

**POSITIVE COGNITIVE TRIAD – a link between SELF EFFICACY AND  
RESILIENCE, PROSOCIAL BEHAVIOUR AND HOSTILITY**

*Project submitted for partial fulfillment of the degree of*

***MASTERS OF ARTS***

***IN***

***PSYCHOLOGY***



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(Deemed to be University)

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## CERTIFICATE

This is to certify that the thesis entitled, “**Positive Cognitive Triad- a link between Self Efficacy and Resilience, Prosocial behavior and Hostility**” being submitted in partial fulfilment of requirements for the award of degree of **Master of Arts in Psychology**, submitted in the **School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala** is a bonafide work carried out under the supervision of Prof Surinder Kaur, School of Liberal Arts, Thapar Institute of Engineering and Technology, Patiala and that no part of this project has been submitted for the award of any other degree.



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This is to certify that the above statement made by the student concerned is correct and true to the best of my knowledge.



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## CANDIDATE’S DECLARATION

I hereby declare that the work presented in this thesis entitled, “**Positive Cognitive Triad- a link between Self Efficacy and Resilience, Pro social behavior and Hostility**” in partial fulfillment of the requirement for the award of the degree of **Master of Arts in Psychology**, submitted in the **School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala**, is an authentic record of my own work carried out under the supervision and guidance of Prof Surinder Kaur, School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala and refers other researcher’s work which are duly listed in the reference section.

The matter embodied in this thesis has not formed the basis for the award of any other degree of this or any other university.

Date: May 2020

Place: Patiala



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## **ABSTRACT**

The research examined into the impact of the newly arising concept Positive Cognitive Triad in mediating the relationship between psychological dimensions including self-efficacy and pro-social behaviour, resilience, and hostility levels in adolescents. To see how one's positive cognitive processes associates with their self-esteem and, in addition, other characteristics. The findings from 166 Children suggest a significant positive link between cognitive triad and self efficacy ( $r = .40$ ,  $p < 0.01$ ), as well as a positive correlation between positive cognitive triad and resilience ( $r = .212$ ,  $p < 0.05$ ). The positive cognitive triad appears to have an important role in mediating the relationship between self-efficacy and resilience. However, there was no evidence of a its link between Prosocial conduct and hostility. Furthermore, regression analysis also revealed that the Cognitive triad accounted for 17% of the variance in self efficacy.

**Keywords:** Positive Cognitive triad, Hostility, Pro-social behaviour, Self efficacy, Resilience, adolescents, variance.

## CHAPTER -1

### INTRODUCTION

#### 1.1 Self Efficacy

Self-efficacy is a term coined by Albert Bandura in 1977 to describe a person's confidence and belief that he or she can effectively undertake the tasks required to achieve a desired goal (Bandura, 1977). Ever since, self-efficacy is now one of psychology's most well-studied notions. Self-efficacy theory has been used to explore nearly every important domain of human nature (Bandura, 1997; Maddux, 1995; Maddux & Gosselin, 2011, 2012). Self-efficacy refers to your views about what you can do with your abilities rather than your abilities themselves. Also, self-efficacy is not a personality attribute; there aren't divisions – of people who have high self-efficacy and others who have low self-efficacy (Stajkovic & Luthans, 1998). In fact, Self-efficacy beliefs are held by persons regarding specific goals and life areas. For example, if you believe you have the skills needed to succeed in school and that you can use those skills to do so, you have a high level of academic self-efficacy. Self-efficacy, like many other psychological notions, is not always easy to quantify and requires a great deal of thought to do it effectively. In quite young children, self-efficacy begins to start developing. It does not remain constant once it has been formed; it may vary and expand as an individual goes through different situations throughout his or her life. Parents' self-efficacy is also seen to be reflected on children's development while they are very young (Jones & Prinz, 2005).

Self-efficacy act as a decisive factor in people's decisions in life and the actions they pursue. Usually, they choose and engage in activities that they feel they are capable of doing and avoid activities that they do not (Arora et. al , 2004). The advantages of self-efficacy extend beyond children's school years as people who have strong self-efficacy beliefs about their ability to

accomplish in school are more likely to indulge and see a larger choice for their future options (Lent, Brown, & Larkin, 1986). Self-efficacy formed in children end up having a long-term effect with positive future outlook. In one study, people aged 14 to 18 with higher social and intellectual self-efficacy reported higher life satisfaction five years later (Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007). Various studies have found that those who have higher self-efficacy for doing healthy practices (e.g., exercise self-efficacy, dietary self-efficacy) participate in more health-promoting behaviors (Strecher, DeVellis, Becker, & Rosenstock, 1986). Self-efficacy has a variety of effects on self-regulation, improved productivity and achievement (Maddux & Volkmann, 2010). For instance, those with higher self-efficacies are more motivated to succeed in the areas where they have higher self-beliefs (Bandura & Locke, 2003). This means people are encouraged to put in more effort in areas where they believe they can excel. Second, they tend to stick with their goals more even in the face of obstacles (Vancouver, More, & Yoder, 2008).

## **1.2 Prosocial behaviour**

Social behavior which tends to benefit other people or society as a whole is regarded as pro-social behavior that includes “Helping, sharing, contributing, sharing, and volunteering” (Arthur & Stephan, 1986). According to Eisenberg et al. (2007), it intends on benefiting others. Rule-following and complying to socially acceptable acts (such as halting at a "Stop" sign or paying for groceries) are also considered pro-social behavior (Baumeister & Bushman, 2007). Such behavior might be driven by empathy and concern for others' welfare and rights, as well as egoistic or realistic motives, like one's social position or reputation, or the expectation of direct or indirect reciprocity, or conformity to one's perceived system of justice (Eisenberg et al., 2007). Furthermore, it could also be driven by altruism. Although the nature of pure altruism is

debatable, where some believe that this is a philosophical rather than a psychological one (Wilson,2015). Pro sociality appears to be important to the well-being of communities at all scales, including schools evidently. Even in the classroom, it tends to have a major impact on a student's desire to learn and benefits to the classroom and larger society. In workplace too, it has impact on team's mental safety, as well as significant indirect impacts on employees' supportive attitudes and their task productivity (Frazier & Tupper, 2018). Adolescents and society benefit from pro-social conduct because it encourages healthy attributes. Sharing and fairness are generally the starting points for pro-social conduct in children. Children begin to demonstrate pro-social conduct by presenting and offering their toys to their parents between the ages of 12 and 18 months, without being encouraged or rewarded. Children's reasoning evolves from utilitarian and needs-oriented to more concerned with recognition and involved in complicated cognitive processes of perspective taking and reciprocity reasoning as they get older (Eisenberg, 1991). Although the word "pro-social behavior" is frequently linked with adolescents developing healthy attributes (Eisenberg & Paul, 1989), the literature on the subject has expanded since the late 1980s to encompass adult activities as well.

