# Flourishing and Its Major Indicators in School-going Indian Adolescents

A thesis submitted during 2016 to the University of Hyderabad in partial fulfillment of the award of a Ph.D. degree in Psychology in the Centre for Health Psychology

> by **Durgesh Nandinee** Regd. No. 12CPPH04 Research Fellow, ICSSR



Centre for Health Psychology School of Medical Sciences

# **University of Hyderabad**

Central University Campus P.O. Gachibowli, Prof. C.R. Rao Road Hyderabad - 500 046, Telangana, India

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# Supervisor Dr. Suvashisa Rana



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## DECLARATION

I, Durgesh Nandinee, hereby declare that this thesis entitled "*Flourishing and its major indicators in school-going Indian adolescents*" submitted by me under the guidance and supervision of Dr. Suvashisa Rana is a bona fide research work which is also free from plagiarism. I also declare that it has not been submitted previously in part or in full to this University or any other University or Institution for the award of any degree or diploma. I hereby agree that my thesis can be deposited in Shodganga/INFLIBNET.

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# **CERTIFICATE**

This is to certify that the thesis entitled "*Flourishing and its major indicators in school-going Indian adolescents*" submitted by Durgesh Nandinee, Research Fellow, ICSSR bearing Regd. No. 12CPPH04 in partial fulfillment of the requirements for the award of Doctor of Philosophy in Psychology is a bona fide work carried out by her under my supervision and guidance which is a plagiarism free thesis.

The thesis has not been submitted previously in part or in full to this or any other University or Institution for the award of any degree or diploma.

> (Dr. SUVASHISA RANA) Supervisor

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Head of the Centre

**Dean of the School** 

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#### (DURGESH NANDINEE)

#### ABSTRACT

Research on adolescence-the second decade of life-has focused predominantly on adolescent's negative characteristics, which is not enough to understand the underlying complexities. Therefore, this study emphasizes on adolescent's flourishing-a positive dimension of mental health continuum—which is a relatively new construct. The main objectives of the study are to assess the level of flourishing in school-going Indian adolescents across two types of school and gender, and to identify its major indicators. The study has explored the occurrence of natural groups among these adolescents using cluster analysis in terms of their flourishing and measured variation between these natural groups on the indicators of flourishing. The study has also attempted to explore the adolescents' lived experiences to understand the dynamics of their flourishing. On the basis of the review of literature, hypotheses have been formulated to address all the objectives except the last one as it has been addressed by the qualitative research method. The study is based on sequential mixed method design. In the first phase, under the framework of quantitative research design, the study has adopted a prospective, more than one independent variable, factorial design developed under the ex post facto approach. As there are two factors, a 2 (School) x 2 (Gender) factorial design has been adopted. In the second phase, under the framework of qualitative research design, the study is based on Interpretative Phenomenological Analysis for understanding the process and identifying the dynamics of flourishing in school-going Indian adolescents. The sample comprises of 400 school-going Indian adolescents, who are in their late adolescence phase and selected by multistage sampling. After obtaining the ethical approval of the Institutional Ethics Committee of the University, five measures, such as Mental Health Continuum-Short Form, Modified Differential Emotional Scale, Personal Growth Initiative Scale, Sources of Adolescent's Happiness Scale, and Big Five Inventory-10 have been administered in small

groups. In addition to this, individual in-depth interview sessions have been conducted on five flourishing and five languishing participants. The obtained quantitative data have been analysed by means of Mean, SD, 95% Confidence Interval, 2 X 2 Between-subjects ANOVA, Pearson's r, hierarchical regression analysis, k-means cluster analysis, t-test, and Cohen's d. In addition to these, exploratory factor analysis, confirmatory factor analysis, and Cronbach's alpha have been used to develop Sources of Adolescent's Happiness Scale. The qualitative data have been analysed by means of data driven thematic analysis. The findings of the study have revealed that the Indian adolescents do not vary in terms of their level of flourishing across school and gender. It is observed that 6.2% participants are flourishing, 83.8% are moderately mentally healthy, and 10% are languishing. The study, however, has identified seven major indicators of adolescent's flourishing. Cluster analysis has revealed two natural groups (high flourishing and low flourishing) and these two groups have been found to be significantly different from each other in terms of the indicators of flourishing. In addition to this, the study has contributed a specific instrument—SAHAS—to measure the sources of adolescent's happiness. The findings have also unfolded eight facilitating factors and seven barriers in the form of a functional model of the dynamics of adolescent's flourishing, which would help in developing intervention programme for fostering flourishing during adolescence, theory generation, and theory verification. Limitations and future direction are discussed along with the implications in terms of assessment and evaluation, intervention, and theory generation and verification.

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# **ABBREVIATIONS**

BFI-10	Big Five Inventory-10
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
IPA	Interpretative Phenomenological Analysis
mDES	modified Differential Emotional Scale
MHC-SF	Mental Health Continuum-Short Form
PGIS	Personal Growth Initiative Scale
SAHAS	Sources of Adolescent's Happiness Scale
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organisation

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#### **CHAPTER I**

#### **INTRODUCTION**

Tomes have been written on adolescence-a critical phase of transition-laden with negative characteristics like distress, anxiety, anger, confusion, and depression, leading to crises. The contemporary cultural contradictions escalate the possibility of adolescents to be the victims of such negativity, which acts as a threat to their positive health-a state beyond the mere absence of disease operationalized by a combination of excellent status on biological, subjective, and functional measures (Seligman, 2008). As the phase of adolescence is a major determinant of later development, fostering mental health during this phase is essential. In India 20.5 % of the world's adolescents reside which is the highest rate worldwide (United Nations Fund for Population Activities [UNFPA], 2014). Many adolescents suffer from chronic health issues and disabilities. Accident, violence, suicide, complications related to early age pregnancy, and other illnesses that are either preventable or treatable, are few reasons of adolescent's premature death. In addition to this, many serious diseases in adulthood have their roots in adolescence. There have been a plethora of studies in relation to negative outcomes among adolescents, dominated by mental illness (e.g., depression and anxiety disorder) rather than wellness. This highlights the disproportionate attention given to the suffering part during adolescence. The changes during the phase of adolescence are necessary and normal. Nevertheless, when such changes have negative consequences, adolescents face problems in relation to their psychosocial adjustment.

Positive aspects of adolescents, in comparision to negative aspects, are rarely focused. Therefore, this study underlines the positive dimension of adolescence and explores the pathway to sustain the positive state for a longer period. To understand the developmental pathway of adolescents, it is important to assess their mental health condition. According to Keyes (2002), "mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community". Mental health may be explained on a continuum—flourishing (positive side—presence of mental health) and languishing (negative side—absence of mental health). Thus, one of the major positive indicators of the mental health is flourishing. This study is based on Keyes's concept of flourishing. According to Keyes (2002), "to flourish means to live within an optimal range of human functioning, one that connotes goodness, generativity, growth, and resilience".

#### **Adolescence: A Pathway to Adulthood**

Adolescence, a pathway to adulthood, is a critical phase where rapid biopsychosocial changes are inevitable. The onset of adolescence—beginning at the age of 10-11 years and lasting up to 19-20 years generally—brings complex changes in body and mind of the person, resulting in physiological, psychological and social changes that act as the building block of the adulthood of a person (World Health Organisation [WHO], 2003). One of the major biological changes includes attainment of puberty and its related rapid changes. Psychological changes are prominent in the form of psychosexual development, where frustration and fixation are expected, problem in establishing selfidentity, understanding the moral value, ego identity statuses, and formal operational cognitive ability. Social changes are related to the new pattern of peer interaction and interpersonal relationship, establishing a career, and progressing towards the attainment of adult status. Therefore, adolescence can be explained as a dynamic phase in which most of a person's biological, psychological, and social characteristics change not only constantly, but instantly in an interrelated manner. Adolescents need to learn to establish their identity, adjust in the society, take care of families, and become responsible and accountable, which help them making constructive decisions about value aspects of their lives. The value of attachment, affiliation-oriented family, and the beginning of economic independence act as the markers of termination of adolescence.

During adolescence, multiple changes occur with a vulnerability of manifestation of negative characteristics. Conduct problem, deviant behaviour, poor scholastic achievement, sexually transmitted infections, wrong eating and exercise habits, problems related to substance abuse, and social maladjustment are the most frequent problems identified during adolescence. To mention few major challenges encountered by Indian adolescents are sexual and reproductive health related hazards, lack of autonomy affecting their decision-making capacity, and sexual exploitation and abuse, which make this transitional period more complex (United Nations International Children's Emergency Fund [UNICEF], 2012). These problems are amply noticed in school-going adolescents. Adolescents are found to be worried about their grades on a test or about a rejection in a relationship. There are various sources of stress found during this phase-problems related to school, peer pressure, issues related to family or conflict with parents, their own confusing thoughts, ambiguous feelings towards world or society, and feelings of loneliness or depression. In addition to these, virtual relationships arising out of the online social media and abuse of internet and cell phones are the constant and instant source of stress in present day adolescent's life.

Living in a world of competition, school-going adolescent's life is more strenuous and stressful. Specifically, the anxiety-ridden atmosphere supplements to adolescent's stress level. As a result, they are likely to face failure in their lives. Constant fear about failure steers them to think negative about their lives, which is normal for everyone in this phase. Nevertheless, if sadness persists, accompanied by symptoms like inability to concentrate, fatigue, apathy, and feelings of worthlessness, adolescents are likely to exhibit the symptom of depression. Simultaneously cumulative experience of negative emotions is a potential threat to their well-being, happiness, and healthy development. Though the transition through adolescence is inevitable, yet the speed and magnitude of this phase overburden the capability of many school-going adolescents to cope.

As this phase plays a significant role in every individual's life, various theories have been developed to explain the complexities of this period. Attachment theory (Bowlby, 1980) has stated that during stress adolescents seek comfort from their parents and other significant family members. This support reduces their stress level and helps them to act effectively in their career and life. Freud (1931) has explained adolescence in terms of psychosexual development. Freud's idea is similar to Hall's (1999) evolutionary theory which has stated the phase of adolescence as phylogenetic. Based on Freud's approach, Erikson (1968) proposed eight stages of psychosocial development. The interplay of biological changes and social attitude determine the psychological meaning of puberty. He has explained about a very central problem of adolescents, i.e., identity. Identity needs to be developed by oneself. He has also stated that every stage of life is distinct with specific crisis or conflict because of the individual's fundamental competitive nature. Adjusting with each of these hurdles helps to successfully achieve the goal. In this phase, the adolescents need to develop an identity which influences the rest of their lives. Adopting others' identity or ideology in this phase does not satisfy them. To personalize their identity they need to work on it so as to gain satisfaction. Mastery on the fifth stage recommended by Erikson (1968)-identity vs. role confusion-leads to establish a coherent identity in the adolescence phase. It also helps them in achieving fidelity and devotion. Crises in this stage may leave the adolescent without a solid sense of identity, marked by fanaticism and repudiation. This problem leaves the adolescent with a sense of isolation and confusion.

Peer influence cannot be underestimated in this phase. When it comes to peer group influence, Lewin's (1947) field theory also supports that adolescence is a phase of life where people have to change themselves in order to establish them in a social group. In order to maintain status in a group, they go beyond their limitations and sometimes it damages their life in the form of wrong habits, e.g. smoking, consumption of alchohol, skipping school, and increasing unhealthy habits. It becomes very difficult for the parents to control the adolescents having strong peer influence. Nevertheless, parents cannot be authoritarian with their children, especially when they are in adolescence phase. Authoritarian parenting style is susceptible to manifest disruptive, aggressive, and antisocial behaviours in children (Machteld et al., 2009).

Parents, teachers, and society tend to have ambiguous feelings towards adolescents. During the process of guiding adolescents, they also get confused and sometimes forget to treat them as adolescents. This emphasizes the significance of the psychological influences of environment on the behavior and development of the child (Lewin, 1935). In a nutshell, when most of the characteristics of an individual match with the above-mentioned states, it is assumed that the individual is in the adolescence phase. In addition to this, late adolescent phase is significant, because the adolescents cross the formal operational stage and begin to think of logical possibilities (Piaget, 1977) which is essential for their moral development.

In the present scenario, the way the adolescents experience their life situations is different in comparison to the earlier times because of the impact of globalization and modernization (UNICEF, 2011a). In this complex scenario, adolescent's mental health is a matter of concern in the contemporary world in general, and in India per se. The mental health refers to a combination of feeling good about and functioning well in life (Keyes, 2002). Flourishing is one of the major aspects of mental health. The presence of flourishing delimits the occurrence of sufferings. There are different factors which accelerate the state of flourishing. They are the level of well-being, type of positive emotion, personal growth, happiness, personality, and resilience. Out of these, this study focuses on four major constructs that act as driving force for flourishing—emotion, personal growth, happiness, and personality.

#### Flourishing

The primary construct of this study is flourishing—a major dimension of mental health. According to Keyes (2003), flourishing is the positive side of mental health continuum and the principles of mental health continuum is applicable to adolescents. Flourishing is defined as a state in which an individual feels positive emotion toward life and function well psychologically and socially (Keyes, 2003). It is a state which includes living life within an optimal range of human functioning and experiencing it. Adolescents experience flourishing in life when they have purpose and meaning in life, positive relationships with others, and constructive coping strategy. Flourished individuals are happy, full of positive emotion, and satisfied in life. They accept themselves as they are, take initiative towards their personal growth, use the autonomy and have an internal locus of control, and never become a victim of fate. It acts as a predictor of mental health and enables adolescents to have broad experience in life. To nurture flourishing, a person has to engage himself or herself in positive activities that produce the actualization of potential.

The negative side of Keyes's mental health continuum is languishing which refers to living a life without any purpose or direction and being more vulnerable to negative outcomes, such as depression and suffering. Highest number of depressive symptoms, conduct problems, and the lowest levels of global self-concept, self-determination, closeness to other people, and school integration are found among languishing adolescents (Keyes, 2012). Languishing individuals are not able to use their self optimally. Languishing leaves an individual with the feeling of emptiness in life or living a life without any purpose. Nevertheless, Keyes argued that the absence of mental illness is only a necessary but not a sufficient condition for complete mental health.

Flourishing always manifests internally. There are various significant roles that flourishing plays in an individual's life. It increases and widens attention, intuition, and increases creativity. It is also associated with good feeling. Good feelings have a significant association with biological manifestations, such as positive cardiovascular effects (e.g., normalization of the blood pressure) and predict healthy mental and physical outcomes (Fredrickson & Losada, 2005) that make an individual to feel motivated and energetic.

The promotion of flourishing in adolescents is essential. According to Keyes (2007), only 17% of US population were free of a common mental disorder which means they are truly mentally healthy, i.e., flourishing and rest of the population are either moderately mentally healthy or languishing.

Eight characteristics have been identified to predict flourishing in an individual over a lifetime. The flourishing person is found to be an enduring learner and creative thinker, a particular and capable performer, a socially and emotionally skilled person, a moral thinker, a respectful and responsible significant agent, a self-controlled person engaging in healthy lifestyle, a contributing community member and democratic citizen, and a spiritual person engaged in influencing life for a noble intention (Lickona & Davidson, 2005). Flourishing individual has an enthusiasm for life and is actively and productively engaged with others and in society for its development (Keyes, 2003). In addition to these characteristics, relatedness, optimism, self-acceptance, competency, having supportive and rewarding relationships, contributing to the happiness of others, and

being respected by others are also important (Keyes, 2002). High level of emotional, social, and psychological well-being are the three major domains of flourishing.

## **Emotional well-being**

Emotional well-being enables an individual to understand the value of emotions and use them to move forward in life in positive directions. It is defined as a positive sense of well-being which enables an individual to function in society and meet the demands of everyday life. People with high emotional well-being have good mental health and it helps them to recover effectively from illness. They perceive misfortune internally and try to bring changes in it (Mental Health Foundation, 2016). Emotional well-being is a combination of happiness, interest, and satisfaction in life. This also reflects the presence or absence of positive feelings of an individual about life. Keyes's concept of mental health has explained emotional well-being under the hedonic perspective of well-being. The hedonic view has tended to focus on a broad conception of hedonism that includes the preferences and pleasures of the mind as well as the body (Kahneman, Diener, & Schwarz, 1999). Emotional well-being believes in staying happy at present and emphasizes more on pleasure giving aspects of life. Basically, it is subjective in nature and predominantly concerns the experience of pleasure versus displeasure elements in life. In addition to this, persons who achieve a high level of emotional well-being, are often likely to be relaxed, away from problems, and stay happy. Experiencing emotional well-being directs individuals to engage in the activities which give happiness for a certain period. Moreover, emotional well-being comprises of two emotional components-presence of positive affect and absence of negative affect (Keyes, 2002).

Positive affect is associated with protective psychosocial and behavioural factors, such as better social connectedness, perceived social support, optimism, and preference for

adaptive coping responses, as well as a greater probability of practicing healthy behaviours. The mere experience of positive affect enables the individual to be psychologically and physically healthy, more creative, knowledgeable, resilient, and socially integrated (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008). Positive affect is the hallmark of hedonic well-being. Positive affect refers to stronger positive feelings than negative feeling. Positive affect is characterized by confidence, optimism, self-efficacy, friendly and absorbing positive characteristics of others, manifestation of prosocial behaviour, and increase the immune system and physical well-being. It also enables the individual to stay real and flexible, and helps to deal effectively with daily challenge and stress. These attributes encourage the individuals for active involvement in the pursuit of their goals. Positive affect predicts health and longevity as well as facilitates the development of positive behaviour pattern.

