therefore, the researchers mainly focused on the Psychology Department of UC-Main Campus, College of Arts and Sciences.

4.3 Research Respondents

The study's participants consisted of fourth-year psychology students within the College of Arts and Sciences department at the University of Cebu-Main Campus during the academic year 2022-2023. The total population of eligible respondents amounted to 166, from which a sample size of 120 was selected. To ascertain the suitable sample size, the researchers employed the Slovin Sample Size Calculation for Limited Prior Information. The respondents were chosen through a non-probability sampling method, specifically utilizing a simple random sampling technique. This technique ensures that each potential participant has an equal and fair statistical likelihood of being included in the study. The selection criteria focused on those currently enrolled in the fourth year during the 2022-2023 school year, ensuring that the sample size was sufficiently large to provide robust statistical data for the research.

4.4 Research Instrument

In this study, the researchers utilized the Rosenberg Self-Esteem Scale (RSE), a ten-item Likert scale developed by Rosenberg in 1965. The RSE evaluated the self-esteem levels of respondents by using items rated on a four-point scale, spanning from "strongly agree" to "strongly disagree." In conjunction with the RSE, the researchers created a tailored survey questionnaire comprising thirty items, employing a Likert scale for responses that ranged from "not effective" to "very effective." This questionnaire aimed to determine the most effective reinforcer influencing the respondents' self-esteem. To facilitate data collection, the questionnaire was administered through Google Forms, chosen for its convenience. Prior to data collection, the researchers submitted the survey guide to their research advisor for approval. Subsequently, both the researchers and the advisor thoroughly reviewed the survey questionnaire, conducting a pilot test to ensure its suitability for the research and its suitability for the targeted respondents.

4.5 Research Procedure

This section goes over the step-by-step procedure of data collection, data analysis, ethical considerations, and the trustworthiness of the research study.

4.5.1 Data Gathering

The researchers initiated the study by drafting a consent letter, formally seeking permission to conduct their research, which was addressed to the Dean of the College of Arts and Sciences. It was essential to obtain the dean's approval to proceed with the study. Subsequently, the fourth-year psychology students were selected at random and informed of the study through a private messaging application, chosen for its convenience in communication. Once approval was granted, the researchers personally engaged with each potential respondent, offering detailed explanations regarding the study's objectives and their specific role in completing the questionnaire. In this process, the researchers secured informed consent from each participant, ensuring their full understanding of the research's purpose and the importance of providing candid and meaningful responses. Following the consent phase, the participants were then provided with the questionnaire, which was administered via Google Forms.

The survey questionnaire employed in this study featured closed-ended questions designed to gather data from the respondents, including their identification of their socio-economic status. To ascertain socio-economic status, the questionnaire integrated the most recent classification established by the Philippine Statistics Authority. This classification system employs per capita income to categorize individuals' income levels and assess their standard of living, serving as a foundational element for the development of governmental policies and the delivery of public services, particularly in relation to the poverty line (Zoleta, 2022). The income categories encompass the following: "poor," "low-income but not poor," "lower-middle-income class," "lower middle," "middle," "upper middle," "upper middle but not rich," and "rich." After the respondents had completed the questionnaire, the researchers reassured them that the information provided would solely be utilized for the research's intended purpose. The researchers also encouraged respondents to seek clarifications or offer supplementary insights to enhance data validity. Lastly, respondents were requested to notify the researchers after questionnaire completion, allowing the researchers to express their gratitude for their valuable participation.

4.5.2 Treatment of the Data

The data obtained from the survey questionnaires completed by the respondents were transformed into percentages and presented in a tabular format to facilitate easy comprehension and assessment. Frequency and percentage calculations were utilized to establish the respondents' profiles, focusing on their gender and socio-economic status. To assess the relationship between the respondents' self-esteem levels and their most effective reinforcers, Chi-square Tests were employed. Additionally,

the researchers used the Wilcoxon Signed Rank Test to examine the correlation between effective reinforcers and the respondents' levels of self-esteem.