### **1.3 Resilience**

The nature and impacts of various types of stress faced by children in their early life largely determine their future tolerance. The time to time life challenges or adversities faced by them influences their flexibility and their strength to cope up with them. It is been seen that a complex balance of human traits and the social context—as well as the nature of adverse experiences, including their quantity, intensity, duration and persistence—can determine the vulnerability or resilience of any child or person. The fact that early life events have such a wide range of long-term implications suggests that differences in vulnerability and resilience play a role in

mediating these associations. Under adverse situations, how an individual face it and cope with it without developing any physical or mental illness has become the central question for researchers. Researchers from various domains, including psychology, psychiatry, sociology, and, more recently, biological fields, such as genetics, epigenetic, pharmacology, and neuroscience, are studying resilience. Hence, despite experiencing all the adversities, Resilience indicate positive adaptation, or the ability to regulate or preserve one's mental health. As scientific knowledge has grown, so has the evolution of definitions. As a result, resilience and its interventions were defined as "protective and vulnerability forces at several levels of influence like culture, community, family, and the individual." The first distinction is between thinking of resilience as a positive attribute and thinking of it as a dynamic process. Meanwhile, other definitions states resilience is broadly described as the ability to bounce back from adversity or recovering from them (Kaplan, 1999) and successfully adjust to the demands of difficult situations (Tugade & Frederickson, 2004). Hence, it refers to positive adaptability in the face of difficult or dangerous conditions (Masten, Best, & Garnezy, 1990).

Furthermore, there is still debate over what characterizes resilient attitude and how to best assess effective adaptation to adversity. It is not a binary, one-dimensional trait that someone possesses or does not possess. It is believed that resilience signifies the endowment of a variety of talents, in varying levels, and varying extents that assist a person in dealing with adversity (Alvord & Grados, 2005). Despite being at more risk than the average for major difficulties, some have been able to enjoy expectedly more successful lives than others (Brooks, 2006). Hence, It has been stated that a resilient person must demonstrate positive outcomes in various aspects of living throughout his lifetime (Cicchetti & Rogosch, 1997).

#### **1.4 Hostility**

Hostility is a multifaceted personality trait with two highlighting components: (1) cynicism, or the conviction that others are concerned by selfish motives, and (2) mistrust, or the anticipation that others will hurt and mistreat you. These characteristics result in a hostile style of social interactions marked by challenge, evasion, and readily aroused frustration. Although hostility and the risk variables of anger and aggression usually coincide, but their inter correlations are weak. In contrast to anger, which is an emotion, and aggression, which is a behavior, hostility is instead a cognitive trait (Powell & Williams, 2007). Therapists, in their daily work are alert of the numerous forms in which hostility is expressed in its different forms, and they carefully distinguish between them. A distinction is also established between verbal hostility and physical assault with respect to the aggression when its overt and direct. Cursing and threatening behavior are easily distinguished from gossiping and roundabout derogation as examples of overt gestures of hostility. Because significant boundaries can be found between subclasses of hostility, a global assessment of hostility tends to be ambiguous. Statement like "He is hostile" might be applied to both a husband who hits his wife and a man who is consistently late for appointments (Buss & Durkee, 1957). As a result, attempts to assess hostility are likely to include not only an overall estimate of intensity but also evaluations of the strength of individual sub-hostilities. According to Buss and Durkee (1957), The first step was to describe the many types of hostility that are commonly seen in everyday life. Assault is defined as physical violence against another person. This includes fighting with other people but not harming goods. Roundabout and undirected aggression are both examples of indirect hostility. Whereas, Temper tantrums and slamming doors are examples of undirected aggression, which is defined as a discharge of negative affect, directed towards no one in particular; it is a diffuse fury reaction with no clear vision. Quick temper, grumpiness, irritation, and rudeness are hallmarks of

irritability. Whereas, Negativism is defined as any behavior that is opposed to authority. This is characterized by a failure to conform that might range from passive noncompliance to outright defiance of rules or traditions. Negative attitude manifested in both the style and content of speech is known as verbal hostility. Threats, obscenities, and being too critical describing content whereas threats, shouting, and screaming are examples of style adopted. These all leads to certain emotional, Social, physical, psychological and interpersonal discomfort in long term. It was stated that "The intensity of any act of hostility inhibition varies positively with the amount of punishment expected as a result of the act" (Miller, 1941). It is an important construct in psychological field, effecting and affected by certain factors.

### **1.5 Positive Cognitive Triad**

Cognition Refers to "the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses". In the fields of linguistics, musicology, anesthesia, neuroscience, psychiatry, psychology, philosophy, biology, systemic, and many more cognitive processes are studied from various perspectives in various contexts (Von Eckardt, 1996). According to Sternberg and Sternberg (2009), the term "cognition" is typically used in psychology to refer to an individual's psychological abilities as information processing, similarly as in cognitive engineering (Blomberg, 2011). Our thoughts, emotions and behaviors are fundamentally said to be controlled by cognition, which are further governed by discrete neural pathways that are assisted by a variety of neurotransmitter systems. Disorientation in which could leads to certain imbalance, disorders or malfunctioning among individuals. Likewise Beck's concept of maladaptive cognitive pattern is one of the most well-known theories of depression (Beck, 1972; Beck, Rush, Shaw, & Emery, 1979). It is different from general mood changes or emotional reactions to adversities of daily life. Beck's theory is founded on the

premise that depressed persons have a bad, dysfunctional way of filtering their experiences. These mental distortions can be assessed by cognitive triad domains (Beck, 1972; Beck et al., 1979), where depression prone people tend to have a negative outlook on themselves, their world, and their future. The cognitive triad also proposes that general cognitive positivity stems from an optimistic perspective of themselves (Willner, 1984). Aaron Beck (1921), when studied depressed people found that they have developed negative schemas that are negative beliefs or expectations about themselves or the world. It involves the development of the cognitive distortions that involves automatic faulty thinking patterns. He postulated three mechanisms that he thought may leads to maladjustments - the cognitive triad (of negative automatic thinking), negative self schemas and errors in logic (ie. Faulty information processing). However, The Positive cognitive triad constitutes positive and adaptive content of cognitive patterns in people as a pervasive optimistic view of the self, of the environment and, of the future that are manifested in automatic, habitual thoughts as a response to triggering stimuli. It could lead to convergence of both the negative and positive thoughts into simpler positive feedback (DeMonbreun & Craighead, 1977). The self view involves "I am sufficient" or "I am lovable," type beliefs, the world view involves core beliefs like "the world is a fair place to live" and the future view possess "I will eventually succeed" kind of schemas. It reflects themes of gain and self fulfillment. Among the many developed instruments to measure the negative cognition in these three above defined Beck's domains, the most prominent one is the Cognitive Triad Inventory (CTI) by Beckham et al.(1986). Positive Psychology however, has given the concept of Positive Triad for assessing the adaptive schemas. The CTI seeks to measure the relationship between "therapist conduct in a single therapy session to improvements in the cognitive triad"

and "patterns of changes in the triad to changes in overall person". Meanwhile, Kaslow et al. developed the CTI-C to use with children and adolescents in more feasible language.

The significance of self efficacy and how it's connecting to children's resilience, hostility and pro-social approach is highlighted in previous literature, despite the fact that the study has a very small history. However, few studies have focused on examining the mediating and moderating effects of those factors. Cognitive behavior therapies emphasize the mediating role played by cognitive processes in psychology. The cognitive triad may also have a mediating effect on an adolescent's mental health (Reinmann & Ellison, 2004). However few empirical studies are bring seen to test the mediated and moderated role of cognitive triad played in the relationship between self efficacy and wellbeing . The relationship between stressful life events and negative self-esteem is moderated by the cognitive triad in middle school students (Reinemann & Ellison, 2004). A mediator is a third variable that influences or changes the relationship between an independent and dependent variable (Baron & Kenny, 1986). A mediator, according to Bennett (2000), is a variable that is anticipated by the independent variable and explains the relationship between the independent and dependent variables. A moderator is an separate independent variable that influences the strength and direction of the link between the other independent factors and the dependent variables. Researchers can more precisely investigate the explanations of the relationship between independent and dependent variables by including a mediator in their research (Bennett, 2000). To our knowledge, no study has looked into the role of the positive cognitive triad in mediating the relationship between self efficacy and other psychological dimensions. Therefore the present study aims to study the Positive Cognitive triad as a mediator between Self Efficacy and variables like Resilience, Pro-social behaviour, and Hostility among Adolescents that How one's belief their abilities (self efficacy) is linked with their constructs

like an individual's tendency to cope (Resilience), their behaviour towards others (Pro-social Behaviour) and his inner aggression inclinations (Hostility).