## Social well-being

Social well-being refers to the magnitude of belongingness and socially connectedness. It is characterized by a strong rapport with all members of the society. Social well-being has a profound effect on individual's mental health. It is a sense of involvement with other people within the community and establishing harmony. Adolescents can sense social well-being when they have family support, affection and protection, and absence of violence and conflict in the environment. This creates a healthy surrounding, which is essential for their mental health and helps them to excel in academics and career-building process. From the eudaimonic perspective, actualizing the inherent potential and living a life of virtue are the key characteristics of social well-being (Delle, Massimini, & Bassi, 2011). It does not promote anything which has a negative impact on the society. Social well-being has various dimensions, such as social contribution, social integration, social actualization, social acceptance, and social coherence. This helps the adolescents to find their true self. Social well-being is the antidote to stigma, violence, and crime. In addition to this, social well-being enables the norm with regard to interpersonal relationships in a group, community or society, including respect for others and their needs, compassion and empathy, and authentic interaction (Aked, Marks, Cordon, & Thompson, 2008).

## **Psychological well-being**

According to Huppert (2009), "Psychological well-being is about lives going well. It is the combination of feeling good and functioning effectively". To have a high level of psychological well-being, the individual needs to be free from negative outcome, e.g. depression. Psychological well-being is usually conceptualised as a combination of functioning with optimal effectiveness in personal and social life (Deci & Ryan, 2008). Regulating one's own emotion without any trouble helps to achieve psychological wellbeing. Only those people can regulate their emotion who can understand the root cause of it. Greater psychological well-being can be felt by individuals when they are aware of their feelings and can deal better with their emotions compared to people who are not aware of their feelings (Gohm & Clore, 2002). Regulating the emotions bring down the depression level among adolescents.

Adolescents' psychological well-being may be impaired by their depression that directly affects their academic performance. High level of parental support is linked with low level of psychological problem which helps to reduce depression. Psychological wellbeing is characterized by a feeling of self-acceptance, environmental mastery, positive relations with others, personal growth, autonomy, and purpose in life. Psychological wellbeing from eudaimonic perspective includes the purpose in life, autonomy, competence, self-realization, mindfulness, self-acceptance, authenticity, values congruence, and social connectedness (Huta & Ryan, 2010). Research findings suggest that to maintain high level of psychological well-being, one needs to experience positive emotion more which is advantageous to enhance and sustain mental health. Long lasting and experience of extreme negative emotion interferes with individual's daily functioning and acts as a threat to psychological well-being. Psychological well-being can be related to mental functioning, personality, self-esteem, positive emotion, and mood comprising of both positive affect and negative affect (Emmons & McCullough, 2003).

## Emotion

Emotion is a complex state of feeling that results in physical and psychological changes which influence thought and behaviour (Myers, 2004). Some theorists explain it as a distinct and constant response to internal or external events which have a particular implication for the individual. It lasts for a short period and comprises a set of responses, which includes verbal, physiological, neural, and behavioural mechanisms. It plays a crucial role in safety and survival. It is characterized by intense mental activity and a high degree of pleasure or displeasure feelings (Schacter, 2011). The level of emotional arousal is also associated with the type of emotions and physical health of the individual. The present study has emphasized on two types of emotions—positive and negative.

Positive emotions are the indicators of optimal well-being. While experiencing positive emotion, an individual cannot be plagued by negative emotions, such as anxiety, sadness, and anger. Positive emotion not only produces optimal functioning for present moment, but also helps to linger the same over a long period. Positive emotion creates a supportive aid in the coping processes. Positive emotions are observed as prospectively associated with greater health-enhancing behaviours, such as better diet, regular exercise, and improved sleep quality. Positive emotion is observed to directly affect health in a positive way via behavioural, physiological, and stressor exposure pathways.

Fredrickson and Branigan (2005) have noted two major features of positive emotions that vary from negative emotions. First, positive emotions do not stimulate specific action tendencies in the similar way as negative emotions do. Instead, they seem to cause some broad and non-direction oriented activation. Second, positive emotions not only facilitate physical action, but also spark significant cognitive action. Seligman's PERMA theory has emphasized on the need of positive emotion and stated that it helps an individual to lead a flourished life (Seligman, 2011). In the broaden-and-build theory, a landmark theory on positive emotions, Fredrickson (1998) is more appropriate in this context to understand the upward spiral effect of positive emotion that helps adolescents to give excellent performance in academics and helps to maintain a flourished life. The theory has also described the significant mechanisms of positive emotions which are needed for survival. According to this theory, positive emotions improve the cognition and behavioural trends. The theory has suggested that positive emotions increase the number of potential behavioural options.

Fredrickson (2000) has recommended an undoing hypothesis related to positive emotion, where she has described the novel relationships between cardiovascular activity and positive emotion. Positive emotion does not generate cardiovascular reactivity, but it quells any existing cardiovascular reactivity caused by negative emotion. The undo effect of positive emotions has proposed that people might increase their level of psychological well-being and their physical health by cultivating the experiences of positive emotions at appropriate moments to cope with negative emotions. There are ten types of positive emotions—gratitude, serenity, interest, joy, hope, pride, amusement, inspiration, awe, and love—identified (Fredrickson, Mancuso, Branigan, & Tugade, 2000).

Gratitude includes appreciation to acknowledge someone from whom one gets benefited. Serenity exists when everything goes in the right way and peace comes as an outcome. When someone's attention is free from worries, he or she can relax and that moment brings serenity to his or her life. Interest helps the individual to discover new fascinating things and gives the individual a feeling of wonder. Engaging oneself in an activity that one admires the most means that the individual is experiencing interest. Joy emerges when one's current circumstance presents an unexpected good fortune, e.g. good news or a pleasant surprise. Joy creates the urge to play and get involved. Hope is a faith and the capacity of thinking of expecting best from worst. Hope makes an individual to know that current problems can be solved and it will change according to time. Pride is a feeling of dignity essential for self-esteem. Pride state comes to an individual when a longawaited thing comes close and create a positive atmosphere. Amusement makes an individual to enjoy humour and creates a jovial mood. Laughing loud, playing with pets, and doing activities related to fun help an individual to experience amusement. Inspiration comes from listening to an admirable personality who uplifts you emotionally and observing extraordinary positive activities. Amazing feats of intellect, strength, and agility can lead to inspiration. Being in awe state makes the individual to feel surprise. Fredrickson (2000a) points out that this may come from experiencing natural phenomenon, e. g. watching beautiful sunset, or crashing of ocean waves. Love is the collection of all of the above emotions. It is a kind of emotion which is common to every living organism. It is characterised as a feeling of affection, attachment, affiliation, and involving in selflessness act for others (Biswas-Diener & Dean, 2007). Positive emotions, however, promote good health, help to sustain well-being, and are instrumental in health benefits, such as improving immunity power and lowering symptoms related to cardiovascular disease (Chesney et al., 2005).

### **Personal Growth Initiative**

Personal growth initiative, the third major construct of this study, is considered as a skill. Personal growth is defined as a vigorous and intentional participation in the selfchange process. Personal growth incorporates change, control, and clear direction. Personal growth is crucial for adolescents to establish their identity. According to Robitschek (1998) personal growth initiative is one's active and intentional involvement in improving, growing, and changing self as a person. It reflects an individual's general awareness and deliberates engagement in enhancing cognition and behaviours in various areas of life. It is described as an orientation towards actively and purposefully engaging in the growth-seeking process. Personal growth is related to mental health and multiple dimensions of well-being (emotional, social, and psychological) among adolescents (Robitschek & Keyes, 2009). The intentional involvement in self-growth always creates the urge to take challenges in life. It is an intra-individual change (i.e. at cognitive, behavioural, or affective levels) that is subjectively experienced as positive (change towards self-actualization) and instrumental in developing adolescent's mental health. It is intentional or purposeful in nature. The individual participates in this growth process that improves their sense of self. Individuals, who change themselves unintentionally or without any determination, are expected to display lower levels of self-efficacy and less mastery than individuals who change self intentionally (Robitschek et al., 2012). In contrast, persons those who do not have interest towards their personal growth actively avoid situations that challenge them to grow. Living an ideal life demands active and intentional work on one's personal growth.

The ability of self-change involves two components—cognitive and behavioural. The cognitive components comprise self-efficacy which includes beliefs, attitudes, and values that support personal growth. The behavioural component comprises of goaldirected behaviour and attitude which is needed to achieve the goal.

Individuals showing high score on personal growth initiative usually are pro-active in relation to their personal development and are eager to devote a substantial amount of energy in their identity quest. Personal growth initiative has been positively linked to assertiveness, internal locus of control, and is instrumental in achieving the goal. Individuals with high level of personal growth initiative are not only aware that they have developed over time but also proactive about their changing process. They intentionally look forward to capitalizing on opportunities for their development. Personal growth initiative has been proposed to assess individual's conscious and intentional quests of growth across the life trajectory.

## Happiness

The fourth construct of this study is happiness—a dynamic state of feeling pleasure and enjoyment. Happiness is explained as "the very thing which makes life worth living" (Seligman, Parks, & Steen, 2004). It differs from one developmental stage to another as shaped by distinct needs, tasks, and societal expectations. Happiness is a state and the urge to be happy lies within the individual. Happiness not only brings smile, but also creates an environment which gives all the individuals around the strength to fight with their sorrows and make them feel positive. Staying happy is an important need for adolescents and helps them to have a positive life. Happiness is characterized by frequently experiencing positive affect states and progressing towards success (Tkach & Lyubomirsky, 2006). Happiness also comes from engaging self in challenging activities, positive social relationships, meaning in life, and accomplishments. This study specifically emphasizes on the adolescent's sources of happiness. The source of adolescent's happiness refers to the person, situation, or event from which happiness comes to an adolescent or is acquired by an adolescent. As the source of happiness is multifaceted, it is very challenging to identify and measure the source from which the adolescent derives happiness.

Experiencing happiness during adolescence reduces the chance of risky behaviour. Family is observed to be a major source of happiness in adolescents. There are various factors which contribute to the adolescent's happiness, such as love, affection, care, closeness, and unconditional acceptance. All these needs are fulfilled by the adolescent's family (Primasari & Yuniarti, 2012). The family gives them a secure place to live. It provides them education, guidance, and helps in their hard time. Adolescents feel happy and important when they receive support from their family. In addition to family, they also receive support from their friends. Relationship with friends also contributes to adolescent's source of happiness. During hardship, friends help them solving the problem and stand with them. With friends they can share their thoughts and ideas, which makes them feel refreshed. Adolescents give importance to social engagement and they prefer it with their family and friends. Social engagement gives them immense pleasure and they cherish those moments for their rest of life. Self-fulfilment which involves the events like winning an award, and being spiritual are few other sources which contribute to the adolescent's happiness.

Happiness is a general condition in human life which is strong, immutable, and has an impact on individual's behaviour (Haybron, 2008). Happiness helps individual to have a wider and productive thought process. They perceive distress from an unidimensional angle and are self-confident to face any kind of challenges. This helps them to make a good choice in their life. Happiness consists of various types of positive emotions, such as joy, interest, contentment, and love (Seligman et al., 2004). Intentionally involving oneself in positive activities and setting a goal to stay happy help an individual to sustain happiness for a longer time. It is also observed that self can be an internal source of adolescent's happiness. It is defined as self-satisfaction, a pleasure derived from the fulfilment of personal needs (e.g., academic achievement and empowerment). Moreover, it is also found that the adolescent's achievement is not only aimed at their personal happiness but is also a dedication to other people (their parents) and other events (getting an award) (Singh & Sharma, 2015). Nevertheless, happiness of adolescents is observed to be predicted from their personality traits (Jensen & Malcolm, 2007).

## Personality

Personality is an individual's unique constellation of consistent behavioural traits. Adolescence is a phase where the individuals are involved in developing their own personalities that become more concrete during their adulthood. Personality also determines adolescent's flourishing level (Keyes, 2005). There are few significant factors that affect adolescent's personality development, such as genetics, childhood experience, family environment, and behaviour of family members (Feist & Feist, 2007). Freud (1920) has theorised that personality development depends on the interaction of instinct and environment during the first five years of life. Parental behaviour is essential to normal and abnormal personality development in adolescents. Problem in personality development during adolescence lead to mental health problems in adulthood. This study emphasizes upon personality traits. Personality trait refers to enduring personal characteristics that are revealed in a particular pattern of behaviour in different situations or events in life. Personality traits are related to adolescent's biological, psychological, and social outcomes. They are significant predictors of adolescent's mental health (Devydov, Robert, Karen, & Isabelle, 2010). Five significant traits of personality-extraversion, agreeableness, conscientiousness, neuroticism, and openness-are given importance in this study.

Individuals who exhibit *extraversion* seek excitement and are assertive, positive, warm, and active. Agreeableness is characterized by trust on other individuals, straightforwardness, honesty, altruism, cooperative behaviour, compliance rather than defiance, modesty, and sympathetic attitudes. Conscientiousness is related to the degree to which individuals are competent, dutiful, motivated to achieve goals, disciplined, and deliberate or considered. *Neuroticism* is related to anxiety, depression, and hostility as well as feeling of self-conscious, acting impulsively and experiencing a sense of vulnerability, or being unable to accommodate aversive events. Openness relates to the level to which individuals are open to the other members of family or society, fantasies, aesthetics, sharing or expressing thoughts, as well as novel actions, ideas, and values. Individuals, exhibiting the trait of openness, choose to be novel, intense, and diverse. In contrast, closed individuals choose very familiar tasks and like to follow regular routines which never seek for any challenging thought (McCrae, Zonderman, Costa, Bond, & Paunonen, 1996). Adolescents' personality traits help them to shape their life course by understanding their thought patterns, feelings, and behaviours. These five personality traits always determine the mainstream of changes that may enhance or deter the mental health of adolescents.

#### **Rationale and Purpose Statement**

The rationale of studying flourishing in adolescents emphasizes on its significance in bringing positive reflections in later phases of life. Flourishing—a relatively new construct—is the positive facet of mental health which needs to be studied in relation to the Indian adolescents. Adolescent's mental health is an important area which has not been explored fully by the researchers. It is the fundamental factor for which adolescent needs to receive adequate support, not only to deal with the problems which are typical in this developmental stage, but also the optimum level of well-being which would help them to lead a flourishing life. The spectrum of positive impact on adolescent's mental health ranged from academics to health, family to the society, and more prominently a mere change to a positive transformation. Much of the existing literature has focused on negative factors related to this phase. Therefore, there is a need to understand the positive factors intensively, such as identifying the mechanisms underlying adolescent's flourishing, positive emotion, personal growth, personality, and happiness, as well as the means to sustain these positive aspects in the long run. Review of literature shows that adolescents with better mental health are physically healthier and demonstrate higher levels of psychological and social competencies. Keyes (2003) posits that the strengths of flourishing are linked to specific facets of well-being, such as emotional, social, and psychological. The building of personal resources entails the mastering of specified skills, which have to be implemented on a regular basis. The well-being strategy presents a synthesis between the mere understanding of wellness and committed efforts, which manifest in a range of thoughts, feelings, and action. Developmental processes in personality are often thought to be related or even partly attributable to changes in cognitive ability. Understanding the pathways of adolescent's flourishing would enable us to nurture those factors that facilitate human health and accelerate positive living towards happiness in life. Conversely, identifying barriers leading to languishing among schoolgoing adolescents would enable us to accurately target students who are at risk. Parents, practitioners, and policymakers are recognizing the importance of adolescent's mental health. Considering the recent research findings, it is essential that the school-going adolescents need to learn how to maintain and sustain mental health which acts as a buffer against negative outcomes of life and illness.

Therefore, the main purpose of the study is to assess the level of flourishing in school-going Indian adolescents and to find out its major indicators. The study has been

carried out not only to examine the position of school-going Indian adolescents in the mental health continuum, but also to understand the dynamics of their flourishing. The study has been carried out under the framework of Developmental Psychology, Health Psychology, and Positive Psychology.

#### **CHAPTER II**

### **REVIEW OF LITERATURE**

This chapter includes a comprehensive recent review of literature in the form of analyzing the findings related to the major constructs in the study and their relevance in an adolescent's life. The review included the research studies primarily from 2005 to 2016 from the various refereed and peer reviewed journals in the field of Psychology published by publishers like Springer, Sage, Taylor and Francis, American Psychological Association, and Routledge. In addition to these major publishers, journals indexed in PsycARTICLES, PsycINFO, PubMed, Jstore, SCOPUS, IndMED, ScienceDirect, and Indian Psychological Abstracts & Reviews were also referred.

Next to childhood, the phase of adolescence needs special attention as it is associated with problems related to puberty (Sawyer et al., 2012) and emotional instability leading to an identity crisis (Maddux, 2005; Wait, Meyer, & Loxton, 2005) and other significant changes in behaviour pattern. The major changes are observed from various aspects like biological (Feldman, 2007), psychological (Dorn & Birom, 2011), and social (Susman, Dorn, & Schiefelbein, 2003). The physiological changes are experienced in intense way by adolescents because of rapid growth (Sternberg, 2008), sexual maturation (Kail & Cavanaugh, 2010), and development. In addition to this, the complexity of their social interaction widens as they enter into the secondary education system and it has a major impact on their lives (WHO, 2012).