5. Results and Discussion

This chapter presented, analyzed, and interpreted quantitative data on the findings of the correlation between effective reinforcers and the level of self-esteem of fourth-year Psychology college students using the descriptive correlational statistics, Wilcoxon Signed Rank Test, Chi-square Tests, Frequency, and Percentage. The data are presented in tabular form with corresponding analysis and interpretation and are organized according to the statement of the problem sequence.

There are six (6) sections presented in this chapter. The first section shows the data about the frequency and percentage results of the respondents' profiles. The second section presents the ranking of the effective reinforcers. The third section portrays the level of self-esteem of the respondents. The fourth section describes the significant relationship Between Paired Variables: The profile of the Respondents and their Level of Self-Esteem. The fifth section contains the significant relationship between the profile of the Respondents and Effective Reinforcers. The sixth section shows the significant relationship between the level of self-esteem and effective reinforcers.

5.1 Profile of the Respondent

Table 1

Frequency and Proportion: Sex of the Respondents

Sex	Frequency	Proportion
Male	22	18.3
Female	98	81.7
Total	120	100.00

The frequency and percentage of respondents by sex are shown in Table 1. There are 120 respondents in total. The entire number of male respondents is twenty-two (22), equal to 18.3%, while the total number of females is ninety-eight (98), equal to 81.7%.

According to the data, female respondents have a higher frequency and percentage than male respondents. It implies that female respondents rather than male respondents dominated the study.

Table 2

Frequency and Proportion: Economic Status of the Respondents

Economic Status	Frequency	Proportion
Poor	38	31.7
Low-income but not poor	43	35.8
Lower middle	23	19.2
Middle	11	9.2
Upper middle	4	3.3
Upper middle but not rich	1	0.8
Total	120	100.00

The frequency and percentage of respondents by economic status are shown in Table 2. The lowest frequency of respondents is found in the upper middle but not rich level, with one (1) frequency and a percentage of 0.8%, while the highest frequency is identified in the low-income status, with forty-three (43) frequency and a percentage of 35.8%.

According to the data presented, the low-income category comprised a higher percentage of respondents, whereas the upper middle but not rich status had the lowest rating. It implies that the study was dominated by respondents with low income but not poor status. This will also be utilized to determine whether a person's socioeconomic status will influence the kind of reinforcers employed to boost their self-esteem.

5.2 Level of Effective Positive Reinforcers

Table 3

Level of Effective Positive Reinforcers

	Indicator	Mean	Standard Deviation	Rank	Verbal Description
14.	Satisfy your cravings by eating delicious food	3.5417	0.67233	1	Very Effective
27.	Studying hard because you find it enjoyable	3.5083	0.79912	2	Very Effective
13.	Hear a "you've improved a lot!" remark from your teacher	3.5000	0.75593	3	Very Effective
22.	Being smiled at in the hallway after completely recognizing a friend	3.4917	0.74468	4	Very Effective
18.	Special recognition at a school event	3.4500	0.78697	5	Very Effective
16.	Hear someone say, "you're making a progress" to you	3.4417	0.79701	6	Very Effective
5.	Making journals, poems, or even creating a story is pleasurable and satisfying	3.4417	0.78640	7	Very Effective
6.	Receiving a prize money after winning the quiz ball	3.3667	0.74398	8	Very Effective
20.	Listening to music because it makes you calm	3.3417	0.80436	9	Very Effective
28.	Spending time with someone because you enjoy their company	3.3417	0.75030	10	Very Effective
21.	Accepting milk tea, coffee, and other beverages after a successful graded reporting	3.2750	0.77744	11	Very Effective
30.	Earn a free admission to a school event for having a high grade in one subject	3.2750	0.83979	12	Very Effective
9.	Receive medals after being recognized as the top student	3.2500	0.82248	13	Effective
17.	Receive a certificate after a big accomplishment	3.2333	0.83750	14	Effective
7.	Receive a thumbs up after solving a problem	3.2333	0.89568	15	Effective
12.	Learning a new language because you are interested in it	3.2250	0.84478	16	Effective