## CHAPTER -2

### REVIEW OF LITERATURE

The present study aims to investigate the relationship between self efficacy and other psychosocial constructs. This chapter is written to provide a state-of-the-art review on these domains. It explores these domains from different angles and perspectives as well as their relationships with various aspects. Furthermore, this chapter brings out the gap in literature and ways of further improvement.

#### 2.1 Self Efficacy

Talking about any domain of life, Self-Efficacy beliefs act as one of the primary foundation for motivation, well-being, and personal accomplishment. Self-efficacy beliefs decides if one is productive, pessimistic or optimistic, how much effort one puts into the activity, motivation and patience in the face of adversity, etc. It affects almost every aspect of one's life. It determines how to regulate thoughts and behaviors, and susceptibility to stress and depression (Arora et.al, 2004). It is believed that Adolescents self efficacy beliefs associates with their self views, self attainments and their skills (Bandura, 1997; Pajares, 1997). Friendships become an essential source of self-efficacy beliefs for children between the age of 12 and 16. Children who hang out with peers and aren't academically inclined likely to have a worse sense of academic self-efficacy (Wentzel, Barry, & Caldwell, 2004). Adolescents who see their friends achieve, on the other hand, have a higher level of academic self-efficacy (Schunk & Miller, 2002). Multon et al. (1991), analyzed 36 studies investigating the relationship between academic self-efficacy and performance and persistence, and identified the mean correlation of  $r = 00.38$  and  $r = 00.34$

respectively. Students who are self - assured approach tasks with ease, while those who lack confidence may feel apprehensive (Pajares, 2002).

In a study, Self-efficacy and general well being among adolescents in context of gender on 100 adolescents, results concluded that majority of adolescent boys (58%) fell in the level of high self-efficacy and same percentage of girls (58%) fell in the level of moderate self efficacy. This indicated that they were more confident than girls in their ability to handle unexpected events, which could be because males are comparatively more exposed to the outside world (Arora et. al ,2014). In another study by Spence et. al, (2010), it was found that high self efficacy highly correlated with physical activity and performance . Also, boys have higher self efficacy than girls has are more physically active. It appears that general self-efficacy influences the nature and extent to which people plan for the future. Those who take a future-focused approach are probably more prepared for future endeavours and to have more control over the task they are working on (Gollwitzer, 1996; Friedman & Lackey, 1991). In a study by, Luszczynska, Gutierrez-Dona, and Schwarzer (2005), it was concluded that people who have high positive futuristic approach scores high on general efficacy scale. Another study showed that both variables that is Self-efficacy and consideration of future consequences are significantly correlated (Azizli, 2015).

## **2.2 Positive Cognitive Triad - as a Mediator**

People have different perceptions of themselves, their world, and their future, as stated by Beck's theory of depression (Beck, Rush, Shaw, & Emery, 1979). Though there are certain factors affecting one's nature like Cognitive, behavioral, and family disruptions but cognitive patterns, particularly related to the child's view of self, world, and future in respect to cognitive triad,

Beck (1967), seem to be of primary importance (Stark et al., 1993). The positive ones can lead to better adjustment, better functioning and positive schemas related to the life. Meanwhile, "Adolescence is defined as a period of change or a journey toward adulthood "(Nurmi, 2001), during which a teenager must deal with series of physiological, psychological, and sociological changes (Nurmi, 1997). Hence it is being assumed if a child comprise positive cognitive triad, it would be difficult to find distant cognitive entities like dysfunctional attitudes or negative core beliefs in him (Beshai et al., 2012). They generally have positive view regarding self, future and world as per Positive Psychology development.

According to Giles and Shaw (1987), majority of cognitive triad studies have not evaluated all three aspects ie. self, world and future views at the same time. In a study, it was argued that to make this model less tedious or complicated, all the three domains could be reduced down to a single one that is into "view of self", as it significantly determined one's thoughts pattern (Haaga et al. ,1991). While in other study, all the three aspects view of self, view of world, and view of future are found to be highly determining with all the distinct constructs having factorial validity (Anderson & Skidmore's , 1995). Articles by Kuiper and Rogers (1979) and Markus views shared characteristics with schemas and beliefs. These studies established the self-concept as a scientifically valid construct. During the 1980s, this resulted in a significant increase in self-research (Swann & Seyle, 2005). In one study by Pelham & Swann (1994), whether the self-views were positive or negative, People's responses to feedback from others are also influenced by their self-view certainty. Meanwhile Hicks (1996), theorises the consequences of an apparent disjunction between their optimistic individual ambitions and their pessimistic attitudes toward the future. According to Beck et al. (1979) as well as others like Freeman (1986) , all the positive or negative cognition are developed through early life experiences only.

Positive approach of either of Triad's domain is related to high Self efficacy by certain previous studies. Alessandri et al.(2014) in his study From Positive Orientation to Job performance: The Role of Work Engagement and Self-efficacy Beliefs with positive orientation linked to positive cognitive triad concluded that cognitive triad is positively associated with self efficacy beliefs. Moreover, they are more likely to use self-inspiring language like "I can do this" and "I am not going to be stopped" and Resilience promotes the development of positive cognitions about oneself, the world, and the future, which leads to improved well-being and reduced distress. (Snyder et al., 1998). As a mediator acts like a third variable that alters the relationship between an independent and a dependent variable (Baron & Kenny, 1986). There is dearth of literature looking for the intermediate factors effecting the relation of self efficacy with other factors. Cognitive triad as possess cognitive patterns related to oneself, world or futuristic approach, could be altering beliefs and impacting other variables.

### **2.3 Resilience**

Luthat and Cicchetti (2000) observed that children and adolescents are faced with a variety of risk factors. Threats relating to the individual or the surroundings that increase the probability of a problem occurring have been classified as risk factors (Rutter, 1987) and tend to be associated with mental health issues (Doll & Lyon ,1998). Therefore, to protect against such challenging factors and adversities Resilience is important (Garmezy et al, 1984; Rutter, 1984; Werner, 1992). According to research by Broderick & Korteland (2002), the individual's perceived assertiveness in dealing with risk factors has a significant impact on the effectiveness of resilience strategies. various approaches to modelling resilience indicate that it is a dynamic process that is culturally moulded (Ungar, 2006). A popular belief is that adolescent resilience

must be nurtured by family, classmates, schools, communities, and cultural and political belief systems are all considered from an ecological, developmental perspective.