Because of its transitional nature, the phase of adolescence is considered as turbulent causing psychological confusion that leads to issues related to personal identity (Berger, 2014), sense of self, stress, and emotional independence (Sternberg, 2008). In the process of coping with these burgeoning issues, there is a high chance of adolescents to engage themselves in risky behaviour (Breinbauer & Maddaleno, 2005). Research findings suggest that the adolescents between the ages of 12 and 18 years are highly vulnerable to behavioural problems-truancy (Saban, Flisher, & Grimsrud, 2013), substance abuse (Bahrami, Rajaeepour, Ashrafi, Zahmatkesh, & Nematolahi, 2011), juvenile delinquency, violence, crimes, and alcoholism (Ann, Vivian, Robert, & Linda, 2005; Parasuraman, Kishore, Singh, & Vaidehi, 2009). In addition to the behavioural problems, studies have found that adolescents are vulnerable to stress (Lerner & Steinberg, 2009; Srivastava, Singh, & Srivastava, 2014), anxiety and depression (Hankin & Abela, 2005), negative emotion (Bouma, Ormel, Verhulst, & Oldehinkel, 2008; Charbonneau, Mezulis, & Hyde, 2009; Hankin, Mermelstein & Roesch, 2007), hopelessness (Shaylyn, Thelma, Assen, & David, 2008), and crises (Steinberg, 2008) in life. Adolescents are observed to be more susceptible to academic failures (Shih, Eberhart, Hammen, & Brennan, 2006), and these failures associated with anxiety contribute to their hopelessness in late adolescence (Rana, Lall, Mishra, Nandinee, & Vincent, 2014). It is also found that experiences of accumulated stress during adolescence act as the predictors of psychological problems and distress (Grant et al., 2004) and act as threats to adolescents' coping strategy and healthy development (Compas et al., 2013). Studies have identified that peer pressure, sense of enjoyment, parental pressure, and stress related to other issues like love failures, and use of tobacco among adolescents (Kokiwar & Jogdand, 2011) are also some of the key factors that affect the lifestyle of the present generation adolescents.

Researchers have reported that progressive development of different types of mental disorders among adolescents is increasing gradually (Bayera, Gilmanb, Tsuid, & Hindind, 2010; Magsodi et al., 2010). The WHO (2012) has reported that mental health problems among children and adolescents have increased in recent years and will continue to rise up to 50% until 2020 (Bayera et al., 2010). It has also been estimated that three-quarters of psychiatric disorders will appear in adolescents of the next generation

(Chisholm, Sanderson, Ayuso-Mateos, & Saxena, 2004; Jacka et al., 2011). The phenomenon of school-going adolescents stress is now well recognized (Byrne et al., 2007). Research findings done on Indian adolescents has shown that the adolescents who perceive academic problems and unsupportive environment at home as burden have higher rates of suicidal ideations (Aggarwal, Prabhu, Anand, & Kotwal, 2007).

Many studies have found an association between these problems and adolescent's mental health (UNICEF, 2011b). Therefore, the incidence of mental illness in adolescence has become a serious concern worldwide. From a review, Kumar and Talwar (2014) suggest that 20% of adolescents experience mental health problems. Depression and anxiety disorder contribute highly to the burden of disease among adolescents (Singh & Gopalkrishna, 2014). Adolescents with anxiety disorder struggle hard to manage their worries, sadness, and anger because of the intense experience of negative emotions (Shih, Eberhart, Hammen, & Brennan, 2006). From a cross sectional study (Nagendra, Sanjay, Gouli, Kalappanavar, & Kumar, 2012), it has been observed that the residential school students are more prone to negative emotions than non-residential school students. Recent research has identified that symptoms of depression are common among Indian adolescents and it increases with age (Hasumi et al., 2012). The dimensions of mental health is also affected by the adolescent's positive and negative development (Vaillant, 2012).

To reduce the complexity of this transitional phase, members of family (Morris, Silk, Steinberg, Myers, & Robinson, 2007), teachers (Wang, Brinkworth, & Eccles, 2013), and community (Dalton, Elias, & Wandersman, 2001) play a key role. The family provides significant support to adolescents, and connectedness with the family has been found to be advantageous for adolescent's emotional development (Santrock, 2010). Parents' attachment with adolescents provides a sense of safety in life and encourages them to explore their talents and experiences in a variety of contexts. In addition to this, it also prepares adolescents to become socially connected with others and to learn how to be the caregivers to others (Kerr et al., 2003). But the integration of these positive concepts is still in its nascent stage, especially among Indian school-going adolescent population, as less emphasis is given to adolescents' positive outcomes compared to the negative outcomes. Living in a disadvantaged environment (e.g., deprivation, poverty, parental conflict, crises, and war zone) prevents the adolescents from experiencing flourishing (Abela, Sakellaropoulo, & Taxel, 2007)—an important positive facet of mental health.

Research conducted by Patel et al. (2010) reflects the importance of promoting mental health among adolescents. Research findings state that resilience (Antaramian, Huebner, Hills, & Valois, 2010; Gilman & Huebner, 2006), absence of delinquent behaviors and aggression, high self-esteem and self-efficacy (Antaramian et al., 2010), absence of symptoms related to depression and anxiety, and adaptation (Huebner, 2004; Suldo & Huebner, 2004) are found as the predictors of adolescents' mental health. Research also indicates that those adolescents, who manage their emotions, show low level of depression (Zeinder & Olnick-Shemesh, 2010).

Achieving optimum health is strongly related to adolescents' mental health status. A healthy mental status not only affects the adolescents, but also the community as it improves the quality of life, physical health, well-being, and social integration (Friedli, 2009). To function well in life, adolescents need to be happy (Seligman, 2011), need to flourish (Keyes, 2009), and have high levels of all three domains of flourishing emotional, social, and psychological (Keyes, 2005).

Adolescents' mental health is associated with several indicators of the developmental path (Pyhalto et al., 2010), like flourishing (Dunn & Dougherty, 2008), positive emotion (Fredrickson, 2000), commitment to school (Elmore & Huebner, 2010),

accomplishment related to academics (Berger, Alcalay, Alejandra, & Neva, 2011), optimism, and coping strategies. An empirical study done on 1390 school-going adolescents has revealed that there is a significant positive correlation between flourishing and learning new things (Gallagher & Lopez, 2007). Another study has found that optimism is one of the protective factors (Carver, Scheier, & Segerstrom, 2010) that is observed to be correlated with variables associated with academics, such as self-regulation, achievement, and motivation in adolescents (Schmid, Phelps, & Lerner, 2011). In a prospective study, it has been found that adolescents' optimism scores have predicted less antisocial behaviour and lower drug use (Patton et al., 2011).

Research findings have suggested that flourished persons are optimistic (Alarcon, Bowling, & Khazon, 2013). Optimistic persons have positive future expectations which help them to manage their stress effectively and they judge the stressful situation differently than pessimistic persons and engage more in building adaptive coping strategies (Nes & Segerstrom, 2006) which help them managing their stress. Research has stated that flourished people are more efficient and compassionate towards self and selfgrowth ability (Arneson, 1999). The problems related to school-going adolescents may be solved if they are optimistic in their life (Oreudo, Puyuelo, Turrado, & Ramos, 2012), work towards sustaining the mental health by cultivating positive emotion (Broderick & Jennings, 2012), and identify the protective factors against risk factors. To perform optimally in life an individual needs a positive state of mind. In this regard, research has identified that positive self-talk helps in creating a positive state of mind (Esther & Olga, 2002).

Research findings have substantiated that positive emotions enhance attention, broaden a person's thought-action repertoire (Fredrickson & Branigan, 2005) and provide courage to confront the consequences of negative emotions (Fredrickson & Levenson, 1998). Therefore, if the school-going adolescents would experience positive emotions frequently, they are more likely to flourish in life as a result they would get optimum benefit from the education process. It is not only adolescents' positive emotions (Fredrickson, 2009), but also their personal growth, purpose, mastery, flow (Seligman, 2003), and optimism along with positive affect (Lyubomirsky, King, & Diener, 2005) contribute to their flourishing. Findings of various research show that the level of wellbeing (Butkovic, Brkovic, & Bratko, 2012), positive emotions (Fredrickson, 2005), personal growth (Keyes, 2005), and personality (Gestsdottir & Lerner, 2007; Davydov, Stewart, Ritchie, & Chaddieu, 2010) predict flourishing.

In this study adolescents' flourishing is given importance because research findings show that flourishing adults have a higher level of motivation to work actively, pursue new goals, and enrich themselves through acquiring new skills and resources (Lyubomirsky et al., 2005). Research also show that flourished persons are found to have greater emotional strength as well as they function positively in both personal and social fields of their lives, and are liberated from mental illness (Michalec, Keyes, & Nalkur, 2009). They are free from depression, anxiety, distress, and continuous irrational thoughts. Huppert (2009) has conducted a cross-sectional study and found that people who are found to be flourishing have perceived that their lives were going on well. They realize their own potential in different aspects of their lives, and try to achieve, thrive, and make some significant contribution to the society (Gokcen, Hefferon, & Attree, 2012).

Findings of Keyes (2006a) suggest that flourished adolescents do not have any conduct problems, rather they have higher psychosocial functioning (global self-concept, self-determination, closeness to others, and school integration). Researchers also observe that the adolescents who experience flourishing in their life have fewer depressive symptoms (Sher, Parke, & Coltrane, 2011). An epidemiological study using mental health

continuum scale has reported that flourishing is associated with superior physical, psychological, and psychosocial functioning (Keyes, 2005). Findings suggest that flourishing helps the persons to learn effectively, makes them more dynamic at work, and contributes positively to their communities. Because of this, these persons have better social relationships and emotional health, experience fewer limitations in daily activities, and enjoy better health and life expectancy (Huppert & So, 2011; Keyes, 2005). Flourishing enhances the ability to function well across the life (Huppert & So, 2011; Seligman, 2011). From several research findings, the characteristics of flourished persons have been identified. Virtuous family and good relationships with community member, successful self-image (Forgeard, Jayawickreme, Kern, & Seligman, 2011), emotional balance, a prosperous career, a committed life, a sense of purpose, and physical vitality are the few characteristics among several others (Seligman, 2011).

Research findings exihibit that the person who experiences low levels in all the three domains of well-being—emotional, social, and psychological—has a dull and tedious life with low-level of happiness (Ferguson & Sheldon, 2013). Ryff and Singer (1996) have observed that low level of well-being makes the person more vulnerable to mental and physical illness (e.g., depression, heart diseases). The adolescents who are not found to be flourishing in their lives show behaviours related to suicides (Keyes et al., 2008), conduct problems (Keyes, 2006), poor health (Cooper, Bandelow, & Nevill, 2011), and frequent procrastination (Howell, 2009). In certain cases, conduct problems are seen to be associated with increased risk of suicide (Fergusson, Horwood, & Ridder, 2005).

Research has stated that well-being prevails when pathology is absent (Huppert & So, 2011). There is a negative association found between emotional well-being and depression (Extremera & Fernandez-Berrocal, 2005). Several studies identified that practicing certain virtues, such as forgiveness (McCullough, Hoyt, & Rachal, 2000),

gratitude (Emmons & McCullough, 2003), and thoughtful self-reflection (Lyubomirsky, Sousa, & Dickerhoof, 2006) helps in enhancing a person's mental health.

Research findings suggest that psychological well-being has a strong positive correlation with personal development, life purpose, positive relationships with others, environmental mastery, and autonomy of an individual (Ryff & Singer, 2008). Likewise low positive emotions decrease happiness and increase the risk of depression in adolescents (Adams, Abela, Auerbach, & Skitch, 2009). The protective factors in relation to these can foster adolescents' flourishing. Research findings have suggested that to achieve psychological growth, and high level of psychological and physical well-being, adolescents need to cultivate positive emotion which enable them to maintain and sustain their mental health over time (Keyes, 2003).

Recently researchers begin focusing on the health benefits of positive emotions (Cohen & Pressman, 2006; Ong, 2010). The pattern of positive emotion has been found to act as an indicator of adolescents' psychological well-being (Rana & Nandinee, 2015). A study on Catholic nuns found that remembering positive words and sentences regularly has made the participants positive and increased the probability of long life (Danner, Snowdon, & Friensen, 2001). An experiment on 157 cardiac patients has revealed that inducing positive emotion in the participants has helped them to achieve good health as it has not only reduced the lipid levels and blood pressure, but also improved the functional capacity and hormonal balance (Davidson, Mostofsky, & Whang, 2010). Watanuki and Kim (2005) have found that positive emotion is more likely to have a direct impact on left frontal cortex. The activity of this cortex increases in the presence of pleasant smells and positive verbal stimuli (e.g., ecstasy, thrill, and promotion) as a result there is an increase in the secretion of immunoglobulin that functions as antibodies. Because of the significant

role of positive emotion, exploring positive emotion is considered as 'the other hemisphere in behavioral medicine' (Chesney et al., 2005).

Research findings suggested that the level of emotional arousal might moderate the association between positive emotion and health (Cohen & Pressman, 2006). Positive emotion is found to be the marker of optimal well-being (Bryant & Veroff, 2007; Eisner et al., 2009; Gross et al., 2006; Tugade & Fredrickson, 2007). Positive emotions not only help the individual to function optimally in the present moment, but also help to sustain the optimal functioning over the long term. Positive emotions produce a pattern of thought process which is notably rare (Isen, Johnson, Mertz, & Robinson, 1985), flexible and inclusive (Compton, Wirtz, Pajoumand, Claus, & Heller, 2004), and creative (de Rooij, Corr, & Jones, 2015). Evidence for the undoing effect of positive emotions suggests that cultivating the experience related to positive emotions enhances the person's mental health and physical health as well as creates a positive environment (Fredrickson, 2000).

Positive emotions lead to satisfaction with one's life and one's interpersonal relationships. Such persons remain more prolific and content in their jobs, helpful to others, and are more likely to reach at their desired goals in lives (Diener, Suh, Lucas, & Smith, 1999). Positive emotions are found to predict of good social connections (Waugh & Fredrickson, 2006), enhance creativity and action span (Isen, 1987), thus leading to the development of a healthier behaviour pattern in life (Berkman & Breslow, 1983). Research also stated that positive emotion foresees physical and mental health (Fredrickson, 2000; Peterson, 2000), and reduces disease vulnerability (Peled, Carmil, Siboni-Samocha, & Shoham-Vardi, 2008). Positive emotions are found to be instrumental in quicker recovery from the cardiovascular problems (Ho, 2007). In studying positive emotions, it is found out that the gender of the person plays a role in experiencing positive

emotion where male adolescents are found to be more oriented to experience positive emotions than female adolescents (Pascual, Etxebarria, Ortega, & Ripalda, 2012).

Moreover, a unique ability of positive emotion is that it helps to down-regulate the long term impact of negative emotions (Fredrickson, Mancuso, Branigan, & Tugade, 2000). Adolescents who experience negative emotions frequently have less confidence in their abilities to deal with a stressful situation (Suveg & Zeman, 2004). The persistent experience of negative emotions is found to be an etiology of illness (O'Donovan et al., 2012; Wilson et al., 2005). On the other hand, the experience of positive emotion strengthens the person by means of developing resilience and helps in identifying powerful psychological resources to foster positive mental health (Tugade, Fredrickson, & Barrett, 2004). This helps in the mobilization of mechanisms leading to mental as well as psychological affluence and secure personal well-being (Fredrickson & Joiner, 2002).

Research has identified that positive affect is a significant component of positive emotion which helps to improve immune system among adolescents (Segerstrom & Sephton, 2010). Low positive affect is associated with high delinquent activity in adolescents (Windle, 2000). Therefore, the balance of positive to negative affect is one of the important factors in understanding a person's mental health and defining whether a person flourishes or not (Diehl, Hay, & Berg, 2011).

Positive emotions, however, act as an aid in resolving problems concerning the individual's personal growth (Fredrickson, Tugade, Waugh, & Larkin, 2003). Personal growth helps an individual to seek challenges and growth that may be key to the achievement of one's personal goal (Robitschek, 1997). Personal growth has been associated negatively with chance locus of control and mental illness (Robitschek & Keyes, 2004). A study revealed that personal growth initiative was related to better professional identity, assertiveness, career exploration, and problem-focused coping

(Robitschek & Cook, 1999). Nevertheless, personal growth initiative is associated with social and psychological well-being, mental health, and self-efficacy (Sharma & Rani, 2014), and multiple dimensions of well-being (Robitschek & Keyes, 2009). It is an essential element in mastering new skills, managing with life stressors, and helping in creating and maintaining close relationships. Research suggests that preparation for the future and striving to a set of goals are the primary features of personal growth initiative (Luyckx, Lens, Smits, & Goossens, 2010). Personal growth initiative is associated with both the setting of clear future-oriented goals and make the individual's striving for achievement (Shorey, Little, Snyder, Kluck, & Robitschek, 2007). Robitschek and Cook (1999) have found that personal growth initiative has a direct impact on adolescents' professional interest and identity. Identity confusion is one of the major problems during adolescence. Therefore, adolescents involve themselves in identity construction which constitutes a way to materialize their personal growth in everyday life (Robitschek et al., 2012). Personal growth initiative also enables the adolescent to grow as a person by satisfying own potentials (Soenens et al., 2005; Waterman, 2011).

Findings suggested that personal growth initiative is positively correlated with psychological well-being and negatively correlated with psychological distress among adolescents (Hardin, Weigold, & Robitschek, 2007; Stevic & Ward, 2008; Sood, Gupta, & Bakhshi, 2012). Moreover, adolescents who are high in both personal growth initiative and psychological well-being experience less mental health issues (Ayub & Iqbal, 2012) compared to their counterparts with low personal growth initiative and psychological well-being.

Research findings posit that there is an association between personal growth initiative and adolescents' happiness (Hardin et al., 2007; Neff, Kirkpatrick, & Rude, 2007; Sood & Gupta, 2014). Research also reveals that individuals who perceive their life

transitions in terms of growth have higher levels of life satisfaction (Brink, 2016). Research findings suggest that high personal growth initiative is related to a range of positive outcomes that include a positive impact on one's lifestyle and behaviour (Merrill et al., 2011), social performance (Ford, Clark, & Stansfeld, 2011), enhanced quality of life, and fruitful aging (Sorrell, 2011).