15.	Participating in sports because this is where you can find comfort	3.1667	0.91057	17	Effective
19.	Receive brand-new clothes from your parents after washing your dirty clothes	3.1500	0.98433	18	Effective
4.	Accepting a certificate of participation in attending a voluntary seminar	3.1500	0.83666	19	Effective
29.	Hear a "you're doing a good job" after a successful presentation	3.1167	0.89050	20	Effective
10.	Earn a free library pass by consistently using the library	3.1000	0.84416	21	Effective
24.	Have some breakfast to start your day	3.0833	0.85586	22	Effective
2.	Receiving lovely letters after an inspirational speech	3.0833	0.84598	23	Effective
3.	Cleaning the house because you enjoy doing so	3.0667	0.88625	24	Effective
1.	A pat on the shoulder after winning a quiz bee	2.9917	0.85500	25	Effective
25.	Acquire gifts as a reward after being one of the top students in the school year	2.8583	0.92850	26	Effective
8.	Have books, pencils, and other school stuff after getting a high grade	2.8250	0.93181	27	Effective
11.	Receive a high five from your groupmates after a successful teamwork	2.8000	0.87544	28	Effective
26.	Receiving the highest grade for a successful group presentation	2.8000	0.96667	29	Effective
23.	Getting a higher score in a quiz after studying all night	2.7000	0.94023	30	Effective
Average		1.9417	0.58404	EFFECTIVE	

Not effective (1.00-1.75); Somewhat effective (1.76-2.50); Effective (2.51-3.25); Very effective (3.26-4.00)

Table 3 presents the level of effective reinforcer of the respondents. The result shows that generally, the respondents have effective reinforcers, with a mean of 1.94 and a standard deviation of 0.58. The result implies that most of the respondents in the study have received reinforcers effectively.

Table 4

Level of Positive Reinforcers

Indicator	Mean	Standard Deviation	Rank	Verbal Description
Natural	3.3750	.69889	1	Very Effective
Social	3.2583	.75030	2	Very Effective
Tangible	3.1833	.74454	3	Effective
Token	3.1333	.80891	4	Effective

Not effective (1.00-1.75); Somewhat effective (1.76-2.50); Effective (2.51-3.25); Very effective (3.26-4.00)

The results in Table 4 are the ranking of the type of reinforcers. The natural reinforcer displays the highest rank, which means it is a very effective reinforcer, followed by the social and tangible reinforcer. In contrast, the token reinforcer has the lowest rank among the four but is still an effective reinforcer for the respondents. The natural reinforcer is the most effective type of reinforcer, with a mean of 3.3750 and a standard deviation of 0.70, while the token reinforcer is the least effective reinforcer, with a mean of 3.1333 and a standard deviation of 0.81. The result implies that a higher percentage of respondents agree that natural reinforcers followed by social reinforcers are more effective than using tokens and tangible reinforcers to boost self-esteem.

The results in Table 4, which rank natural reinforcer in rank 1, is supported by the Self Determination Theory by Deci & Ryan (2000), which focuses on intrinsic motivation; according to this study, a person’s intrinsic need to explore, absorb, and dominate his surrounding is what leads to true high self-esteem-the act of performing something for its own sake rather than for a separate benefit. When someone is intrinsically motivated by demands, pressure, or rewards from other sources, this finding means a person can be reinforced naturally even if they do not receive tangible goods from others. Furthermore, this kind of reinforcer helps an individual in developing their own intrinsically desirable traits. This refers to the excellent character attributes that define them as individuals.