According to Bolognini et. al (1996), the development of resilience among children and adolescents is age dependent. Younger children tends to show rapid focus on problems and indulgence in coping strategies like positive self instruction, direct action or distraction (Hampel & Petermann, 2005). Resilience theory focuses on strengths rather than flaws, and it aims to understand healthy development and positive outcomes in the face of adversity (Masten, 2001). it is an innate ability everyone born with. Children who are resilient work, play, love, and expect well (Bernard, 1993). According to Beasley, Thompson, & Davidson (2003) in their study, Resilience: Enhancing Well-Being Through the Positive Cognitive Triad on 1,419 college students in Hong Kong found concluded resilience to be significantly associated with positive cognitions about the self, the world, and the future . It was found that Individuals with a higher level of resilience had significantly more positive thoughts and reported significantly higher levels of happiness in their lives. Self-efficacious, confident, and determined are common characteristics of resilient people (Wagnild & Young, 1990; Werner & Smith, 1992). Meanwhile people who exhibit these traits are more likely to engage in positive self-talk that improves their self-view and empowers them. Resilient people develop a positive view of themselves when they are in such a positive frame of mind. Individuals with high self-esteem are more likely to persevere and endure during difficult times (Smokowski, Reynolds, & Bezruczko, 1999). In a study conducted by Parr, Montgomery and DeBell (1998), it was concluded that People who are resilient have a positive state of mind towards the world, which inspires them to overcome adversity and back bounce from it. Also, it was suggested that a child must need to have positive outlook towards the world to build resilience in oneself (Greene, Galambos & Lee, 2003).

Furthermore, They are better able to see potentials in difficult situations and find solutions to problems if they have a positive outlook on the world (Wang, 2009). In another study, it was depicted that resilient people have an optimistic view of the future (Klohn, 1996; Werner & Smith, 1992).

## 2.4 Hostility

Despite the fact that hostility is a well-studied topic, its definition remains ambiguous and often perplexing, as it is frequently associated with concepts like aggression and anger, or used interchangeably. Nevertheless, it is important to note that these are fundamentally different terms. For example, aggression refers to any behavior aimed at another person with the intent of harming them (Bushman, 2016). Anger, on the other hand, is an emotional state characterized by feelings varies from mild annoyance to intense fury and anger, as well as activation of the autonomic nervous system (Spielberger & Biaggio, 1992). Hostility, on the other hand, is defined as a set of beliefs, expectations, and negative attitudes toward people and objects (Smith 1992; Siegman & Smith, 2013). In a study by Eron (1987), by collecting 22 years data of 600 children ranging from 7 to 9 years to check the causes of development of hostility among children, it was found that Hostility may be instilled in a child as a result of his or her interactions with his social environment of his home and school. It was stated that the feeling of hostility and aggression seems to be more in children that are not supported positively by their parents at home (Eron et al., 1971). Thereafter, after 10 years of this study, when these children grow up to 17-19 years, Lefkowitz, et al. (1977) performed same experiment with reinter viewed 427 of original subjects; he concluded that those children are rated as aggressively as they were earlier. Research shows wide variety in results. According to some studies, Attacks to interpersonal self-esteem, such as insults or unfair criticism, are frequently used to incite hostility

(Averill, 1982; da Gloria, 1984; Wills, 1981; Zillmann, 1978). In such situations, becoming enraged or hostile may serve a variety of purposes, including warding off anxiety and other negative self-emotions and immediate communicating one's feeling of displeasure through this form (Novaco, 1975). Furthermore, according to other studies, it also helps in restoring one's attacked self esteem (Feshbach, 1970), subjective well-being (Wills, 1981), or public self-image (Felson, 1984).

Many studies related to gender differences depicts the most significant differences between them in their socialisation and expression of hostile emotions. It concludes that girls experience less hostility than boys and this difference is found across cultures (Maccoby and Jacklin, 1974, 1980). In a study, gender differences in hostility among 218 depressed and 51 medical outpatients, it was found that in both depressed and medical patients, male tends to be significantly more hostile than females (Fawa et. al, 1995). Cognitive patterns and schemas plays a significant aspect in forming one's hostile behaviour. According to literature by Kugle et. al (1983) and Turner (1968), such instability is linked to an increased sensitivity to evaluative feedback by people (world view) , increased self-consciousness, and increased efforts to assign credit and blame for events which, more likely to experience frustration and express it in a hostile manner. Threats to a low in self people are likely to be notably hostile (Averill, 1982). In literature association hostility and self efficacy, Cowan et al. (1998) investigated the self-report correlates of 477 adolescent's women's hostility toward other women in three studies, where second study founded that their hostility was negatively associated with self-efficacy, whereas no significant relation was founded by Pierce et al. (2010).

## 2.5 Prosocial behaviour

There is often a "golden rule" of social conduct that exists across societies and cultures: treat others as you would like to be treated. Prosocial behaviour encompasses a wide range of voluntary behavior that benefit others or society, regardless of the reason or self interest (Graziano & Eisenberg, 1997; Staub, 1978). Batson (1991) postulated the empathy-altruism hypothesis, that connect perception, emotional communication, empathic concern (i.e. compassion), and altruism to explain pro-social behavior.

In a study by Janssens and Dekovic (1997) conducted on 125 children showed positive correlations between pro-social morality and pro-social behavior and it was found that Children who grew up with a supportive parents, and less restrictive environment were more pro-social and persuasive about pro-social moral values at much higher level. Moreover Pro social children tend to be confident in their passionate expression, socially endowed, balanced, well-directed, and have a positive self-view (Kaur, 2019). Nantel-Vivier et al. (2009) investigated the development of pro-social behavior in both Canadian and Italian adolescents aged 10–15. Their findings show that, while empathy and moral reasoning continue to improve in early adolescence, the development of pro-social behaviors reaches a halt. This shift in development is thought to be the result of more individualized and selective pro-social behaviors. Adolescents begin to direct these behaviors toward their peer groups and/or affiliations during adolescence. Also, in comparison to their male peers, young adolescent girls tended to engage in more pro-social behaviors. As Females mature earlier than males, could explain the mentioned difference. In some studies it was found that media played important role in imparting pro social conduct among children. According to some studies, Gender is an important yet controversial aspect of prosocial behavior (Eisenberg & Fabes,1998) with females slightly outperforming males

Whereas, in others men have been found to be more helpful than women (Feinman ,1978). Meanwhile in some, no significant gender differences in terms of helping behavior was found (Boice & Goldman, 1981).

With high social self-efficacy may seem to have the confidence to execute pro-social acts (Caprara & Steca, 2005) while who may be low in self-efficacy, may lack the confidence to act prosocially (Comunian & Gielen, 1995). Individuals with high levels of self-efficacy, especially adolescents, have been found to have pro-social inclinations (Wentzel, 2014). Caroli with his colleagues (2013), explored the relationships between different types of self-efficacy and prosocial tendencies in a sample of 108 Italian adolescents computed that pro-social behavior was positively related to self-efficacy in problem solving and empathy. Similar association was founded by Steinemann et. al (2020) in his study on 66 psychology students and Patrick et al.(2018) in his study examining the extent to which moral identity, moral judgment, and social self-efficacy contribute to pro-social behaviors in adolescence.

## CHAPTER-3

### **RESEARCH GAP, MOTIVATION FOR THE STUDY, OBJECTIVES, CONCEPTUAL FRAMEWORK AND HYPOTHESES**

#### **31. GAP IN LITERATURE**

To clarify the relationship between self efficacy and other psychological concepts like Resilience, hostility and pro-social behavior, research has shifted to examining the factors mediating these constructs. Mak, Ng, and Wong (2011) proposed a positive cognitive triad, composed of positive views about oneself, one's world, and the future, to help explain this link. Although there has been little research on the positive cognitive triad as a set of beliefs, existing literature appears to support relationships between each individual constructs. Also, there is lack of research on positive cognitive triad, without beck's depression aspects especially on adolescent population. As Pittard et al. (2021) in their study, the conceptualization of the positive cognitive triad and associations with depressive symptoms in adolescents, bring out the constructive aspects of Positive Cognitive Triad. This is a new growing concept and the study aims for checking its implication without its depressive domain. To further elucidate the potential role of these variables on Indian sample was emphasized. This study is conducted to find the connection of self efficacy and, Resilience, hostility, and pro social behavior via Positive cognitive triad and factors and to fill the gap between them. Keeping in mind the inconsistencies in the existing body of literature and to investigate something new, the current study aims to leap in the same direction using validated and reliable scales.