Seligman (2008) concluded that happiness is the right of everyone. It has a direct impact on adolescents' mental health, as well as holds several positive benefits in later life (Diener & Chan 2011; Lyubomirsky, King, & Diener, 2005; Seligman, 2008). Happiness also protects the person against negative mental health (Seligman, 2008). Research has revealed that happy people are characterized by high personal competence and self-esteem (Lyubomirsky et al., 2005), optimism (Myers, 2002), less likely to fall sick (Diener & Chan, 2011), more resilient (Deaton, 2008), and a sense of personal mastery and control (Lyubomirsky et al., 2005). Research, however, has identified that sources of optimism increase the level of happiness (Boven, 2005; Lyubomirsky, Schkade, & Sheldon, 2005) and that it is an indicator of the quality of life (Haller & Hadler, 2006).

Findings have shown that a higher level of happiness are experienced during early adolescence than late adolescence (Moljord, Moksnes, Eriksen, & Espnes, 2011; Piqueras et al, 2011). Empirical reports largely concluded that a substantial number of young adults are happy (Piqueras et al, 2011; van de Wetering et al., 2010). Conversely, result of a study done by Compas and Reeslund (2009) indicated that a low number of adolescents experienced happiness. A number of studies revealed that there were significant differences in the happiness scores between male and female adolescents (Levin, Currie, & Muldoon, 2009). Empirical findings showed that female adolescents often reported being unhappier compared to their male counterparts (Moljord et al., 2011).

For most individuals, being happy is a leading goal in life (Lu & Gilmour, 2004; Seligman, 2008). Happiness has been found to be related to subjective well-being (Diener, Oishi, & Lucas, 2009). Happy people think and feel that their lives go on well (Veenhoven, 2008). It has been empirically found out that happiness is important because it leads to positive personal, behavioral, physical, psychological, and social outcomes (Diener & Chan 2011; Lyubomirsky, Diener, & King 2005; Veenhoven, 2008). Therefore, happiness is not only a valuable goal in itself, but it also exert influence upon other important domains of life (Diener & Ryan, 2009). One study has shown that counting the blessings and choosing to feel optimistic in life (Lyubomirsky et al., 2006) help to experience greater happiness. There are several factors which are found to contribute to adolescent's happiness, such as parents' emotional support (Lim, You, & Ha, 2013), family (Primasari & Yuniarti, 2012), age (Uusitalo, 2014), self (Cheng & Furnham, 2003), academic achievement (Lyubomirsky, King, & Diener, 2005), relationship with friends (Poulin & Chan, 2009) and forgiveness (Rana, Hariharan, Nandinee, & Vincent, 2014).

Family has been identified, as an important source of adolescent's happiness (Wu, 2014). A study done by Shi and Yang (2006) has found that adolescents who grow in a harmonious family are happier and they devour more positive emotions and less negative emotions. The levels of life satisfaction and self-efficacy are seen to be relatively higher in such adolescents (Huang, 2016). Parental support and positive peer relationship are strongly associated with happiness (Suldo & Huebner, 2004). In addition to family, friends act as a source of happiness (Fowler & Christakis, 2008). An empirical study on 467 participants aged between 14 and 18 years has shown that out of several factors of happiness, 50.1% contribute to relations with others which consist of moments like concern for their families, bond with friends, and events related to affection and love or being loved, 32.67 % contribute to their self-fulfillment consisting of events related to

achievement and good financial status, and 9.63% contribute to relation with God (Primasari & Yuniarti, 2012).

Research findings suggest that self-compassion is associated with happiness as it is converted to a positive psychological strength (Hollis-Walker & Colosimo, 2011; Shapira & Mongrain, 2010; Smeets, Neff, Alberts, & Peters, 2014). It also helps to achieve higher levels of optimism and gratitude (Breen, Kashdan, Lenser, & Fincham, 2010; Neff, Kirkpatrick, & Rude, 2007). Research has found that self-compassion among adolescents tend to have a good relationship with friends and it is an important source of adolescent happiness (Crocker & Canevello, 2008).

In the process of quantifying happiness, research has suggested that about 50% of the happiness is determined genetically, 40% is under self-control, and 10% is accounted for the environment (Lyubomirsky et al., 2006; Lyubomirsky, Schkade, & Sheldon, 2005). Thus, happiness is amendable by intentional activities and practice. Happiness predicts desirable outcomes in many different life domains (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009; Diener & Chan, 2011; Suldo & Huebner, 2004). Findings have shown that a higher level of happiness among adolescents is associated with a higher level of physical activity (Moljord et al., 2011; Piqueras et al., 2011), higher self-esteem (Cheng & Furnham, 2003), more success in social relationships, and better academic achievement (Proctor, Linley, & Maltby, 2010). Higher level of happiness is also associated with fewer psychological problems and behavioral problems (Suldo & Huebner, 2004). Individuals, who are happy, do not engage themselves in unhealthy activities or behaviors; therefore increase their social relationship (Debra & Jennifer, 2010). They achieve better life outcomes, such as constructive coping skills (Azizi, 2012), supportive social relationships, good performance at work or study, and better physical health as well as longevity (Piqueras et al., 2011). Because of its significance in life, happiness remains an important

area of research and helps to develop strategies related to health promotion among adolescents (Mahon & Yarcheski, 2002; Seligman & Csikszentmihalyi, 2000).

Research indicates that happiness also depends on the personality of an individual (Kirkpatrick, 2015). Personality is a key element in adolescent's life, as it is related to the tendency of reactivity to emotional stimuli, individual differences in intensity of responses to emotional events, and to the duration of emotional reactions (Kim-Prieto, Diener, Tamir, Scollon, & Diener, 2005). Healthy personality development is related to several facets of mental health (Seligman, 2008; Vaillant, 2012). Personality traits are found to be the significant predictors of mental health (Butkovic et al., 2012; Cloninger & Zohar, 2011; Davydov et al., 2010; Gestsdóttir & Lerner, 2007; Josefsson et al., 2011). DeYoung and Gray (2009) have proposed that the dopaminergic system might simultaneously affect two personality traits across the life span, where it is lower during adolescence and higher towards middle adulthood (Allik, Laidra, Realo, & Pullmann, 2004).

Research using the Five-Factor Model of personality indicated a negative association between neuroticism and happiness and psychological well-being (Garcia & Moradi, 2011; Stewart et al., 2005), as well as positive associations between neuroticism and negative affect, openness and positive affect, and conscientiousness and life satisfaction (Garcia & Moradi, 2011). Recent research has revealed that conscientiousness plays a significant role in health and has essential implications across the lifespan (Friedman & Kern, 2014). Another research on 4,000 adults showed that substance use was seen to be increased when there was an increase in neuroticism and openness, whereas it was observed to be decreased when there was an increase in conscientiousness and agreeableness (Turiano, Whiteman, Hampson, Roberts, & Mroczeka. 2012). Conscientious children face fewer problems related to their academics and school (Poropat, 2009). A meta-analysis revealed that conscientious individuals are more likely to perform well in academics and are more oriented towards achievement (Poropat, 2009). Conscientious adults were found to be more likely to connect with other conscientious people—personally, socially, and at work—and make their environment healthier (Hampson, 2012). This helps in creating more prudent, better-organized, and advanced thinking adults (Vaillant, 2012).

Research indicates that three personality traits—agreeableness, conscientiousness, and openness—are low during adolescence (Roberts, Wood, & Smith, 2005). Extraversion has been found to be positively related to positive affect (Lyubomirsky et al., 2006; Garcia & Moradi, 2011). Extraversion is observed to influence well-being as it is found to be positively related to positive emotions and the ability to be more reactive to positive affect, while neuroticism was negatively related to negative emotions and the ability to be more reactive to positive affect (Larsen & Eid, 2008). Studies also found a relation between the big five traits and multiple dimensions of psychological well-being (Higgs & Dulewicz, 2013; Singh, Singh, & Singh, 2012). Extraversion, conscientiousness, and low neuroticism are observed to be linked with the psychological well-being (Brackett & Mayer, 2003). Moreover, personality traits are one of the important indicators of mental health (Momeni, Anvari, Kalali, Raoofi, & Zarrineh, 2011).

#### **Summary**

From the review, it is evident that the development during adolescence—the second decade of life—is an essential parameter for the development in the subsequent phases of life. During the review process, more studies were traced highlighting the extensive nature of the negative aspects of adolescent's life. Identifying the negative factors and their repercussion are not enough to understand an adolescent's complexities. In the contemporary society, adolescents are observed as independent individuals and

active participants in forming and influencing their own environment (Olsson, 2011). The genesis of Positive Psychology provides a scope to draw out the latent potentialities of the adolescents in order to nurture positive living in the form of flourishing, though they are vulnerable to languishing. It is important to identify the protective factor against the risks associated with adolescence (Keyes, 2006). The review has shown that there is no existing research available on flourishing in Indian adolescents. Very few studies have been found on positive emotion, personal growth initiative, and multiple sources of happiness of adolescent. On the other hand, a sizeable amount of studies has been observed in case of adolescent's personality. Moreover, most of the studies reviewed, were quantitative in nature. Nevertheless, basing on the findings of the recent studies across the world and specifically taking into consideration the studies done on Indian adolescents on related constructs, the investigator formulated the research questions, objectives, and specific hypotheses, and carried out the study by means of sequential mixed method design involving both quantitative and qualitative research methods.

#### **Research Questions**

The present study was undertaken to find answers to the following four main research questions.

(1) What was the level of flourishing—a salient positive facet of mental health—in school-going Indian adolescents across two types of school and gender?

(2) Were there any prominent indicators of flourishing noticed in school-going Indian adolescents?

(3) Was there any heterogeneity observed among the school-going Indian adolescents in respect of the three domains of their flourishing?

(4) What was the process of adolescent's flourishing in terms of the insider's perspectives?

## **Objectives**

The main objectives of the present study were

(1) To assess the level of flourishing in the school-going Indian adolescents across two types of school and gender;

(2) To identify the major indicators of flourishing in the school-going Indian adolescents;

(3) To explore the occurrence of natural groups using cluster analysis among the school-going Indian adolescents in terms of their flourishing;

(4) To find out the variation between these natural groups among the school-going Indian adolescents in terms of the indicators of flourishing; and

(5) To explore the lived experiences of the school-going Indian adolescents for understanding the process of flourishing.

# Hypotheses

On the basis of the review of literature, four hypotheses were formulated to address the first four objectives of this research. No hypothesis was formulated against the fifth objective as it was addressed by the qualitative research method.

(1) It was expected that there would be variation between the male and female Indian adolescents of residential and non-residential schools in respect of their flourishing.

(2) It was hypothesized that out of four main measures, certain specific measures would act as the major indicators of flourishing in the school-going Indian adolescents.

(3) It was expected that there would be heterogeneity among the school-going Indian adolescents in respect of flourishing.

(4) It was also hypothesized that because of the expected heterogeneity, the occurred natural groups of school-going Indian adolescents would differ in terms of the identified indicators of flourishing.

#### **CHAPTER III**

#### **METHOD**

This chapter describes the design and procedure adopted for the study. *First*, the plan of the study and designs are described followed by the pilot study. *Second*, the participants are described along with the determination of sample size and sampling. Third, the measures used in this study are described with their psychometric properties and scoring procedure followed by the in-depth interview protocol. Finally, the procedures followed in this study are described. This study has been conducted after obtaining the ethical approval from the Institutional Ethics Committee of University of Hyderabad, and the Committee has also approved all forms, measures, and procedures of the study.

#### **Plan and Design**

The study was based on sequential mixed method design (Cresswell, 1999). Therefore, it was planned to carry out the study in two phases. The first phase of the study was based on the principles of quantitative research design, whereas the second phase was based on the principles of qualitative research design.

#### **First Phase**

In the *first* phase, under the framework of quantitative research design, the study adopted a prospective, more than one independent variable, factorial design (Montero & Leon, 2007) developed under the *ex post facto* approach (Dunham, 1988). As there were two independent variables or factors, a 2 (School) x 2 (Gender) factorial design was adopted in this study. For this, the participants were selected because of a specific combination of characteristics, as the investigator had planned, in order to fill the groups formed by the combination of levels of the two factors under study. There were two factors—School (S) and Gender (G). The first factor, School was divided into two levels—Residential and Non-residential. The second factor Gender, which was a natural

attribute, possessed two levels—Female and Male. Thus, the adopted 2 (School) x 2 (Gender) factorial design generated four cells—Residential Female ( $S_1G_1$ ,  $n_1 = 100$ ), Residential Male ( $S_1G_2$ ,  $n_2 = 100$ ), Non-residential Female ( $S_2G_1$ ,  $n_3 = 100$ ), and Non-residential Male ( $S_2G_2$ ,  $n_4 = 100$ ) with equal sample size. The following is the schematic representation of the design.

2 (SCHOOL) X 2 (GENDER) FACTORIAL DESIGN		Factor 2: Gender (G)					
		Female	Male	Total			
Factor 1: School (S)	Residential	$\begin{array}{c} S_1G_1\\ n_1=100 \end{array}$	$\begin{array}{c}S_1G_2\\n_2=100\end{array}$	200			
	Non-residential	$\begin{array}{c} S_2G_1\\ n_3{=}100 \end{array}$	$\begin{array}{c} S_2G_2\\ n_4=100 \end{array}$	200			
	Total	200	200	$\mathbf{N} = 400$			

The primary dependent variable in the study was flourishing that was measured in terms of its three basic domains—emotional well-being, social well-being, and psychological well-being. In addition to this, four other major dependent variables—positive emotions, personal growth initiative, sources of adolescent's happiness, and personality traits—were also measured to identify the major indicators of flourishing.

#### **Second Phase**

In the *second* phase, under the frame work of qualitative research design the study was based on Interpretative Phenomenological Analysis (IPA) for understanding the process and identifying the dynamics of flourishing in school-going Indian adolescents. IPA studies are generally conducted with small samples to obtain sufficiently in-depth and nuanced examination of idiographic perspective (Smith et al. 2009). IPA (Smith et al. 1995; Smith et al. 1997; Smith et al. 1999) attempts to analyze how people understand their lived experiences. As a dynamic process, IPA also focuses on the active role of the researcher in analyzing the lived experiences. In this study, the investigators tried to understand the participants' personal world—an insider's perspective (Conrad, 1987) by means of inductive processes of meaning making. The salient principle of IPA—the use of a double hermeneutic interpretation process—was followed. The investigator tried to understand the adolescent's subjective experience and also examined the underlying meanings (Aresti et al., 2010; Smith 2011). For IPA small sample (n = 10) was identified from the large sample of *first* phase and in-depth-interview method was resorted to generate rich qualitative data.

## **Pilot Study**

Pilot study was conducted with four main objectives—*first*, to construct a scale for measuring the sources of happiness of school-going Indian adolescents; *second*, to test the effectiveness and feasibility of the flourishing scale as it was a relatively new construct; *third*, to examine the feasibility of applying the proposed research design; and *fourth*, to verify the accessibility and availability of the sample. After meeting these objectives, the main study was conducted.

## **Participants**

The sample consisted of 400 school-going India adolescents who were in their late adolescence phase. The sample size was determined on the basis of three criteria—(i) The review of literature showed that sample sizes used in majority of similar studies varied between 200–500; (ii) The prescribed sample size recommended by Krejcie and Morgan (1970) for the population size of 10,00,000 is 384; and (iii) Given an alpha = 0.01, power = 0.99, and effect size = 0.25 (medium), *a priori* sample size was calculated and found to be 388. Therefore, the sample size was chosen as 400, with equal number of cases in each cell of the design of the study. The participants were selected by multistage sampling.

In *first* stage of sampling, the place of the study was finalized. Out of 29 States in India having cultural unity in diversity, the State of Odisha was included in the universe

off the study selected and its capital city, i.e. Bhubaneshwar was selected as it was the native place of the investigator and it was convenient for the investigator to carry out the research with accessibility, resources, and adequate support.

In *second* stage of sampling, the secondary schools and intermediate colleges (both named as School and considered as the first factor i.e. School) were identified and a comprehensive list was prepared. These enlisted schools were divided into two strata—residential and non-residential—on the basis of the type of accommodation available for their students. From the list, six residential schools and eight non-residential schools were selected on the basis of their official permissions.

In *third* stage of sampling, two separate lists of female and male adolescent students were prepared. Students of intermediate standard belonging to the age group of 16-18 years were included in the lists. The adolescent students having any forms of disabilities, known psychological disorders, or suffering from physical illness were excluded from the lists. Basing on these inclusion and exclusion criteria, two lists—list of female adolescents and list of male adolescents—were prepared for each school from both types of schools—residential and non-residential. The total 28 lists, thus prepared, constituted the sampling frame.

In *fourth* stage of sampling, the required number of cases were selected by means of simple random sampling. For this, the above prepared lists were entered into MS Excel Sheet independently and the participants in each list were assigned numbers serially. Using specific formula, each list was shuffled independently and the required numbers of cases were selected by using formula of random number selection in order to meet the desired sample size of 100 in each group. From each list, 10–15 participants were selected on the basis of the above simple random sampling method to include them in the study.

As per the design, the study aimed to include 100 participants in each of the four cells (n = 100) of 2 (School) x 2 (Gender) factorial design amounting to total of 400 participants (N = 400). The cell where less than the required sample of 100 was observed, remaining cases were selected randomly from the list by simple random sampling as mentioned above in order to reach the required sample size. Nevertheless, in the process of reaching the desired sample size of 400, the investigator came across 462 participants out of which 62 participants were excluded from the study considering the refusal of informed consent, subject dropout, and missing data (some item unanswered or missing fundamental data—age and gender).