5.3 Level of Self-Esteem of the Respondents

Table 5

Level of Self-esteem of the Respondents

Statement	Mean	Standard Deviation	Interpretation
1. I feel that I am a person of worth, at least on an equal plane with others.	1.7917	0.60663	Disagree
2. I feel that I have a number of good qualities.	1.7833	0.63753	Disagree
3. All in all, I am inclined to feel that I am a failure.	2.8500	0.81633	Agree
4. I am able to do things as well as most other people.	1.8083	0.62572	Disagree
5. I feel I do not have much to be proud of.	2.8250	0.84677	Agree
6. I take a positive attitude toward myself.	1.6833	0.63489	Strongly Disagree
7. On the whole, I am satisfied with myself.	1.8500	0.74077	Disagree
8. I wish I could have more respect for myself.	2.2750	0.91635	Disagree
9. I certainly feel useless at times.	2.6333	0.86901	Agree
10. At times, I think I am no good at all.	2.6250	0.87026	Agree
Self Esteem Mean Score	22.1250	2.70562	Normal Self-Esteem

a. *Strongly Disagree (1.00-1.74); Disagree (1.75-2.49); Agree (2.50-3.25); Strongly Disagree (3.26-4.00)*

b. *General Self-Esteem Scale: Low Self-Esteem (0-14); Normal Self-Esteem (15-25); High Self-Esteem (26-30)*

Table 5 displays the self-esteem level of the respondents. The result shows that generally, the respondents have a normal self-esteem level, with a mean score of 22.13 and sd = 2.71. The result implies that respondents dominated the study with an average level of self-esteem. Most of the respondents marked “Strongly Disagree” with item six, which has a mean of 1.68 and a standard deviation of 0.63. While items three, five, nine, and ten are within the range of 2.50 to 3.25 and are interpreted as “Agree”. Furthermore, items one, two, four, seven, and eight show disagreement between 1.75 and 2.49.

Cherry (2022) agreed with this claim that a person’s level of self-esteem has an impact on their capacity to overcome challenges and their belief in their ability to accomplish their goals. A person with a solid sense of self-worth may also keep appropriate boundaries in the relationship and have a good relationship with them and other people.

5.4 Significant Relationship Between Paired Variables

Table 6

Significant Relationship Between Profile and Level of Self-esteem

Variables	df	Computed value	P-value	Decision	Interpretation
Sex and Self Esteem	2	.875	.646	Failed to Reject H_0	Not Significant
Socioeconomic status and Self-esteem	10	10.746	.378	Failed to reject H_0	Not significant

[Reject H_0 : $P\text{-value} < \alpha$], [$V \in [0.1, 0.3]$]: weak association, [$V \in [0.4, 0.5]$]: Medium association, and $V > 0.5$: Strong Association]

Table 6 shows the result of chi-square statistics on the correlation between the profile of the respondents and their level of self-esteem. The profile includes a name (optional), sex, and socioeconomic status.

In these results, the p-value of the variable sex and self-esteem is = 0.646; therefore, at a significance level of 0.05, the researchers failed to reject the null hypothesis and concluded that the relationship between sex and self-esteem is statistically significant. In addition, the p-value of socioeconomic status and self-esteem is .378, which is higher than the significant level of 0.05; hence, the researchers failed to reject the null hypothesis and concluded that socioeconomic status and self-esteem don't have a significant relationship.

Ryan and Deci's study agreed that people have an innate desire to understand, take in, and control their surroundings. The concept of relatedness was introduced to account for people's intrinsic ability to construct meaning and build relationships with others through the internalization of societal norms and values. As a result, neither the respondents' sex nor socioeconomic class impacts their sense of self-esteem.

Table 7

Significant Relationship Between Profile and Effective Reinforcer

Variables	df	Computed value	P-value	Decision	Interpretation
Sex and Effective Reinforcer	3	3.866	.276	Failed to Reject H_0	Not Significant
Socioeconomic Status and Effective Reinforcer	15	12.477	.643	Failed to reject H_0	Not significant

[Reject H_0 : $P\text{-value} < \alpha$], [$V \in [0.1, 0.3]$]: weak association, [$V \in [0.4, 0.5]$]: Medium association, and $V > 0.5$: Strong Association]

Table 7 shows the relationship between the profile of the respondents and the effective reinforcers. Effective reinforcers include Natural Reinforcer, Social Reinforcer, Tangible Reinforcer, and Token Reinforcer.

In this result, the p-value of the variable sex is .276 at a significance level of 0.05; therefore, the researchers failed to reject the null hypothesis and concluded that sex and effective reinforcer are not statistically significant. Moreover, the variable socioeconomic is .643 > 0.05 significance level; the researcher failed to reject the null hypothesis and concluded that socioeconomic status is not significant to the effective reinforcer.