### **3.2 MOTIVATION OF THE STUDY**

Adolescents with their budding thoughts, changing perspectives regarding themselves and others are seeking to have some vital link with their self efficacy and other social constructs like coping level, Pro-social Behavior etc. Given this new concept of positive triad and its mediation role, Certain studies like Mehta et al.,(2019) in their study have successfully investigated Positive Cognitive triad linking it with constructs like self efficacy and overall Wellbeing and Chang et al. (2007). By studying the “The mediating and moderating roles of the cognitive triad on adolescents” bringing into the light, the whole new perspective of proposing Positive Cognitive triad ( a new extent of Positive Psychology) as a mediator between different psychological Domains. To adopt an positive outlook on the future potential of this research and to point out to the possibility of implications targeting the positive cognitive triad and thereby boosting people's approach in different domains.

### **3.3 OBJECTIVE**

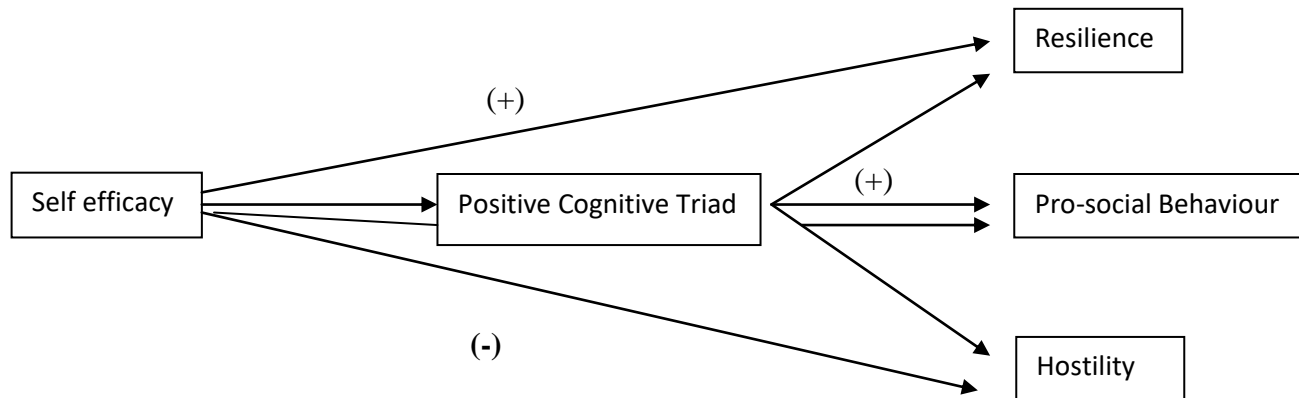
To examine the Positive cognitive triad as a link between Self efficacy and Resilience, Pro Social behaviour and Hostility among Adolescents.

### **3.4 CONCEPTUAL FRAMEWORK**

Taking cue from Hsiu-Ju Chang(2017), Positive cognitive triad can be proposed to be mediating variable between self efficacy (Independent variable) and other dependent variables like hostility, Resilience and Prosocial behavior. Bandura’s Self-efficacy plays role in not only how you feel about yourself, but it could also effect one’s conduct in psychosocial realm

(Rodebaugh, 2006), like their tendency of being hostile towards others, or one’s helping behavior for others, or one’s coping strategies.

Figure 1 shows the general proposed pathway between Self Efficacy, Positive Cognitive Triad, Hostility, Pro-social behavior and Resilience.



### 3.5 HYPOTHESES

H<sub>1</sub> : Self Efficacy is positively associated with Positive Cognitive triad

H<sub>2</sub> : Positive Cognitive triad is positively associated with Resilience.

H<sub>3</sub> : Positive Cognitive triad is positively associated with Pro social behaviour.

H<sub>4</sub> : Positive Cognitive triad is negatively associated with Hostility.

H<sub>5</sub> : Positive Cognitive triad act as a mediator between Self Efficacy and Resilience.

H<sub>6</sub> : Positive Cognitive triad act as a mediator between Self Efficacy and Pro social behaviour.

H<sub>7</sub> : Positive Cognitive triad act as a mediator between Self Efficacy and Hostility.

## CHAPTER -4

### **METHODOLOGY:**

#### **4.1 SAMPLE**

The sample consisted of 166 participants within the age range of 14-18 years, out of which 96 were females and 70 were males. The mean age of the participants was 16.40. The participants were selected using convenient sampling, which was a type of non probability sampling that involves the sample being drawn from that part of the population that is close to hand.

#### **4.2 DESIGN**

Co relational design will be used.

where, Self efficacy is an Independent Variable. Resilience , Pro-social behaviour and hostility are dependent Variables. And Positive Cognitive triad act as a mediator.

STATISTICAL ANALYSIS : Product moment correlation and linear Regression will be used to compute the results using SPSS. Additionally, Mediation Analysis ( Structural Equation Modelling) is done using Smart PLS.

#### **4.3 MATERIAL USED**

6 psychometric scales will be used in this study.

1. General Self efficacy scale (GSE) developed by Schwarzer and Jerusalem (1979) to measure self efficacy among children. It consisted of 10 items like “I can always manage to solve difficult problems if try enough”, “It is easy for me to stick around my aims and accomplish my goals” etc. Responses are made on 4-point scale. The scale is one-dimensional, with cronbach alpha ranged from .76 to .90 with the majority in the high .80 .
2. Cognitive Triad Inventory for children (CTI-C) consisting of 36 items divided into three subscales- self view, future view and world view. It is a downward revision of the CTI (Kaslow et al., 1992). There were 6 filler items that is 1,2,4,7,14 and 22, leaving behind 30 questions constituting 10 items each sub- scale. High score on Cognitive scale here represents positive adaptation to self, world and future. Full-scale internal consistency and

reliability of the CTI-C was ( $\alpha = .92$ ) and moderate alphas on the individual scales ( $\alpha = .83$  for the Self,  $\alpha = .85$  for the Future, and  $\alpha = .69$  for the World scales).

3. Brief Resilience Scale (Smith et. al, 2008) used to measure Resilience level among the sample. It was consisted of 6-items like “I tend to bounce back quickly after hard times”, “ I have a hard time making it through the stressful events” etc. Responses were made on a 5-point likert scale. It has moderate reliability with cronbach alpha ( $\alpha = .71$ ).
4. Light Triad Scale (Kaufman et. al, 2019) was used to measure pro-social orientation. It was consisted of 24-items divided into 3 subscales (Empathy, Compassion and Altruism), 8 items each. Each construct was defined highlighting the key elements of each one. Responses were made on a 5-point likert scale.
5. Hostility scale developed by Deragatis, Rickels and Rock (1976) is consisted of 6 items. It is generally used to measure symptoms underlying hostility, reflecting qualities such as aggression, irritability, rage and resentment. It consists of hypothetical situations and consecutive options regarding the same. It demonstrates good internal consistency of  $\alpha = .73$ .