The final sample consisted of participants from two streams of education— Science (63%) and Arts (37%). Out of 400 participants, 12.75% were 16 years of age, 30% were 17 years of age, and 7.25% were 18 years of age under residential school category, whereas 18.75% were 16 years age, 27% were 17 years of age, and 4.25% were 18 years of age under non-residential school category. Female and male participants were equally distributed in four cells, i.e. 25% in each cell.

Basing on the findings of *first* phase of the study, five adolescent students were selected from the category of flourishing and five from the category of languishing on the basis of purposive sampling for conducting the in-depth interview in the *second* phase of this study. Hence the principles of theoretical sampling were followed for IPA on the major criterion of competency of the participant in expressing their lived experience.

#### Measures

The first phase of the study focused on assessment whereas the *second* phase involved in-depth interview. In the first phase, there were five measures used along with the response sheet and demographic details of the participants. The measures, response sheet, and demographic details are appended (*Appendix B*). The measures were Mental

Health Continuum–Short Form (Keyes, 2005), Modified Differential Emotional Scale (Fredrickson, Tugade, Waugh, & Larkin, 2003), Personal Growth Initiative Scale (Robitscheck, 1998), Sources of Adolescent's Happiness Scale (developed for this study), and Big Five Inventory–10 (Rammstedt & John, 2007). The items of the measures were bilingual—English and the regional language. Standard procedure was followed to translate the original items in English to the regional language. For the participants' easy understanding these were translated into regional language, i.e. Odia. The translated versions of these measures were then re-translated into English by two experts independently and matched with the original versions in order to avoid ambiguity. The measures are described below with their psychometric properties and scoring procedure.

#### Mental Health Continuum–Short Form (MHC–SF)

The MHC–SF (Keyes, 2005) was used in this study to measure flourishing—the positive aspect of mental health (*Appendix B:* Section A). The MHC–SF having three domains—Emotional well-being, Social well-being, and Psychological well-being—consisted of 14 items. The Emotional well-being contained three items (e.g. how often did you feel happy), Social well-being contained five items (e.g. how often did you feel that your life has a sense of direction or meaning to it), and Psychological well-being contained six items (how often did you feel that people are basically good). Each item was measured on a 6-point rating scale (0 = never, 5 = everyday). The Cronbach's alpha for Emotional well-being was .64, Social well-being was .71, and Psychological well-being was .57 (Robitschek & Keyes, 2009). The Cronbach's alpha was found for Emotional well-being was .67, Social well-being .57, and Psychological well-being .70 in this sample. The validity of the scale was found to be high (Keyes, 2005, 2006; Keyes et al., 2008; Lamers et al., 2012; Westerhof & Keyes, 2010).

**Scoring.** The scale was scored in two ways—to calculate the domain scores and classify under three category of flourishing—flourishing, moderately mentally healthy and languishing (Keyes, 2005) for the two purposes of the study. To obtain the domain score the items of the corresponding domain were added. The total scores of the Emotional well-being ranged between 0–15, Social well-being ranged between 0–25, and Psychological domain ranged between 0–30. Higher the domain scores, higher was the well-being. To classify the participants into Flourishing, they must respond "Every day" or "Almost every day" to at least one of the three emotional well-being items, and at least six of the 11 social and psychological well-being items. To classify the participants as languishing, they must respond "Never" or "Once or twice" to at least one emotional well-being item and six social and psychological well-being items and the participants those who do not belong to these two category they belong to moderately mentally healthy category (Keyes, 2002).

## **Modified Differential Emotional Scale (mDES)**

The mDES (Fredrickson et al., 2003) was used in this study to measure the frequency with which the participants experienced positive and negative emotions over the past four weeks (*Appendix B:* Section B). The mDES consisted of 20 items, each was rated with a 5-point rating scale (0 = not at all, 4 = most of the time). In the scale, 10 items measured 10 positive emotions—love, joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, and awe (e.g. how often did you feel most hopeful, optimistic, or encouraged), whereas 10 items measured 10 negative emotions—anger, shame, fear, disgust, hate, embarrassment, guilt, sadness, contempt, and stress(e.g. how often did you feel most hate, distrust, or suspicion). The Cronbach's alpha for the positive emotion was .82 and negative emotion was .94 (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008). The Cronbach's alpha for positive

emotion was found to be .64 and negative emotion .82 in this sample. The validity was also found to be high (Michael, Anastasios, Christos, & Irene, 2016).

**Scoring.** For this study, each single item was used to assess a specific emotion. Each item score was taken as the score for the corresponding emotion. The score of the positive emotion was calculated by adding the individual item scores of all the 10 positive emotions and the score varied from 0–40. Likewise, the score of the negative emotion was calculated by adding the individual item scores of all the 10 negative emotion and the score varied from 0–40. Likewise, the score of the negative emotions and the score varied from 0–40. Higher the scores, higher was the corresponding emotion.

# **Personal Growth Initiative Scale (PGIS)**

The PGIS (Robitscheck, 1998) was used to measure the participants' intentional engagement in their growth in life (*Appendix B:* Section C). As a one-dimensional scale, the PGIS consisted of nine items (e.g. I have a specific action plan to help me reach my goals). Each item was measured on a 7-point rating scale (1 = disagree, 6 = definitely agree). The Cronbach's alpha was ranged .78 to .90 (Robitscheck, 1998). The validity was also established. The Cronbach's alpha was found to be .75 in this sample.

**Scoring.** The score of the PGIS was calculated by adding the individual item scores of all the nine items. The total score varied from 9-54. Higher the scores, greater was the level of intentional self-change.

#### Sources of Adolescent's Happiness Scale (SAHAS)

The Sources of Adolescent's Happiness Scale (SAHAS) (developed for this study) was used to measure the sources of adolescent's happiness (*Appendix B:* Section D). The final version of SAHAS consisted of 13 items shown with asterisks. Each item was measured on a 10-point scale (1 = completely absence of happiness, 10 = most intense happiness possible). There were three sources of adolescent's happiness—family (e.g., I become happy when I receive lot of love from my family), self (e.g., Thinking positive

gives me happiness), and friend (e.g., I become happy when I understand my friend correctly. The process of construction of SAHAS involving Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) and its psychometric properties are appended (*Appendix C*).

**Scoring.** The score of three sources of happiness were calculated by adding the responses of the participants for the corresponding items. The total scores for family and self as source of happiness varied from 5–50, whereas for friend as a source of happiness, the total score varied from 3–30. Higher the score in a specific source indicated higher the contribution of that source to the adolescent's happiness.

#### **Big Five Inventory–10 (BFI–10)**

The BFI–10 (Rammstedt & John, 2007) was used to assess the personality traits of the participants (*Appendix B:* Section E). The BFI-10 consisted of 10 items. Each item was measured on a 5-point Likert scale (1 = disagree strongly, 5 = agree strongly). There were five traits and each trait was measured through two items. The traits were Extraversion (e.g. I see myself who is outgoing and sociable), Agreeableness (e.g. I see myself who tend to find fault with others), Conscientiousness (e.g. I see myself who tend to lazy), Neuroticism (e.g. I see myself who is relaxed, handles stress well), and Openness (e.g. I see myself who has few artistic interests). Each of the traits ranged from 2-10. The Cronbach's alpha for extraversion was .65, agreeableness was .69, conscientiousness was .70, neuroticism was .76, and openness was .65 (Singh, Singh, & Singh, 2012). The Cronbach alpha for Extraversion was .55, agreeableness was .74, conscientiousness was .51, neuroticism was .75, and openness was .55 in this sample. The validity was also found to be average.

Scoring. Each trait was measured through two items and out of these two items one was keyed positively (1 = disagree strongly, 5 = agree strongly), and the other was

keyed negatively (5 = disagree strongly, 1 = agree strongly). After this, both the item scores were added to generate the total score of that specific trait. Likewise, separate score of each of the five traits was calculated.

#### **Response Sheet and Demographics**

The response sheet specifically designed for this study had two parts. First part contained five sections (Section A to E) for five measures, serial numbers of the corresponding items, and blank boxes for the responses to be written by the participant (*Appendix B*). The second part consisted of a demographic form, where the participant had to report his or her personal details, like name, gender, age, stream of education, type of accommodation, and name of the school or college.

#### **In-depth Interview**

In *second* phase of the study, multiple in-depth interview sessions were conducted to obtain the qualitative data. The main aspect of the in-depth interview was to generate rich qualitative data to understand the process of flourishing and the factors primarily responsible for languishing. The detailed procedure followed in conducting in-depth interview is mentioned below under 'Procedure'.

#### **Procedures**

Before conducting the study, the ethical approval from the Institutional Ethics Committee of University of Hyderabad was obtained. Prior to collecting data, the required number of residential and non-residential schools from Bhubaneshwar of Odisha were selected on the basis of the official permissions received from the authorities of the schools. The adolescent participants were selected through the multi-stage sampling as mentioned under the previous section 'Participants'.

As the study involved sequential mixed method design, two separate procedures were followed to generate both quantitative and qualitative data. In *first* phase, there was

group assessment to obtain quantitative data for the first four objectives. In *second* phase, there was in-depth interview to generate rich qualitative data.

#### **Group Assessment**

The selected participants were informed about the purpose of the study, the nature of questions, and the duration of the assessment. It was informed to the participants that their participation was voluntary. They were also informed that they were free to withdraw at any point of time during the process. The participants were assured that their information provided in any form would be kept confidential. Nevertheless, the Informed Consent was taken from each participant who completed 18 years of age. The participants who were below 18 years of age were requested to give their Informed Assents and the Informed Consents were taken from the authorities of their respective institutions. Before starting the assessment, the investigator established rapport with the selected participants. For the assessment, group administration method was followed. The selected participants in group of 10–15 were given the booklets containing all the measures under study and demographics with printed instructions. The assessment was done during the regular class hours in normal classrooms in the absence of the teachers. For this, arrangements were made by the schools. Considering the length of the measures, the investigator took two sessions of assessment per group. The duration of each session varied from 25-30 minutes. During the assessment, the investigator gave individual attention to each of the participants in the group. In case of any doubts raised by the participant, the same was clarified by the investigator. At the end of each assessment, the investigator debriefed the participants.

#### **In-depth Interview**

In-depth interview sessions were conducted on five participants who were identified as flourished and five participants who were identified as languished from the participants of the *first* phase of the study. The selected participants were informed about the purpose of the in-depth interview, the types of interaction, the place and time of interview, and the tentative duration of each session. For each participant, the investigator took four to five face-to-face individual in-depth interview sessions, each for a duration about 30–45 minutes. The interview sessions were conducted in a specific classroom exclusively allotted by the administration wings of the schools to the investigator. During the session, the investigator attempted to elicit rich qualitative data to understand the factors that helped the school-going adolescents to lead a flourished life and the major impediments which refrained them from flourishing. Another major focal point of the indepth interview was to explore the dynamics of flourishing during this phase. The protocol of standard in-depth interview was followed as objectively as possible by the investigator. As the demographic details were already collected, the same were not collected again from the 10 identified adolescent participants. After the completion of the interview process each participant was debriefed by the investigator.

#### **CHAPTER IV**

## RESULTS

The results were discussed by using both quantitative and qualitative data. The first four objectives were addressed by means of analyzing quantitative data whereas the last objective was addressed by means of analyzing qualitative data. In addition to this, the investigator's observation report was also taken into consideration for analyzing the results. The results were discussed under six major headings in the line of five objectives and investigator's observation report. The first paragraph under each heading explained the data analysis techniques followed by the analyses and interpretation. The quantitative data were analyzed by using IBM SPSS Statistics 20 and Stata Special Edition 12.0.

# Level of Flourishing

The first objective of the study was to assess the level of flourishing in schoolgoing Indian adolescents across two types of School and Gender. This objective was addressed by following two steps. *First*, the level of flourishing in school-going adolescents across School and Gender was studied. *Second*, the prevalence of flourishing among the sample (N = 400) was measured in terms of flourishing and its three principal domains—Emotional well-being, Social well-being, and Psychological well-being.

#### Flourishing across School and Gender

Flourishing was measured in terms of its three domains—Emotional well-being, Social well-being, and Psychological well-being. As flourishing is a relatively new construct, before examining the variation, it was necessary to understand the level of flourishing in adolescents across two types of Gender (female and male) and School (residential and non-residential). Therefore, the obtained quantitative data on flourishing and its three domains were analyzed using descriptive statistics (*M* and *SD*) and 95% confidence interval. The results are presented in Table 1 and Table 2.

#### Table 1

	Female <sup>a</sup>				Male <sup>a</sup>			
Variables			95% CI			95% CI		5% CI
	М	SD	LL	UL	М	SD	LL	UL
Flourishing	56.98	10.41	55.53	58.43	55.49	12	53.82	57.17
Emotional	13.53	3.38	13.05	14	13.26	3.29	12.80	13.72
Social	16.90	5.25	16.17	17.63	16.75	5.36	16	17.49
Psychological	26.56	5.35	25.81	27.30	25.49	6.52	24.58	26.40

Means, Standard Deviations, and 95% CI of flourishing in female and male adolescents

*Note.* CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit. <sup>a</sup>n = 200

## Table 2

Means, Standard Deviations, and 95% CI of flourishing in adolescents of residential and non-residential schools

Variable	Residential Schools <sup>a</sup>			Ν	Non-residential Schools <sup>a</sup>				
			95% CI		<u> </u>		95	95% CI	
	М	SD	LL	UL	М	SD	LL	UL	
Flourishing	57.06	10.73	55.57	58.56	55.41	11.70	53.79	57.04	
Emotional	13.60	3.34	13.13	14.07	13.19	3.33	12.72	13.65	
Social	16.98	5.49	16.91	17.75	16.67	5.11	15.95	17.38	
Psychological	26.49	5.53	25.71	27.26	25.56	6.38	24.67	26.45	

*Note.* CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit. <sup>a</sup>n = 200 From Table 1, it is observed that the mean of flourishing score of the female adolescents was 56.98 (SD = 10.41, 95% CI: Lower Limit = 55.53, Upper Limit = 58.43) whereas the mean of flourishing score of male adolescents was 55.49 (SD = 12, 95% CI: Lower Limit = 53.82, Upper Limit = 57.17). The mean of emotional well-being score of the female adolescents was 13.53 (SD = 3.38, 95% CI: Lower Limit = 13.05, Upper Limit = 14) whereas the mean of emotional well-being score of male adolescents was 13.26 (SD = 3.29, 95% CI: Lower Limit = 12.80, Upper Limit = 13.72). The mean of social wellbeing score of the female adolescents was 16.90 (SD = 5.25, 95% CI: Lower Limit = 16.17, Upper Limit = 17.63) whereas the mean of social well-being score of male adolescents was 16.75 (SD = 5.36, 95% CI: Lower Limit = 16, Upper Limit = 17.49). The mean of psychological well-being score of the female adolescents was 26.56 (SD = 5.35, 95% CI: Lower Limit = 25.81, Upper Limit = 27.30) whereas the mean of psychological well-being score of male adolescents was 25.49 (SD = 6.52, 95% CI: Lower Limit = 24.58, Upper Limit = 26.40).

From the Table 2 it is evident that the mean of the flourishing score of residential school adolescents was 57.06 (SD = 10.73, 95% CI: Lower Limit = 55.57, Upper Limit = 58.56) and non-residential adolescents was 55.41 (SD = 11.70, 95% CI: Lower Limit = 53.79, Upper Limit = 57.04). The mean of emotional well-being scores of the residential school adolescents was 13.60 (SD = 3.34, 95% CI: Lower Limit = 13.13, Upper Limit = 14.07) whereas, the mean of non-residential schools adolescents was 13.19 (SD=3.33, 95% CI: Lower Limit =12.72, Upper Limit = 13.65). As presented in Table 2 it is observed that the mean of the social well-being scores of the residential school adolescents was 16.98 (SD = 5.49, 95% CI: Lower Limit = 16.91, Upper Limit =17.75) whereas, the mean non-residential schools adolescents was 16.67 (SD = 5.11, 95% CI: Lower Limit = 15.95, Upper Limit =17.38). The mean of the psychological well-being scores of the

residential school adolescents was 26.49 (SD = 5.33, 95% *CI*: Lower Limit = 25.71, Upper Limit = 27.26) whereas, the mean of non-residential schools adolescents was 25.56 (SD = 6.38, 95% *CI*: Lower Limit = 24.67, Upper Limit = 26.45).

To examine the variation of flourishing in school-going Indian adolescents across the Schools and Gender, it was initially decided to compute 2 (School) X 2 (Gender) Twoway Between-subjects MANOVA. But at the time of testing the assumptions, one of the major assumptions of MANOVA—equality of covariance—was not present. Therefore, 2 (School) X 2 (Gender) Two-way Between-subjects ANOVA was done on flourishing and its three domain scores after testing the assumptions. The results of the ANOVA were presented in Table 3.