There are a variety of reinforcers that can be used to boost self-esteem; therefore, their use is not dependent on the respondent's socio-economic standing or gender. According to the study of Sigler & Aamidor (2005), various forms of reinforcement are accessible, including presents, prizes, and verbal and written compliments. The study backs up the finding in Table 5 since it emphasizes that everyone can get reinforcers regardless of their personal possessions.

Table 8

Significant Relationship Between Level of Self-esteem and Effective Reinforcer	
Effective Reinforcers – Level of Self Esteem	
Z	-9.078
Asymp. Sig. (2-tailed)	.000

[Reject H₀: P-value < α = 0.05]

Table 8 presents the relationship between the effective reinforcer and self-esteem level. The outcome demonstrates a significant correlation between the two variables, with a p-value of 0.000, which is less than the significance level of 0.05. As a result, H₀ (null hypothesis), which claims that there is no relationship between effective positive reinforcement and self-esteem, will be rejected. This implies that the level of self-esteem and the positive reinforcers are statistically correlated.

These results were supported by Self Determination theory, which places significant value on the need for reinforcers for achievement. According to this theory of human motivation and personality, people are motivation oriented. It underlines that motivation provides energy, direction, persistence, and enforceability, which could lead to the high self-esteem of an individual. An individual is more determined to achieve their inner objectives and ambitions when they are both intrinsically and extrinsically motivated. A person can also develop more skills with the aid of external reinforcers like awards and admiration.

6. Conclusion

The primary objective of this research was to investigate the relationship between self-esteem and the effectiveness of various forms of reinforcement among fourth-year psychology students during the 2022-2023 academic year at the University of Cebu - Main Campus. The study focused on understanding the characteristics of the participants, identifying the most potent positive reinforcers for them, assessing their self-esteem levels, and exploring the interconnections among participants' profiles, preferred reinforcement types, and self-esteem levels.

The study's results indicated that a majority of the respondents were female, with a noteworthy proportion belonging to the low-income category. Among the four types of positive reinforcement examined, natural reinforcement emerged as the most effective for fourth-year psychology students. Additionally, a majority of the respondents exhibited a normal level of self-esteem. Notably, there was no discernible link between the respondents' profiles and the effectiveness of reinforcement, with gender and socio-economic status having no significant impact on the choice of reinforcer. Similarly, the study found no statistically significant correlation between the respondents' profiles and their self-esteem levels. However, a noteworthy correlation did emerge between the type of reinforcement used and the levels of self-esteem among the participants.

The majority of college students exhibit normal self-esteem and perceive the reinforcement techniques as effective. These strategies, such as providing recognition, tokens, or offering encouragement, serve as powerful motivators for individuals in pursuit of their goals. Notably, among the various reinforcement types studied, the most potent one was found to be the Natural reinforcer, whereby individuals can bolster their own motivation by engaging in activities they find enjoyable or desirable. This research contributes valuable insights into the role of reinforcement in enhancing self-esteem and can aid individuals in comprehending its significance in personal development.

The study's focus was primarily on fourth-year psychology students, which introduces constraints when attempting to extend the findings to the broader student population. It is important to acknowledge that the effectiveness of positive reinforcement may vary across different academic disciplines, and therefore, the results may not be directly applicable to students in other programs. Each academic program comes with its unique dynamics, goals, and challenges, which can influence how positive reinforcers impact student motivation and self-esteem. As such, caution should be exercised when extending the study's conclusions to a broader context, as the results are primarily grounded in the specific context of psychology students.

Based on the study's findings, it is clear that the respondents perceive the positive impact of reinforcers on self-esteem. Therefore, the study recommends strengthening self-awareness among students and the community, promoting responsible parenting, and

encouraging the use of positive affirmations among peers. These measures can collectively contribute to personal growth, enhanced self-esteem, and the cultivation of a more supportive and positive environment within educational and societal contexts.

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