## PROCEDURE

To study Positive Cognitive triad as a link between Self Efficacy and variables like Resilience, Pro-social behaviour, and Hostility among Adolescents, the research will be initiated. Literature review will be collected and the various researches will be studied. The tools for data collection for all the variables will gather. Next, the hypotheses will be formulated and the expected outcome will be identified. Students from different universities will be identified and approached for the data collection. The purpose of the present study will be explained in brief to all the participants and their doubts related to the questionnaire will be cleared. The participants will be both males and females. Upon giving the instructions to the participants, data will be collected. It will be collected via online softcopy of the questionnaire in the form of Google survey.

Ones the desired number of the responses will be gathered, participants will be thanked for their valuable response and time. The raw score will be compiled in excel sheets for each variable and each participant. For the analysis of raw score, SPSS and SmartPLS will be taken. Descriptive Statistics, correlation, stepwise regression and mediation analysis, will be use to test the various hypotheses.

CHAPTER 5

RESULTS

The data was analysed using Descriptive statistics, Correlation, Regression analysis and Mediation analysis.

Table 1. Descriptive Statistics

	N	Mean	Std. Deviation
Cognitive Triad	166	72.795	7.5511
Hostility	166	9.012	1.1207
Self efficacy	166	31.000	5.0799
Resilience	166	20.602	3.8157
Pro social	166	81.651	7.1796

Table No. 1 shows the descriptive statistics of Cognitive triad, hostility, pro social behavior and dependent variables like self efficacy and resilience. The mean value of Cognitive Triad came out to be 72.795 ( SD= 7.5511), for Hostility it came out to be 9.012 (SD= 1.1207), for Prosocial behavior it was 81.651 (SD=7.1796), for Self efficacy 31.000 (SD= 5.0799) and for Resilience the mean was found to be 20.602 (SD= 3.8157).

TABLE 2. Correlation Analysis

	POSITIVE COGNITIVE TRIAD	HOSTILITY	PRO SOCIAL BEHAVIOR	SELF EFFICACY	RESILIENCE
POSITIVE COGNITIVE TRIAD	1				
HOSTILITY	.095	1			
PRO SOCIAL BEHAVIOR	.048	-.146	1		
SELF EFFICACY	.409**	-.064	.138	1	
RESILIENCE	.212*	-.270*	.212*	.275*	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 2. show the product moment correlation analysis of Positive cognitive triad, and self efficacy with hostility, pro-social behaviour and resilience. A significant positive correlation was found between Positive cognitive triad and self efficacy ( $r = .409, p < 0.01$ ), and between positive cognitive triad and resilience ( $r = .212, p < 0.05$ ). the correlation between Self efficacy and Resilience was also found to be significant ( $r = .275, p < 0.05$ ).

While, no significant relationship was found between Positive Cognitive triad and other factors like Hostility ( $r = .095, p > 0.05$ ) and pro-social behaviour ( $r = .048, p > 0.05$ ).

Similarly, no significant relationship was found between Self efficacy and Pro-social behaviour ( $r = .138, p > 0.05$ ), Self efficacy and Hostility ( $r = -.064, p > 0.05$ ),

**TABLE 3** Regression model summary of Positive Cognitive triad

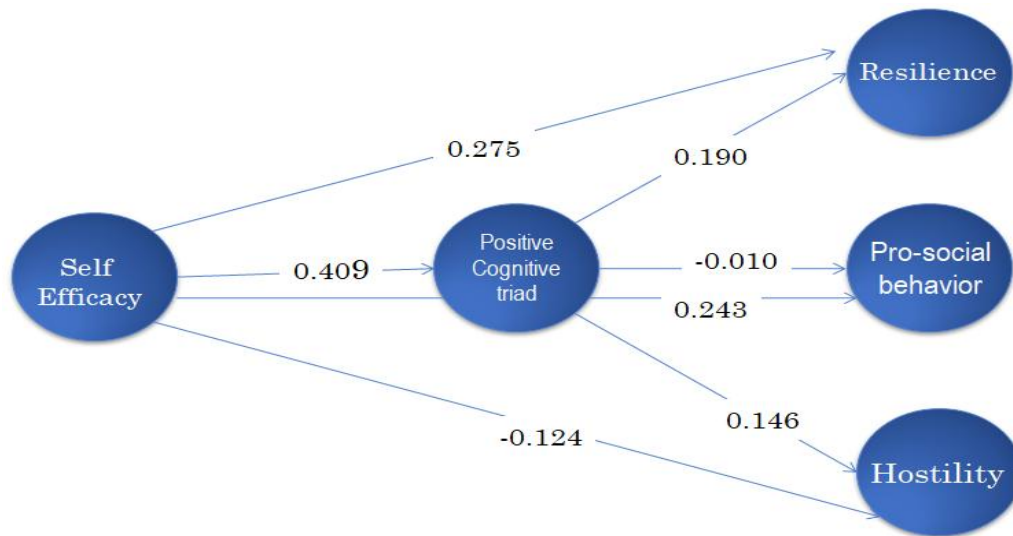
Model		Unstandardized		Standardized		Adjusted R Square
		Coefficients		Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	9.297	5.133		1.811	.170
	Positive Cognitive triad	.250	.059	.424	4.269	.000

a. Dependent Variable: Self efficacy

Table 3. shows that the predictor variable (Positive cognitive triad) contributed significantly to the regression model ie. The B value of Cognitive Triad ( $B = .250, p < 0.01$ ) predicts significant increase in self efficacy. It indicates that a unit increase in Positive cognitive triad leads to .250 unit increase in self efficacy. The value of adjusted R square which was found to be .170, which indicates that 17% of the variance in self efficacy can be explained by predictor variable that is cognitive triad.

**MEDIATION ANALYSIS**

Figure 1. showing results of mediation analyses



Here, the mediation analysis has been performed wherein the mediating effect of Positive Cognitive Triad has been observed. The direct, as well as indirect path coefficients, can be delineated from the figure

Table 4. Path Coefficients

			Original Sample	Sample Mean	Standard deviation	T statistics	p values
Self efficacy	→	Positive Cognitive Triad	0.409	0.400	0.111	3.690	0.000
Self efficacy	→	Hostility	-0.124	-0.131	0.113	1.095	0.274
Self efficacy	→	Resilience	0.275	0.347	0.120	2.927	0.010
Self efficacy	→	Pro-Social Behaviour	0.243	0.242	0.141	1.999	0.050
Positive Cognitive Triad	→	Hostility	0.146	0.146	0.132	1.106	0.269
Positive Cognitive Triad	→	Resilience	-0.190	-0.192	0.106	2.080	0.030
Positive Cognitive Triad	→	Pro-Social Behaviour	-0.010	-0.001	0.117	0.088	0.930

Table no. 4 indicates the path coefficients values between Self Efficacy (Independent Variable) and Hostility, Resilience and Pro-Social behaviour along with Positive Cognitive Triad (Mediating Variable). It is directly clear from the table that there is no direct association between Self efficacy and hostility in the presence of Positive Cognitive Triad whereas a significant direct effect is observed between Self efficacy and Resilience and Pro social behaviour.

The T- statistics of pathway from Self efficacy to Positive Cognitive Triad came out to be, (  $t = 3.690$  ,  $p < 0.001$ ), is significant indicating direct effect of Self Efficacy on Positive Cognitive Triad. Similarly, the T - statistics from Self efficacy to Resilience (  $t = 2.927$ ,  $p < 0.05$ ) and Pro-social behaviour (  $t = 1.999$ ,  $p \leq 0.05$ ) came out to be significant which signifies direct effects of Self efficacy on both.