The 2 (School) X 2 (Gender) Two-way Between-subjects ANOVA done on flourishing scores revealed that the main effect of school was not significant, F(1, 396) =2.17, p = .14. This indicated that the flourishing scores of the adolescents of the residential (M = 57.06, SD = 10.73) and non-residential school (M = 55.41, SD = 11.70) were homogeneous in nature. The main effect of Gender was not significant, F(1, 396) = <1, p =.19. This indicated that the flourishing scores of female adolescents (M = 56.98, SD =10.41) and male adolescents (M = 55.49, SD = 12) were homogeneous in nature. The School x Gender interaction effect was also not significant, F(1, 396) = <1, p = .95. Table 3 revealed that the main effect of school was not significant, F(1, 396) = <1, p = .21 in case of emotional well-being score of the adolescents. This indicated that emotional wellbeing scores of the adolescents of the residential (M = 13.60, SD = 3.34) and nonresidential school (M = 13.19, SD = 3.33) were homogeneous in nature. The main effect of Gender was not significant, F(1, 396) = <1, p = .43. This indicated that the emotional well-being scores of female adolescents (M = 13.53, SD = 3.38) and male adolescents (M = 13.26, SD = 3.29) were homogeneous in nature. The School x Gender interaction effect

# Table 3

Two-way Between-subjects ANOVA for flourishing and its three domains scores as a

Source	df	MS	F	Р					
Source	цj	INIS	Γ	1					
Flourishing									
School	1	273.90	2.17	.14					
Gender	1	220.52	1.75	.19					
School x Gender	1	.56	<1	.95					
Error	396	126.13							
Emotional well-being	Emotional well-being								
School	1	17.22	1.54	.21					
Gender	1	7.02	<1	.43					
School x Gender	1	.02	<1	.96					
Error	396	11.15							
Social well-being									
School	1	9.92	<1	.55					
Gender	1	2.40	<1	.77					
School x Gender	1	2.40	<1	.77					
Error	396	28.26							
Psychological well-being									
School	1	85.56	2.41	.12					
Gender	1	113.42	3.19	.07					
School x Gender	1	.42	<1	.91					
Error	396	35.52							

function of School and Gender

was not significant, F(1, 396) < 1, p = .96. This indicated that the female and male adolescents were homogeneous in terms of their emotional well-being across two different schools.

The results of 2 (School) X 2 (Gender) Two-way Between-subjects ANOVA done on Social well-being score (Table 3) revealed that the main effect of school was not significant,  $F(1, 396) = \langle 1, p = .55$ . This indicated that the social well-being scores of the adolescents of the residential (M = 16.98, SD = 5.49) and non-residential school (M =16.61, SD = 5.11) were homogeneous in nature. The main effect of Gender was not significant,  $F(1, 396) = \langle 1, p = .77$ . This indicated that the social well-being scores of female adolescents (M = 16.90, SD = 5.25) and male adolescents (M = 16.75, SD = 5.36) were homogeneous in nature. The School x Gender interaction effect was not significant,  $F(1, 396) \langle 1, p = .77$ . This showed that the female and male adolescents did not vary in terms of their social well-being across two different schools.

The results of 2 (School) X 2 (Gender) Two-way Between-subjects ANOVA done on Psychological well-being scores (Table 3) revealed that the main effect of School was not significant, F(1, 396) = 2.41, p = .12. This indicated that the psychological well-being scores of the adolescents of the residential school (M = 26.48, SD = 5.53) and nonresidential school (M = 25.56, SD = 6.30) were homogeneous in nature. The main effect of Gender was not significant, F(1, 396) = 3.19, p = .07. This indicated that the psychological well-being scores of female adolescents (M = 26.56, SD = 5.35) and male adolescents (M= 25.49, SD = 6.52) were homogeneous in nature. The School x Gender interaction effect was not significant, F(1, 396) < 1, p = .91. This revealed that there was no significance difference observed between female and male adolescents in terms of their psychological well-being across two different schools. From the analyses, it was evident that there was no significant variation found among the school-going Indian adolescents in respect of their flourishing and its domains across School and Gender. Thus, the four different groups of school-going adolescents as per the design of the study were found to be a single homogeneous group in terms of their flourishing. Therefore, subsequent, statistical analyses were carried out on the entire sample (N = 400) as the sample was found to be homogeneous.

## **Prevalence of Flourishing in Adolescents**

To identify the categories of flourishing, the criteria recommended by Keyes (2006) were followed. Data were analyzed by means of frequency (*f*), percentage (%), and Chi-square ( $\chi^2$ ). The analyses are presented in Table 4 and Figure 1.

Out of the total participants (N = 400), 6.2% participants were found to be under the category of flourishing, 83.8% participants were moderately mentally healthy, and 10% were languishing. Further analysis showed that there was no significant association between the four groups of adolescents and the three categories of flourishing ( $\chi^2 = 5.92$ , p = .43).

## **Identification of Major Indicators**

The second objective of the study was to identify the major indicators of flourishing in school-going Indian adolescents. For this, two steps were followed. *First,* the relationships between the four major dependent variables under study (emotion, personal growth initiative, the sources of adolescent's happiness, and personality traits) and flourishing were seen. *Second,* the major indicators of flourishing were identified.

## **Relationship between the Four Dependent Variables and Flourishing**

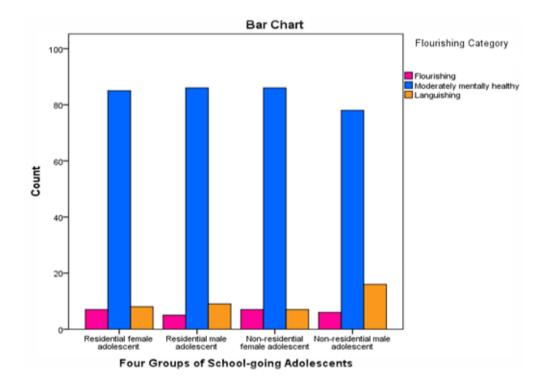
As the sample was found to be homogeneous, Product-moment correlation coefficients (Pearson's r) between the four dependent variables (emotion, personal growth

Prevalence of flourishing in school-going Indian adolescents across School and Gender

(N = 400)

Groups	Number of	Flourishing	Moderately	Languishing	
Groups	participants	Flourishing	mentally healthy	Languishing	
Residential female	100	7	85	8	
Residential male	100	5	86	9	
Non-residential female	100	7	86	7	
Non-residential male	100	6	78	16	
Total	400	25 (6.2%)	335 (83.8%)	40 (10%)	
Note $y^2 = 5.02$ $p = 43$			()		

Note.  $\chi^2 = 5.92$  , p = .43



*Figure 1.* Bar graph presenting the frequencies of adolescents falling into three categories (Flourishing, Moderately mentally healthy, and Languishing) across School and Gender.

initiative, sources of happiness, and personality traits) and flourishing with its three principal domains were calculated along with their corresponding descriptive statistics on the sample (N = 400). The results are presented in Table 5. Taking into consideration the individual dimensions, these four dependent variables gave rise to 11 variables which are presented in the first column of Table 5.

As can be seen in Table 5, except three personality traits—extraversion, neuroticism, and openness—other eight variables were significantly correlated with flourishing. The correlation coefficient was varied between .56 and .13. Out of all the significant correlation coefficients the strongest significant correlation coefficient was found between positive emotion and flourishing (r = .56, p < .001), whereas the weakest correlation coefficient was found between family as a source of happiness and flourishing (r = .13, p < .01). Moreover, significant negative correlation was found between negative emotion and flourishing (r = ..33, p < ..001), whereas all the other seven variables were significantly positively correlated.

Out of this 11 variables, except neuroticism and openness, other nine variables were significantly correlated with emotional well-being. The correlation coefficient was varied between .50 and .10. The strongest correlation coefficient was found between positive emotion and emotional well-being (r = .50, p < .001) and the weakest correlation coefficient was found between family as a source of happiness and emotional well-being (r = .10, p < .01). Moreover, significant negative correlation was found between negative emotion and emotional well-being (r = .40, p < .001), whereas all other eight variables were significantly positive correlated with emotional well-being.

As can be seen Table 5, except two sources of happiness (family and friend) and three personality traits (extraversion, neuroticism, and openness), other six variables were

# Product moment correlation coefficient between the four dependent variables and

Dependent Variables		95% CI		Flourishing	Domains of flourishing			
	M (SD)	LL	UL	Tiourishing	FLE	FLS	FLP	
Emotion								
Positive	24.05 (5.98)	23.54	24.55	.56***	.50***	.26 ***	.54***	
Negative	13.47 (6.49)	12.83	14.10	33***	40***	10*	31***	
PGI	40.38 (7.92)	39.60	41.16	.47***	.34***	.23***	.48***	
Sources of happing	ess							
Family	45.22 (6.77)	44.55	45.89	.13**	.10*	.01	.19***	
Self	42.71 (7.41)	41.98	43.43	.31***	.20***	.11*	.38***	
Friend	24.54 (5.21)	24.02	25.05	.21***	.12**	.07	.26***	
Personality traits								
Extraversion	7.34 (1.95)	7.14	7.53	.09	.11*	06	.05	
Agreeableness	6.89 (1.78)	6.71	7.06	.20***	.15**	.22***	.26***	
Cons.	6.89 (1.99)	6.65	7.04	.34***	.20***	.24***	.32***	
Neuroticism	5.85 (1.88)	5.67	6.04	01	.04	02	09	
Openness	5.86 (1.69)	5.69	6.03	03	01	.02	07	

*flourishing* (n = 400)

*Note.* PGI = Personal growth initiative; Cons. = Conscientiousness; FLE = Flourishing domain-Emotional well-being; FLS = Flourishing domain-Social well-being; FLP = Flourishing domain-Psychological well-being.

\*p < .05, \*\*p < .01, \*\*\*p < .001.

significantly correlated with social well-being. The correlation coefficient was varied between .26 and .11. The strongest correlation coefficient was found between positive emotion and social well-being (r = .26, p < .001) and the weakest correlation coefficient was found between self as a source of happiness and social well-being (r = .11, p < .01). Moreover, significant negative correlation was found between negative emotion and social well-being (r = .10, p < .05) and other variables are positively correlated with social wellbeing.

Out of 11 variables except three personality traits (extraversion, neuroticism, and openness), other eight variables were significantly correlated with psychological wellbeing. The correlation coefficient was varied between .54 and .19. The strongest was correlation coefficient was found between positive emotion and psychological well-being (r = .54, p < .001) and the weakest correlation coefficient was found between family as a source of happiness and psychological well-being (r = .19, p < .001). Moreover, significant negative correlation was found between negative emotion and psychological well-being well-being (r = -.31, p < .001), whereas all other seven variables were significantly positively correlated.

### **Identification of the Major Indicators of Flourishing**

To identify the major indicators of flourishing, hierarchical regression analysis was computed by taking flourishing and its three principal domains as criterion and four dependent variables as predictors using IBM SPSS Statistics 20. The sequence of the entry of the four predictors into the model was followed by making four blocks—Block 1 (Two types of emotion), Block 2 (personal growth initiative), Block 3 (Three sources of happiness), and Block 4 (Five personality traits).

To find out the major indicator from four dependent variables for flourishing and its three domains, hierarchical regression analyses were run four times. Before running the test, the assumptions of hierarchical regression analyses were tested. The results were presented in Table 6 to Table 9.

Table 6 presents the results of hierarchical regression analysis done by taking the four predictors for the first criterion—Flourishing. The analysis gave rise to four models. Model 1, with positive emotion and negative emotion as the predictors, explained 36% variance and was significant, F(2, 397) = 111.14, p < .001. Both positive emotion ( $\beta = .51$ , t = 12.43, p < .001) and negative emotion ( $\beta = -.22$ , t = 5.29, p < .01) were found to be significant predictors of flourishing. Model 2, in which personal growth initiative was added, explained significantly more variance,  $R^2$  change = .06, F(1, 396) = 45.78, p < 100.001. The Model 2 explained 42% of variance in flourishing (Adjusted  $R^2 = .42$ ) and was significant, F(3, 396) = 97.71, p < .001. The significant predictors of Model 2 were positive emotion ( $\beta = .42$ , t = 10.18, p < .001), negative emotion ( $\beta = -.18$ , t = 4.55, p < .001) .001), and personal growth initiative ( $\beta = .28$ , t = 4.55, p < .001). Model 3, in which three sources of happiness-family, self, and friend-were added, explained significantly more variance,  $R^2$  change = .02, F(3, 393) = 3.55, p < .01. The Model 3 explained 44% of variance in flourishing (Adjusted  $R^2 = .43$ ) and was significant, F(3, 393) = 36.27, p < .23.001. The significant predictors of Model 3 were positive emotion ( $\beta = .41$ , t = 9.71, p < .001.001), negative emotion ( $\beta = -.19$ , t = 4.76, p < .001), personal growth initiative ( $\beta = .26$ , t = 6.12, p < .001), and two sources of happiness—family ( $\beta = -.13$ , t = 2.61, p < .01) and self ( $\beta = .16$ , t = 2.74, p < .01)—were found to be significant predictors in this model and the model was significant, F(6, 393) = 51.57, p < .001. Likewise, Model 4, in which two personality traits-agreeableness and conscientiousness-were added, explained significantly more variance,  $R^2$  change = .03, F(2, 391) = 12.43, p < .001. The Model 4 explained 47% of variance in flourishing (Adjusted  $R^2 = .46$ ) and was significant, F(2, $(\beta = 12.43, p < .001)$ . The significant predictors of Model 4 were positive emotion ( $\beta = 12.43, p < .001$ ).

Summary of Hierarchical Regression Analysis for major variables predicting school-going

Model and predictor variable	β	SEB	В	$R^2$	$\Delta R^2$
Model 1 (C = 34.39, F = 111.14***)				.36	
Positive emotion	1.20	.09	.51***		
Negative emotion	38	.07	22**		
Model 2 ( <i>C</i> = 22.32, <i>F</i> = 97.71***)				.42	.06***
Positive emotion	.92	.90	.42***		
Negative emotion	31	.07	18***		
Personal growth initiative	.40	.06	.28***		
Model 3 ( <i>C</i> = 24.66, <i>F</i> = 51.57***)				.44	.02**
Positive emotion	.89	.09	.41***		
Negative emotion	32	.07	19***		
Personal growth initiative	.37	.06	.26***		
SAH-Family	22	.09	13**		
SAH-Self	.24	.09	.16**		
SAH-Friend	03	.12	01		
Model 4 ( <i>C</i> = 16.14, <i>F</i> = 44.03***)				.47	.03***
Positive emotion	.84	.09	.38***		
Negative emotion	22	.07	13**		
Personal growth initiative	.33	.06	.24***		
SAH-Family	22	.08	13**		
SAH-Self	.22	.09	.14*		
SAH-Friend	02	.12	01		
Agreeableness	69	.29	.11**		
Conscientiousness	.82	.22	.15***		

Indian adolescent's flourishing (N = 400)

*Note.* SAH = Sources of adolescent's happiness, C = Constant, B = Unstandardized beta coefficient, SEB = Standardized error of beta,  $\beta$  = Standardized beta coefficient,  $\Delta R^2 = R^2$  change. \*p < 0.05, \*\*p < 0.01, \*\*\*p < .001. .38, t = 9.37, p < .001), negative emotion ( $\beta = -.13$ , t = 3.1, p < .01), personal growth initiative ( $\beta = .24$ , t = 5.62, p < .001), two sources of happiness—family ( $\beta = -.13$ , t = 2.62, p < .01) and self ( $\beta = .14$ , t = 2.50, p < .01), and two personality traits—agreeableness ( $\beta = .11$ , t = 2.80, p < .01) and conscientiousness ( $\beta = .15$ , t = 3.67, p < .001) were found to be significant predictors in this model and the model was significant, F(8, 391) = 44.03, p < .001.

Table 7 presents the results of hierarchical regression analysis done by taking the four predictors for the second criterion-Emotional well-being. The analysis gave rise to four models. Model 1, with positive emotion and negative emotion as the predictors, explained 33% variance and was significant, F(2, 397) = 99.31, p < .001. In this model both positive emotion ( $\beta = .43$ , t = 10.27, p < .001) and negative emotion ( $\beta = -.30$ , t =7.15, p < .001) were found to be significant. Model 2, in which personal growth initiative was added, explained significantly more variance,  $R^2$  change = .02, F(1, 396) = 11.14, p < 100.001. The Model 2 explained 35% of variance in emotional well-being (Adjusted  $R^2 =$ .347) and was significant, F(3, 396) = 71.61, p < .001. The significant predictors of Model 2 were positive emotion ( $\beta = .38$ , t = 8.78, p < .001), negative emotion ( $\beta = -.28$ , t = 6.68, p < .001), and personal growth initiative ( $\beta = .15$ , t = 3.34, p < .001). Model 3, in which three sources of happiness-family, self, and friend-were added, did not significantly explain any more variance to the Model 2,  $R^2$  change = .00, F(3, 396) = .96, p = .41. Nevertheless, positive emotion ( $\beta = .38$ , t = 8.55, p < .001), negative emotion ( $\beta = .28$ , t =6.78, p < .001), and personal growth initiative ( $\beta = .15$ , t = 3.28, p < .001) were found to be significant predictors in this model and the model was significant, F(6, 393) = 36.27, p <.001. Likewise, Model 4, in which three personality traits—extraversion, agreeableness, and conscientiousness-were added, but did not significantly explain any more variance to Model 2,  $R^2$  change = .00, F(3, 390) = .02, p = .10. Nevertheless, positive emotion ( $\beta =$ 

Summary of Hierarchical Regression Analysis for major variables predicting school-going

Model and predictor variable	β	SEB	В	$R^2$	$\Delta R^2$
Model 1 ( <i>C</i> = 8.74, <i>F</i> = 99.31***)				.33	
Positive emotion	.28	.03	.43***		
Negative emotion	15	.02	30***		
Model 2 ( <i>C</i> = 6.86, <i>F</i> = 71.61***)				.35	.02**
Positive emotion	.25	.03	.38***		
Negative emotion	14	.02	28***		
Personal growth initiative	.06	.02	.15**		
Model 3 ( <i>C</i> = 7.62, <i>F</i> = 36.27***)				.36	.01
Positive emotion	.25	.03	.38***		
Negative emotion	15	.02	28***		
Personal growth initiative	.06	.02	.15***		
SAH- Family	03	.03	06		
SAH-Self	.03	.03	.07		
SAH-Friend	04	.04	06		
Model 4 ( $C = 7.58, F = 24.01^{***}$ )				.36	.00
Positive emotion	.25	.03	.38***		
Negative emotion	15	.02	29***		
Personal growth initiative	.06	.02	.15**		
SAH-Family	03	.03	07		
SAH-Self	.03	.03	.07		
SAH-Friend	04	.04	06		
Extraversion	.02	.07	.01		
Agreeableness	01	.08	00		
Conscientiousness	01	.07	01		

Indian adolescent's emotional well-being (N = 400)

*Note.* SAH = Sources of adolescent's happiness, C = Constant, B = Unstandardized beta coefficient, SEB = Standardized error of beta,  $\beta$  = Standardized beta coefficient,  $\Delta R^2 = R^2$  change. \*p < 0.05, \*\*p < 0.01, \*\*\*p < .001. .38, t = 8.51, p < .001), negative emotion ( $\beta = -.29$ , t = 6.53, p < .001), and personal growth initiative ( $\beta = .15$ , t = 3.41, p < .01) were found to be significant predictors in this model and the model was significant, F(9, 390) = 24.01, p < .001.