A significant association is found between Positive Cognitive Triad and Resilience (  $t = 2.080$ ,  $p < 0.05$ ). Meanwhile no significant direct effect is found to be seen between self efficacy and Hostility (  $t = 1.097$ ,  $p > 0.05$ ). Similarly the T- statistics between Positive Cognitive Triad and Hostility (  $t = 1,106$ ,  $p > 0.05$ ) , and Pro-social behaviour ( $t = 0.088$ ,  $p > 0.05$ ) is not significant.

Table 5. Specific Indirect Effects

			Original Sample	Sample Mean	Standard deviation	T statistics	p values
Self efficacy	→ Positive Cognitive Triad	→ Hostility	0.192	0.174	0.230	0.943	0.346
Self efficacy	→ Positive Cognitive Triad	→ Resilience	0.198	0.197	0.055	2.091	0.030
Self efficacy	→ Positive Cognitive Triad	→ Pro-Social Behaviour	0.115	0.143	0.184	0.086	0.533

Table no. 5 represents the Specific indirect effect pathways. It is seen that the association among Self efficacy - Positive Cognitive Triad – Hostility did not came out to be significant ( $t = 0.837$ ,  $p > 0.05$ ). In the same manner indirect effect among self efficacy – positive cognitive triad – Pro-Social Behaviour came out to be insignificant ( $t = 0.837$ ,  $p > 0.05$ ). Whereas, significant association among self efficacy – positive cognitive triad – Resilience, was found ( $t = 2.091$  ,  $p >$

0.003). which indicates that PCT plays partial mediation role inbetween self efficacy and resilience.

Table 6. Total Indirect Effect

	Original Sample	Sample Mean	Standard deviation	T statistics	p values
Self efficacy → Hostility	0.060	0.063	0.062	0.967	0.334
Self efficacy → Resilience	0.043	0.077	0.054	2.950	0.002
Self efficacy → Pro-Social Behaviour	0.353	0.005	0.051	1.980	0.032

Table no. 6 represents total indirect effects. It is clear from the table that there is no significant total indirect effect to be found between Self efficacy and Hostility (t= 0.825 , p>0.05).

Meanwhile, a significant Indirect effect is seen between Self efficacy and Resilience (t= 2.950, p< 0.002) and also between Self efficacy and Pro-Social Behaviour (t= 1.980, p<0.05)

Table 7. Model fit Summary

	Saturated Model	Estimated Model
NFI	1.000	0.860
SRMR	0.000	0.082
Rms theta	0.177	

Table no. 7 represents the model fit summary. Many researchers have indicated towards a need to develop a comprehensive understanding of the varied values obtained in Smart PLS.

Nevertheless, the indices above indicate the proposed model to be a good fit.

## CHAPTER – 6

### DISCUSSION

The study was conducted to examine the Positive cognitive triad as a link between Self efficacy and Resilience, Pro Social behaviour and Hostility among Adolescents. 7 hypotheses were formulated. Accordingly, our first hypothesis was Self Efficacy is positively associated with Positive Cognitive triad. It was accepted as the nature of correlation between Positive cognitive triad and self efficacy was found to be significant. It was also supported by some other studies like According to the Abramson (1989), persons who have self-doubts about their abilities lose up fast, about world or future and people who don't meet their own standards of self-worth have less self efficacy and with positive triad have high self efficacy. Regression analysis further predicted 17% of the significant variance in self efficacy with Positive Cognitive triad.

Similarly our second hypothesis that is Positive Cognitive triad is positively associated with Resilience was also accepted. A study by Wong et al.(2011) where results indicated that resilience is significantly related to positive cognitions about the self, the world, and the future that is people who had higher level of resilience held significantly more positive cognitions and vice versa.

Whereas, our third hypotheses which is Positive Cognitive triad is positively associated with Pro social behaviour was rejected as no significant positive relationship was found between them. Similar result was witnessed by Bar-tal et al (1985), where they inferred that any cognition skills were not associated with any helping behaviour.

Similarly our fourth hypotheses, Positive Cognitive triad is negatively associated with Hostility was also rejected.

Further on for determining Positive Cognitive triad acting as a mediator between self efficacy and different constructs, a significant positive mediating effect was seen between self efficacy and resilience on mediation analyses leading to acceptance of our fifth hypothesis. It was found to play partial mediation in-between both variables. Anticipating strategies to achieve self goals and feeling confident in one's own abilities to attain it can aid in dealing with both severe and little situations (Mehta et al, 2018).

Despite attaining significant effect of Self efficacy on Pro-social behaviour, no indirect mediating effect was found by Positive Cognitive Triad on mediation analyses with pro-social behaviour and also with hostility. This will leads to rejection of our next, sixth and seventh hypotheses which are Positive Cognitive triad act as a mediator between Self Efficacy and Pro social behaviour and Positive Cognitive triad act as a mediator between Self Efficacy and Hostility. As this study forms a new foundation of the association of these constructs, there is dearth of literature supporting these results.

## **CONCLUSION**

The present study was determined to find the relationship and mediating role of positive cognitive triad between self efficacy and hostility, pro-social behaviour and resilience among Adolescents. 7 hypotheses were formulated out of which 3 were accepted while 4 got rejected. Significant association was found between positive cognitive triad and self efficacy predicting 17% of the variance in self efficacy. A positive link was associated by Positive Cognitive triad between one's self efficacy and their Coping skills ie. How one thinks about himself, his future and surrounding plays a significant role in affecting one's confidence in their abilities and their

Resilience power. There is not much literature constituting same factors. There is a still need to do more research in this domain considering the new positive elements of Cognitive triad.

### **LIMITATIONS**

There were several limitations in the present study. First, participants were recruited via the Internet, including the reliance on self-report. Future work should consider using peer-ratings, or behavioral criteria. Convenience sampling and small sample size of the study could have led to the predictor variables to have an insignificant association with independent variables. The high levels of stress and disruption in normal life routine during the Covid19 pandemic could also be a probable cause for obtaining some insignificant results. This study can be more refined and more ivariables can be added to it for further experimentation. It would be better to take a large sample size in order to get some significant results. Note, withstanding the above limitations, the findings of the present study are stimulating.

### **IMPLICATIONS**

Children in their teenage period go through many changes. Their perspectives and thinking change regarding themselves, their coming opportunities, and their environment. They undergo a lot of pressure. Some of them handle it nicely whereas others don't. The present study revealed that positive cognitions are important factors in influencing and sustaining their certain characteristics. Their belief in themselves about their abilities and their skills affect many others of their psychological and psycho-social factors. Many studies have revealed that how children's self efficacy is correlated with their coping strategies, their aggression and hostility level and also their helping attitudes towards others. But what all factors are responsible for directing such association is still under researched. The present study revealed that positive cognitions are

important factors that contribute to the same. Educators and counselors may consider teaching positive thinking in classes and during counseling services to attain desirable level of essential traits like resilience and pro-social behavior. Cognitive strategies, decatastrophizing methods, and real-time resilience abilities for countering negative thinking could also be taught. Students could be given exercises and homework assignments to assist them learn to apply such positive cognitive approaches in everyday situations (Gillham et al., 2006; Stice, Burton, Bearman, & Rohde, 2007). Such teaching could be used as a preventative measure, giving children self-confidence and optimistic expectations for their future and world and which could also be useful in decreasing their hostile behavior. In addition to this their belief in themselves and their positive approach towards everything may make them compassionate and helping towards others. With these positive cognitions being borne in mind, students would be more capable of riding through their adversity and of enjoying better adjustment and dealing with their aggressive tendency and be considerate towards others need.