Table 8 presents the results of hierarchical regression analysis done by taking the four predictors for the third criterion-social well-being. The analysis yielded four models. Model 1 with positive emotion and negative emotion as the predictors, explained 7% variance and was significant, F(2, 397) = 15.19, p < .001. In this model positive emotion ( $\beta = .43$ , t = 5.12, p < .001) and negative emotion ( $\beta = -.30$ , t = 5.12, p < .001) were found to be significant predictor of social well-being. Model 2, in which personal growth initiative was added, explained significantly more variance  $R^2$  change = .02, F(1,396) = 8.80, p < .001. The Model 2 explained 9% of variance in social well-being (Adjusted  $R^2 = .084$ ) and was significant, F(3, 396) = 13.26, p < .001. The significant predictors of Model 2 were positive emotion ( $\beta = .38$ , t = 3.92, p < .001), negative emotion  $(\beta = -.28, t = 5.12, p < .001)$ , and personal growth initiative  $(\beta = .15, t = 2.97, p < .01)$ . Model 3, in which one source of happiness—self was added, did not significantly explain anymore variance to the Model 2,  $R^2 = .00$ , F(1, 395) = .18, p = .67. Nevertheless, positive emotion ( $\beta = .38$ , t = 3.92, p < .001), negative emotion ( $\beta = -.28$ , t = 5.12, p < .001), and personal growth initiative ( $\beta = .15$ , t = 2.99, p < .001) were found to be significant predictors in this model and the model was significant, F(4, 395) = 9.97, p < .001. Likewise, Model 4, in which two traits of personality-agreeableness and conscientiousness explained significantly more variance  $R^2$  change = .05, F(2, 393) = 11.80, p < .001. The Model 4 explained 14% of variance in social well-being (Adjusted  $R^2 = .13$ ) and was significant, F(6, 393) = 10.94, p < .001. The significant predictor of Model 4 were positive emotion ( $\beta = .38$ , t = 3.92, p < .001), negative emotion ( $\beta = -.29$ , t =5.12, p < .001), personal growth initiative ( $\beta = .15$ , t = 2.99, p < .001), and two personality

Summary of Hierarchical Regression Analysis for major variables predicting school-going Indian adolescent's social well-being (N = 400)

Model and predictor variable	В	SEB	В	$R^2$	$\Delta R^2$
Model 1 ( <i>C</i> = 10.99, <i>F</i> = 15.19***)				.07	
Positive emotion	.26	.03	.43***		
Negative emotion	04	.02	30***		
Model 2 ( <i>C</i> = 7.86, <i>F</i> = 13.26***)				.09	.02***
Positive emotion	.21	.03	.38***		
Negative emotion	02	.02	28***		
Personal growth initiative	.10	.02	.15**		
Model 3 ( <i>C</i> = 8.24, <i>F</i> = 9.97***)				.09	.00
Positive emotion	.21	.03	.38***		
Negative emotion	02	.02	28***		
Personal growth initiative	.12	.02	.15***		
SAH- Self	02	.03	06		
Model 4 ( <i>C</i> = 3.31, <i>F</i> = 10.94***)				.14	.05***
Positive emotion	.19	.03	.38***		
Negative emotion	04	.02	29***		
Personal growth initiative	.09	.02	.15**		
SAH-Self	03	.03	07		
Agreeableness	.46	.15	.15***		
Conscientiousness	.44	.13	.16***		

*Note*. SAH = Sources of adolescent's happiness, C = Constant, B = Unstandardized beta coefficient, SEB = Standardized error of beta,  $\beta$  = Standardized beta coefficient,  $\Delta R^2 = R^2$  change. \*p < 0.05, \*\*p < 0.01, \*\*\*p < .001. traits—agreeableness ( $\beta$  = .15, *t* = 5.12, *p* < .001) and conscientiousness ( $\beta$  = .16, *t* = 5.12, *p* < .001).

Table 9 presents the results of hierarchical regression analysis done by taking the four predictors for the fourth criterion-psychological well-being. The analysis yielded four models. Model 1 with positive emotion and negative emotion as the predictors explained 33% variance and was significant, F(2, 397) = 99.41, p < .001. In this Model positive emotion ( $\beta = .50$ , t = 11.84, p < .001) and negative emotion ( $\beta = -.20$ , t = 4.86, p < .001) .001) were found to be significant predictors of psychological well-being. Model 2, in which personal growth initiative was added, explained significantly more variance,  $R^2$ change = .08, F(1, 396) = 54.26, p < .001. The Model 2 explained 41% of variance in psychological well-being (Adjusted  $R^2 = .41$ ) and was significant, F(3, 396) = 93.25, p < 100.001. The significant predictors of Model 2 were positive emotion ( $\beta = .40$ , t = 9.51, p < .001.001), negative emotion ( $\beta = -.16$ , t = 4.06, p < .001), and personal growth initiative ( $\beta =$ .31, t = 7.37, p < .001). Model 3, in which three sources of happiness—family, self, and friend—were added, were explained significantly more variance,  $R^2$  change = .03, F(3, 1)(393) = 6.02, p < .001. The Model 3 explained 44% of variance in psychological wellbeing (Adjusted  $R^2 = .43$ ) and was significant, F(6, 393) = 51.41, p < .001. The significant predictors of Model 3 were positive emotion ( $\beta = .37$ , t = 8.74, p < .001), negative emotion  $(\beta = -.17, t = 4.32, p < .001)$ , personal growth initiative ( $\beta = .26, t = 6.17, p < .001$ ), and two sources of happiness—family ( $\beta = -.11$ , t = 2.16, p < .001) and self ( $\beta = .23$ , t = 3.86, p < .001). Model 4, in which two personality traits—agreeableness and conscientiousness—were added, explained significantly more variance,  $R^2$  change = .47, F(5, 388) = 4.50, p < .001. The Model 4 explained 46% of variance in psychological wellbeing (Adjusted  $R^2 = .45$ ) and was significant, F(11, 388) = 31.34, p < .001. The significant predictors of Model 4 were positive emotion ( $\beta = .35$ , t = 8.42, p < .001),

Summary of Hierarchical Regression Analysis for major variables predicting school-going Indian adolescent's psychological well-being (N = 400)

Model and predictor variable	β	SEB	В	$R^2$	$\Delta R^2$
Model 1 ( $C = 14.65, F = 99.41^{***}$ )				.33	
Positive emotion	.58	.05	.50***		
Negative emotion	19	.04	20***		
Model 2 ( $C = 7.59, F = 93.25^{***}$ )				.41	.08***
Positive emotion	.46	.05	.40***		
Negative emotion	16	.04	16***		
Personal growth initiative	.23	.03	.31***		
Model 3 ( $C = 6.88, F = 51.41^{***}$ )				.44	.03**
Positive emotion	.43	.05	.37***		
Negative emotion	16	.04	17***		
Personal growth initiative	.20	.03	.26***		
SAH- Family	10	.05	11**		
SAH- Self	.18	.05	.23***		
SAH- Friend	02	.06	01		
Model 4 ( $C = 3.29, F = 41.92^{***}$ )				.46	.02***
Positive emotion	.40	.05	.35***		
Negative emotion	11	.04	13***		
Personal growth initiative	.18	.03	.24***		
SAH-Family	10	.05	13***		
SAH- Self	.17	.05	.22***		
SAH- Friend	01	.06	01		
Agreeableness	.25	.13	.08**		
Conscientiousness	.39	.12	.13**		

*Note*. SAH = Sources of adolescent's happiness, C = Constant, B = Unstandardized beta coefficient, SEB = Standardized error of beta,  $\beta$  = Standardized beta coefficient,  $\Delta R^2 = R^2$  change. \*p < 0.05, \*\*p < 0.01, \*\*\*p < .001. negative emotion ( $\beta$  = -.13, *t* = 3.14, *p* < .001), personal growth initiative ( $\beta$  = .24, *t* = 5.77, *p* < .001), two sources of happiness—family ( $\beta$  = -.13, *t* = 2.47, *p* < .001) and self ( $\beta$  = .22, *t* = 3.72, *p* < .001), two personality traits—agreeableness ( $\beta$  = .08, *t* = 2.32, *p* < .01) and conscientiousness ( $\beta$  = .13, *t* = 3.35, *p* < .01).

### **Occurrence of Natural Groups Using Cluster Analysis**

The third objective of the study was to find out the occurrence of natural groups using cluster analysis among school-going Indian adolescents in terms of their flourishing. The obtained quantitative data were analyzed by means of different statistical tests to address this objective. *First,* cluster analysis (k-means) was computed to find out the occurrence of the natural groups of the school-going adolescents. *Second,* descriptive statistics (*M, SD,* and Percentage) and 95% confidence interval were computed to describe the characteristics of the occurred clusters.

### k-Means Cluster Analysis

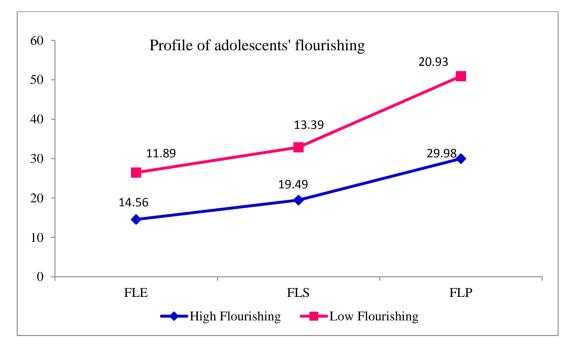
Cluster analysis is a process of finding natural groups by partitioning the entire sample into exclusive groups on the basis of the principle of intra-cluster homogeneity and inter-cluster heterogeneity. In cluster analysis (k-means) cluster centroids are calculated and the Euclidean distance cases and centroids are calculated.

The results of cluster analysis are presented in Table 10. The profile of adolescents' flourishing is presented in Figure 2. In the present study, cluster analysis (k-means) was done to explore how well the school-going adolescents clustered together based on three domains of flourishing—emotional well-being, social well-being, and psychological well-being. In the first step, an exploratory phase of cluster analysis (k-means) procedure (Aldenderfer & Blashfield, 1984) was followed. Then two cluster solution and three cluster solution were computed. Finally, the two-cluster solution was

Mean, SD, t-value, and 95% Confidence Interval for domains of flourishing across two emerged clusters

		Cluster (S	ub-groups)	_	959	% CI
Variables	Total	High Low flourishing flourishing		t(398)	Lower	Upper
FLE	13.39 (3.34)	14.56 (2.51)	11.89 (3.67)	8.68***	-3.29	-2.07
FLS	16.82 (5.30)	19.49 (4.69)	13.39 (3.88)	13.89***	-6.96	-5.23
FLP	26.02 (5.98)	29.98 (3.03)	20.93 (4.88)	22.75***	-9.83	8.27
N	400	225	175			
% of total sample	100	56.25	43.75			

*Note.* FLE = Flourishing domain-Emotional well-being; FLS = Flourishing domain-Social well-being; FLP = Flourishing domain-Psychological well-being. Figures in parentheses are standard deviations; 95% CI = 95% Confidence Interval. \*\*\*p < .001.



*Figure 2.* Line graph showing the mean values of the three domains of flourishing across the two sub-groups (clusters) of school-going adolescents—adolescents with high flourishing and adolescents with low flourishing.

found as the best fit, as it should the greater amount of variance explained in the clustering variables. This two-cluster solution provided a theoretical and logical meaning to the clusters. Table 10 presents the mean, standard deviation, *t*-test values, and 95% Confidence Intervals for domains of flourishing across two emerged clusters.

The best fitting outcome was a two-cluster solution, where the larger cluster was characterized by higher levels of all three domains of flourishing. This cluster was labeled as *'high flourishing'* cluster ( $n_1 = 225$ , 56.25%) and the remaining cluster was marked by lower values on all three domains of flourishing and hence labeled as *'low flourishing'* cluster ( $n_2 = 175$ , 43.75%). The numbers of female and male adolescents in high flourishing cluster were 112 and 113 respectively, whereas in case of low flourishing cluster, the numbers of female and male adolescents were 88 and 87 respectively. Plotting the mean values of the three domains of flourishing for the two clusters, Figure 2 presents the profile of the two occurred clusters or sub-groups of the school-going adolescents.

Table 10 shows that how the participants of the two-cluster—high flourishing and low flourishing—varied in relation to the three domain of flourishing. Three independent *t*-tests were computed to find out whether any diffrences existed. The results of *t*-test yielded significant difference between the two emerged sub-groups on three domains of flourishing, such as emotional well-being (t = 8.68, p < .001), social well-being (t = 13.89, p < .001), and psychological well-being (t = 22.75, p < .001). The means of emotional well-being (M = 14.56, SD = 2.51), social well-being (M = 19.44, SD = 4.69), and psychological well-being (M = 29.98, SD = 3.03) of high flourishing cluster were significantly higher than the means of emotional well-being (M = 11.89, SD = 3.66), social well-being (M = 13.39, SD = 3.88), and psychological well-being (M = 20.03, SD = 4.88) of low flourishing cluster.

### **Natural Groups and Indicators of Flourishing**

The fourth objective of the study was to find out the variation between these natural groups among school-going Indian adolescents in terms of the indicators of flourishing. *First*, to assess how the cases of the occurred clusters varied in the major dependent variables of flourishing, independent *t*-tests and corresponding descriptive statistics, and 95% confidence interval were computed. The results are presented in Table 11. *Second*, the Chi-square ( $\chi^2$ ) tests were computed to find out if the occurred clusters were confounded by School and Gender.

The results presented in Table 11 showed how the participants of two clusters high flourishing and low flourishing—varied in relation to the major indicators of flourishing—positive emotion, negative emotion, personal growth initiative, three sources of happiness, and five personality traits. Eleven independent *t*-tests were computed to find out whether any differences existed. The results of *t*-tests yielded significant difference between the two emerged sub-groups in respect of the major indicators of flourishing, such as positive emotion (t = 8.85, p < .001), negative emotion (t = 5.89, p < .001), personal growth initiative (t = 7.23, p < .001), family (t = 2.69, p < .01), self (t = 4.01, p < .001), friend (t = 3.30, p < .001), agreeableness (t = 4.41, p < .001), and conscientiousness (t = 6.36, p < .001). The subgroups did not differ significantly in terms of extraversion, neuroticism, and openness.

The effect size was found to be high in case of positive emotion (Cohen's d = 0.88), whereas medium effect size was noticed in case of negative emotion (Cohen's d = - 0.59), personal growth initiative (Cohen's d = 0.72), two sources of happiness (self [Cohen's d = 0.39] and friend [Cohen's d = 0.33]) and two personality traits (agreeableness [Cohen's d = 0.47] and conscientiousness [Cohen's d = 0.67]). Low effect size was observed in case of family as a source happiness (Cohen's d = 0.27). The mean,

Variables	Flourishir	Flourishing (Clusters)		Cahan'a d	95% CI		
Variables	High	Low	— <i>t</i> (398)	Cohen's d	Lower		
Emotion							
Positive	25.88 (4.41)	21.69 (5.06)	8.85***	.88	-5.13	3.26	
Negative	11.84 (6.07)	15.55 (6.45)	5.89***	59	2.47	4.94	
PGI	42.76 (7.11)	37.32 (7.89)	7.23***	.72	-6.91	-3.96	
Sources of happine	ess						
Family	46.02 (5.83)	44.19 (7.71)	2.69**	.27	-3.15	49	
Self	43.99 (6.28)	41.05 (8.38)	4.01***	.39	-4.38	-1.49	
Friend	25.28 (4.97)	23.57 (5.36)	3.30***	.33	-2.73	61	
Personality traits							
Extraversion	7.49 (1.90)	7.13 (1.99)	1.85		75	.02	
Agreeableness	7.24 (1.72)	6.42 (1.75)	4.41***	.47	-1.16	48	
Conscientiousness	7.38 (1.80)	6.16 (1.81)	6.36***	.67	-1.60	84	
Neuroticism	5.83 (1.87)	5.88 (1.88)	.40		32	.42	
Openness	5.78 (1.63)	5.96 (1.77)	1.04		16	.51	

# Comparison of indicators of flourishing across the two clusters

*Note.* PGI = Personal growth initiative; Figures in parentheses are standard deviations. \*\*p < 0.01, \*\*\*p < .001

SD, and 95% CI are presented in Table 11.