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## APPENDIX A

### Cognitive Triad Inventory - C

Mark the answer that defines your opinion. Choose only one answer. Remember to fill this according to how you feel TODAY, on the scale YES, NO or MAYBE

1. I do well at so many different things.
2. Schoolwork is no fun.
3. Most people are friendly and helpful.
4. Nothing is likely to work out for me.
5. I am a failure.
6. I like to think about the good things that lie ahead for me.
7. I do my schoolwork okay.
8. The people I know help me when I need it.
9. I expect that things will be going very well for me a few years from now.
10. I have messed up almost all the important relationships I have ever had.
11. The future holds a lot of excitement for me.
12. My daily activities are fun and rewarding
13. I can't do anything right.
14. People like me.
15. There is nothing left in my life to look forward to
16. My current problems or concerns will always be there in one way or another.
17. I am as adequate as other people I know.
18. The world is a very hostile place
19. There is no reason for me to be hopeful about my future.
20. The important people in my life are helpful and supportive
21. I hate myself.
22. I will solve my problems.
23. Bad things happen to me a lot.
24. I have a spouse or friend who is warm and supportive.
25. I can do a lot of things well.
26. My future is simply too awful to think about.

27. My family doesn't care what happens to me.
28. Things will work out well for me in the future.
29. I am guilty of a great many things.
30. No matter what I do, others make it difficult for me to get what I need.
31. I am a worthwhile human being.
32. There is nothing to look forward to in the years ahead.
33. I like myself
34. I am faced with many difficulties.
35. I have serious flaws in my character.
36. I expect to be content and satisfied as the years go by.

## **APPENDIX B**

### HOSTILITY SCALE

I. Imagine that you are sitting at the lunch table at school, eating lunch. You look up and see another child coming over to your table with a carton of milk. You turn around to eat your lunch, and the next thing that happens is that the child spills milk all over your back. The milk gets your shirt all wet.

#### **A. Why did the child get milk all over your back?**

1. The child slipped on something.
2. The child just does stupid things like that to you.
3. The child wanted to make fun of you.
4. The child wasn't looking and didn't see you.

II. Imagine that you are standing on the playground, playing catch with a lot of other kids. You throw the ball to another child and the child catches it. You turn around, and the next thing you know the child has thrown the ball and hit you in the middle of your back. The ball hits you hard, and it hurts a lot.

#### **A. Why did the child hit you in the back?**

1. The ball slipped and hit you.
2. The child was being mean.
3. The child was mad at you for something.
4. You shouldn't have turned around.

III. Imagine that you are walking to school and you're wearing your brand new sneakers. You really like your new sneakers and this is the first day you have worn them. All of a sudden, you

are bumped from behind by another child. You stumble and fall into a mud puddle and your new sneakers get muddy.

**A. Why did the child bump you from behind?**

1. The child was being mean.
2. The child was fooling around and pushed too hard by accident.
3. The child was running down the street and didn't see you.
4. The child was trying to push you down.

IV. Imagine that you have finished an art project for school. You've worked on it for a long time and you're really proud of it. Another child comes over to look at your project. The child is holding a jar of paint. You turn away for a minute and when you look back the child has spilled paint all over your art project. You worked on the project for a long time and now it's messed up.

**A. Why did the child spill paint on your project?**

1. The child is mean.
2. The child dropped the paint by accident.
3. The child is kind of clumsy.
4. The child wanted to mess up your project.

V. Imagine that you are on the playground. You and some other kids are having a race. Another child is standing on the side, bouncing a basketball. The next thing you know the child has bounced the ball and it rolled under your feet, making you fall. You skin your knee and someone else wins the race.

**A. Why did the child bounce the ball under your feet?**

1. The child wanted to get back at you for something.
2. The child didn't see you coming.
3. It accidentally got away from the child.
4. The child wanted you to lose the race.

VI. Imagine that you brought your new toy to school today. You saved up your money to buy the toy and you want to show it to the other kids at school. You let another child play with it for a few minutes while you go get a drink of water. When you get back you see that the child has broken your brand new toy.

**A. Why did the child break your toy?**

1. The toy wasn't made well.
2. It was an accident.
3. The child was mad at you.
4. The child was jealous of you.

## APPENDIX C

### Pro-social Orientation scale

Here are a number of characteristics that may or may not apply to you. Choose the option next to each statement to indicate the extent to which you agree or disagree with that statement. 1= Disagree strongly 2= Disagree a little 3= Neutral; no opinion 4= Agree a little 5= Agree strongly

- 1            It is hard for me to see why some things upset people so much.
- 2            When someone is feeling ‘down’ I can usually understand how they feel.
- 3            I find it easy to put myself in somebody else’s shoes.
- 4            I have a hard time reading people’s emotion.
- 5            I can tell when others are sad even when they do not say anything.
- 6            People I am with have a strong influence on my mood.
- 7            Other people’s feelings don’t bother me at all.
- 8            I remain unaffected when someone close to me is happy.
- 9            I often have tender, concerned feelings for people less fortunate than me.
- 10           My heart goes out to people who are unhappy.
- 11           I would describe myself as a pretty soft-hearted person.
- 12           Sometimes when people talk about their problems, I feel like I don’t care.
- 13           If I see someone going through a difficult time, I try to be caring toward that person.
- 14           When others feel sadness, I try to comfort them.
- 15           When others are feeling troubled, I usually let someone else attend to them.
- 16           I like to be there for others in times of difficulty.
- 17           Volunteering to help someone is very rewarding.
- 18           I dislike giving directions to strangers who are lost.
- 19           Doing volunteer work makes me feel happy.
- 20           Helping others is usually a waste of time.
- 21           Helping people does more harm than good because they come to rely on others and not themselves.

- 22 Unless they are part of my family, helping the elderly isn't my responsibility.
- 23 Giving aid to the poor is the right thing to do.
- 24 Children should be taught about the importance of helping others.

## **APPENDIX D**

### Brief Resilience Scale (BRS)

Choose the option next to each statement to indicate the extent to which you agree or disagree with that statement. 1= Disagree strongly 2= Disagree a little 3= Neutral; no opinion 4= Agree a little 5= Agree strongly

1. I tend to bounce back quickly after hard times
2. I have a hard time making it through stressful events.
3. It does not take me long to recover from a stressful event
4. It is hard for me to snap back when something bad happens.
5. I usually come through difficult times with little trouble
6. I tend to take a long time to get over set-backs in my life.

## **APPENDIX E**

### General Self Efficacy Scale (GSE)

Choose the option next to each statement to indicate at what extent you find those true.

Not at all true= 0, Hardly true=1, Moderately true=2, Exactly true=3

1. I can always manage to solve difficult problems if I try hard enough.
2. If someone opposes me, I can find the means and ways to get what I want.
3. It is easy for me to stick to my aims and accomplish my goals.
4. I am confident that I could deal efficiently with unexpected events.
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
6. I can solve most problems if I invest the necessary effort.

7. I can remain calm when facing difficulties because I can rely on my coping abilities.
8. When I am confronted with a problem, I can usually find several solutions.
9. If I am in trouble, I can usually think of a solution.
10. I can usually handle whatever comes my way.