The chi-square between schools and cluster ( $\chi^2 = 0.10$ , p = .92) was found to be not significant. The chi-square between gender and cluster ( $\chi^2 = 0.18$ , p = .62) was also found to be not significant. Hence, the clusters were found to be independent and were not confounded by School and Gender.

### **Lived Experiences of Adolescents**

The last objective of the study was to explore the lived experiences of the schoolgoing Indian adolescents for understanding the process of flourishing. This objective was addressed by qualitative research design where interpretative phenomenological approach was followed and data driven thematic analysis was adopted to analyze the data. Participants explained the experiences of their own lives in details which helped the investigator to gather rich qualitative data and understand their thoughts. These qualitative data were analyzed involving several steps.

All the interviews were recorded in audio format and the investigator noted the non-verbal behaviours of the participants during the interview. The investigator also prepared the field notes. The recorded interviews were transcribed. The transcriptions were given to two experts for translation into English independently, and later on validated. From these two sets of translation, the investigator selected one; read and reread it along with field notes, and observation to get clarity of each participant's lived experiences. After reading it several times, codes were identified. A code was a word, phrase, or sentence which gave an accurate meaning to the lived experience of the participants. Similar types of codes were grouped together and sub-themes were identified. The similar sub-themes were brought together and were named. At the next stage of data

analysis, similar sub-themes were brought together to form a theme. These themes were then organized into larger superordinate themes.

Several themes emerged over time as the data analysis proceeded. However, the themes were collated under two superordinate themes, such as facilitating factor and barriers. The superordinate themes with their respective themes and sub-themes were listed in Table 12. At the final stage of data analysis, the sub-themes and themes were linked together and a functional model of dynamics of adolescent's flourishing was developed. Figure 3 represents the functional model.

The functional model of the dynamics of adolescent's flourishing is represented by facilitating factors in the form of balloons and barriers in the form of stones. Balloon represents the upward thrust and stone represents the downward force. When the facilitating factors (internal and external) become dominant, they pull the adolescent in upward direction towards flourishing. On the other hand when the barriers become dominant, they push the adolescent in downward direction towards languishing. The functional model posits that the internal and external facilitating factors need to be nurtured in order to make the adolescent flourishing in life. While nurturing the facilitating factors, the psychologist with the help of parents, teachers, and peers, has to be ascertained that the barriers are weakened and gradually removed.

Under each superordinate theme, the identified principles (sub-themes) were categorized under two themes—internal and external. The superordinate themes with their respective sub-themes with specific illustrative quotations are listed in Table 13.

### **Facilitating Factors**

The investigator identified certain facilitating factors which helped the participants to move smoothly and effectively towards flourishing—a significant determinant of positive living. Facilitating factors included certain core principles that helped an

## Superordinate themes, themes, and their sub-themes

Facilitating	factors	Barriers			
Internal	External	Internal	External		
Shielding self against negativity	Positive and productive engagement of self in leisurely activity	Lack of internal resources	Parental excessive imposition		
Strategy to manage anger	Constructive measures to imbibe advices	Hypo-sensitivity to positive change	Inability to comply with rules and regulations		
Proactive measures to transform self	Engaging in pro- social behaviour	Perception of failure			
Realization of mistakes and adaptation	Parents' need satiation	Feeling of intense inferiority complex			
		Excessive reaction and intolerance			

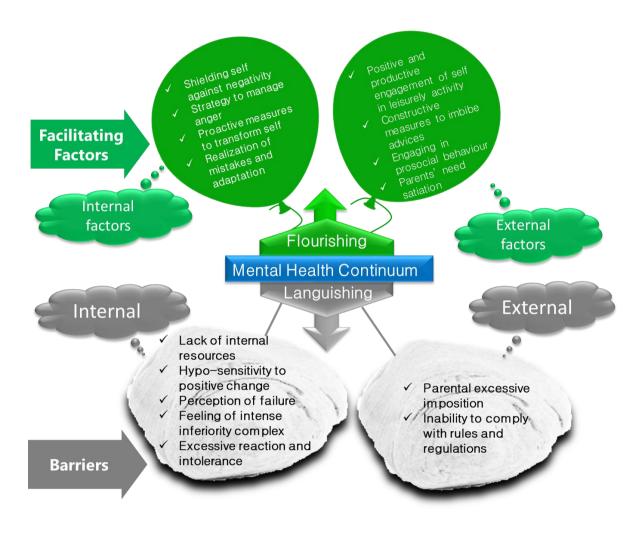
Superordinate	themes and t	their s	sub-themes	with specific	illustrative quotations
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Superordinate theme	Sub-theme	Illustrative quotation
Facilitating factors	Shielding self against negativity	"I prefer to do my work [on] time. A lot of things distract me like watching TV, roaming here and there, doing time pass But I keep myself away from those activities by thinking about my parents' dream. After all, this distraction will not fetch me marks in exam"
	Strategy to manage anger	"I feel angry when my friends play with stuff and they lose it. Again I feel that they do this to me because they think that I am their good friend and sometime they help me solve study related problem"
	Proactive measures to transform self	"Only studying will help me to fetch good mark but to relax my mind I need some friends and for that, I need to mingle with them. After coming to this place (new place for the participants), I realized it. Therefore, I am trying to push myself to make good friends."
	Realization of mistakes and adaptation	"I always thought that due to my bad luck I am not able to score good marks in my matriculation (10 <sup>th</sup> class). But I realized that due to my bad handwriting, I scored less and now I became very conscious."
	Positive and productive engagement of self in leisurely activity	" Apart from my study, I help my mother in tailoring and deliver stitched clothes to her customers. But I never feel sad about our financial condition. I know it is not permanent and I feel happy helping my mother"
	Constructive measures to imbibe advices	"I think that listening to parents, mentor and teacher will give you knowledge which one cannot acquire after reading a <u>millions</u> of books. Because 70% times they give you good advice and applying that in life always give me positive things (outcome is always appreciated by others)"
	Engaging in pro- social behaviour	"I belong to a poor family. My parents taught me that it is not money which brings happiness always. Rather we can make others happy by extending our hand in helping hands towards them in need, specifically those who are in crises. This thought always gives [me] different kind of satisfaction"
	Parents' need satiation	"There is no one around me [in] this hostel who will insist me to study routinely but still I do it regularly as I used to do it at home. Because of my parent's advice and their effort towards my bright future always motivate me to study. My parents want my future to be bright. They want to see me in a high position. I am struggling hard to reach there"
Barriers	Lack of internal resources	"I have a very poor decision-making power. Here, no one is around me to scrutinize. I am a bad student since my childhood. So even if I study now my score is not going to improve. I am always afraid of my future"
	Hypo-sensitivity to positive change	"This world is full of bad people. I know that if i change myself according to demand of the situation, nothing extra I am going to add to my life or society. I do not believe that helping others always revert to us. Earlier I helped my friends, but during the time of my need, nobody came forward to help me."

# Table 13 (Contd ...)

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Superordinate	themes and	i their	sup-inemes	with spi	еснис	ulustrative	auotations
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Superordinate theme	Sub-theme	Illustrative quotation
	Perception of failure	"I was aspiring to study medical science but twice I could not get good rank in all India exams. Therefore, I opt for commerce. Though I am conceptually clear about my study, still I am not doing well in my academics. Now I have no interest in study. I still think that I should be medical field."
	Feeling of intense inferiority complex	"I belong to a poor family whereas my other relatives are very rich. I wanted to study [in] good English medium school for fluency in English. After joining this college, I feel very shy to open my mouth to answer any question though I know the right answer. People make fun of me"
	Excessive reaction and intolerance	"I am not able to bear my friends' comments. Every time they find a new way to irritate me. Initially, I used be silent but when they started to tease me in front of others I busted on them. I cannot control my anger and my reaction"
	Parental excessive imposition	"My parents forced me to do commerce and now I am unable to understand it and scoring very bad. Now they are very angry. I work for them like a robot. What about my failures now?"
	Inability to comply with rules and regulation	"I think world is only for academically good students and for rich people, and I am not any of these. Therefore, I do not have good friends here. Also I am not interested in making friends. I can move smoothly in my life but when obstacle comes I stop there and cannot progress"



*Figure 3.* The functional model of the dynamics of adolescent's flourishing is represented by facilitating factors in the form of balloons and barriers in the form of stones. Balloon represents the upward thrust and stone represents the downward force. When the facilitating factors (internal and external) become dominant, they pull the adolescent in upward direction towards flourishing. On the other hand when the barriers become dominant, they push the adolescent in downward direction towards languishing.

adolescent to progress in life easily and effectively. These factors helped to visualize right way and more predominately simplified the situation or an event in life. These facilitation factors were classified into two themes—internal and external facilitating factors.

**Internal facilitating factors.** Internal facilitating factors included the striving force that was present within the flourishing adolescents to achieve the goal. It was observed that the adolescents were aware of this internal force most of the time. But whenever the adolescents were unable to access their internal facilitating factors, their family, friends, or teachers were instrumental in increasing the accessibility. There were four internal facilitating factors identified among flourishing adolescents, such as shielding self against negativity, strategy to manage anger, proactive measures to transform self, and realization of mistakes and adaptation.

*Shielding self against negativity.* The flourishing adolescents were found to protect themselves with their own strategies of action against anything that they consider as harmful for their progress in career and life. They consciously and constructively avoided their exposure to negative events, like absenteeism, night-out, whiling away time, negative peer support, bullying others, and eve teasing. In many occasions, they gave themselves autosuggestions to follow the paths suggested by their parents, elders in family, and teachers. They constructed their peer group by carefully choosing their friends who shared common characteristics.

"I prefer to do my work [on] time. A lot of things distract me like watching TV, roaming here and there, doing time pass... But I keep myself away from those activities by thinking about my parents' dream. After all, this distraction will not fetch me marks in exam..." *Strategy to manage anger.* The participants considered their anger as a stumbling block to their performance, relationship, and progress in career. In case of flourishing adolescents, it was evident that they became conscious about the onset of their anger. They preferred to analyze the antecedent or anger-provoking situation and visualize its negative impact. This visualization process helped them minimising the intensity of expression of their anger.

"... I feel angry when my friends play with stuff and they lose it. Again I feel that they do this to me because they think that I am their good friend and sometimes they help me to solve study related problem..."

*Proactive measures to transform self.* The flourishing adolescents emphasised upon their positive habits. They explained the proactive process they followed to transform their behaviour, whereas in case of the languishing adolescents, the process of change was noticed as reactive. The flourishing adolescents were found to give emphasis on each small event of life and learn from that. In some circumstances, it was noticed that they fought against their own negative feelings and tried to seek help from others. To transform themselves, they followed advices of parents, elders, teachers, and friends conscientiously. They expressed their concerted efforts to build a strong network of good friends, which was instrumental in their progress in career and life.

"Only studying will help me to fetch good mark but to relax my mind I need some friends and for that, I need to mingle with them. After coming to this place (new place for the participants), I realized it. Therefore, I am trying to push myself to make good friends."

*Realisation of mistakes and adaptation.* Understanding and recognizing the mistakes of life was one of the key sub-themes emerged from the flourishing adolescents' narrations. Realisation of mistakes helped the participants to refine their own selves and

take part in changing process like empowering self in understanding the right situation, rationally analyzing the situation, and taking an initiative to change self. This behaviour helped them in the process of decision making and goal setting.

"I always thought that due to my bad luck I am not able to score good marks in my matriculation (10<sup>th</sup> Class). But I realised that due to my bad handwriting, I scored less and now I became very conscious."

**External facilitating factors.** External facilitating factors included the external force that showed the flourishing adolescents the effective way to stay positive, healthy, and happy. There were four external facilitating factors identified from the flourishing adolescents, such as positive and productive engagement of self in leisurely activity, constructive measures to imbibe advices, engaging in pro-social behaviour, and parents' need satiation.

*Positive and productive engagement of self in leisurely activity.* Flourishing adolescents were found to engage themselves in positive and productive activities that were useful for their all-round development. Some adolescents were engaged themselves in helping their parents for their livelihood whereas others were reported to engage in activities promoting self-development like painting, music, sports, and reading self-help books and other relevant books on general knowledge.

"... Apart from my study, I help my mother in her tailoring and deliver stitched clothes to her customers. But I never feel sad about our financial condition. I know it is not permanent and I feel happy helping my mother..."

*Constructive measures to imbibe advices.* The flourishing adolescents were found to give values to the advices received from parents, elders, and teachers. These advices

helped them changing their worldview towards the career and future. They were found to remember those advices and follow in time without hesitancy. In addition to this, they often shared the advices with their siblings in order to bring changes in their lives.

"I think that listening to parents, mentor and teacher will give you knowledge which one cannot acquire after reading millions of books. Because 70% times they give you good advice and applying that in life always give me positive things (outcome is always appreciated by others)"

*Engaging in pro-social behaviour.* All the flourishing participants emphasized on pro-social behaviour, such as forgiveness, helping others in need, moral values, and ethics. In maximum time, they exhibited positive attitude towards their friends and others around them. They were found to be helpful to others. Even they reported that they extended their unconditional support to their friends without any hesitation. They were found to engage themselves in positive relationship involving sharing, caring, and empathy.

"I belong to a poor family. My parents taught me that it is not money which brings happiness always. Rather we can make others happy by extending our helping hands towards them in need, specifically those who are in crises. This thought always gives [me] different kind of satisfaction..."

*Parents' need satiation.* Most of the flourishing participants focused on their parents' dream which drived them to move in positive direction. Fulfilling parents' need was considered the ultimate goal.

"There is no one around me [in] this hostel who will insist me to study routinely but still I do it regularly as I used to do it at home. Because of my parents' advice and their effort towards my bright future always motivate me to study. My parents want my future to be bright. They want to see me in a high position. I am struggling hard to reach there..."

### **Barriers**

There are certain factors that acted as impediment in the process of adolescents' flourishing. Like facilitating factors, these barriers have been categorised under two sub-themes—internal and external.

**Internal barriers.** Internal barriers were the interneal factors that inhibited the adolescents to progress in life. These factors continuously retarded their development in terms of their career as well as life. As these were lying within the adolescents, they often failed to eliminate the negative impact. These adolescents were failed to constructively fight with the negative aspects of life as a result they were found to be languishing. There were five types of significant internal barriers found, such as—lack of internal resources, the perception of failure, hypo-sensitivity to positive change, feeling of intense inferiority complex, and excessive reaction and intolerance.

*Lack of internal resources.* Most of the participants felt humiliation because of their poor performance. They explained about the lack of their psychological resources that refrained themselves from leading positive life. Hopelessness, anger, fear, procrastination, pessimistic thought, and lack of motivation were the significant markers in their lives. Leading a life without any purpose created a hollowness in their lives. They spent most of their time in searching and understanding themselves.

"... I have a very poor decision-making power. Here, no one is around me to scrutinize. I am a bad student since my childhood. So even if I study now, my score is not going to improve. I am always afraid of my future..."

*Hypo-sensitivity to positive change.* The languishing adolescents were observed to be less sensitive to positivity. Because of their fuzzy outlook, they appeared to be

pessimistic. They did not want to change themselves because of the lack of selfconfidence and farsightedness. They were found to be laden with high level of distress and negative emotions.

"This world is full of bad people. I know that if I change myself according to the demand of the situation, nothing extra I am going to add to my life or society. I do not believe that helping others always revert to us. Earlier I helped my friends, but during the time of my need, nobody came forward to help me."

*Perception of failure.* Negative attitude towards self is one of the important internal barriers experienced by most of the adolescents. Frequent failures in life led them to feel disable. Their repeated failures and low achievement created high level of frustration. The comparison between their and their siblings' performance in the family often made them feel more useless and later on made themselves aloof from their families. It was found that they became very unhappy and felt shy to speak about themselves in front of others. In a nutshell, they detach themselves from the outer world and started behaving in a deviant way.

"I was aspiring to study medical science but twice I could not get good rank in all India exams. Therefore, I opt for commerce. Though I am conceptually clear about my study, still I am not doing well in my academics. Now I have no interest in study. I still think that I should have been in medical field."

*Feeling of intense inferiority complex.* High level of inferiority complex was observed among languishing adolescents. They had a belief that they were less worthy or important than their classmates. This complex was found to make them sluggish, as a result this was a trigger point for asocial behavior. Some the participants attributed their feeling of inferiority complex to their failures, poor communication skills, issues related to parental attachment, and poor body image.

"I belong to a poor family whereas my other relatives are very rich. I wanted to study [in] good English medium school for fluency in English. After joining this college, I feel very shy to open my mouth to answer any question though I know the right answer. People make fun of me..."

*Excessive reaction and intolerance.* Flourishing adolescents were found to be impulsive and intolerant. They were observed to be impatient and inattentive. Most of the languishing adolescents reported that they reacted excessively for trivial issue and did have not have control over their anger expression.

"I am not able to bear my friends' comments. Every time they find a new way to irritate me. Initially, I used to be silent but when they started to tease me in front of others I busted on them. I cannot control my anger and my reaction...."

**External barriers.** There were external barriers noticed in the life of the languishing adolescents those created a block in their progress and happy life. The adolescents were observed to struggle to remove these extenal barriers, but were found to fail because of lack of resources. There were two external barriers identified from the analysis—parental excessive imposition and inability to comply with rules and regulation.

*Parental excessive imposition.* Parental excessive imposition was found to be one of the external barrier that retarded the progress of the adolescents. The excessive imposition gave rise to intense distress as a result of which the adolescents were more vulnerable to languishing.

"My parents forced me to do commerce and now I am unable to understand it and scoring very bad. Now they are very angry. I work for them like a robot. What about my failures now? ..." *Inability to comply with rules and regulations.* Most of the languishing adolescents explained about the lack of their skill to follow the instructions, which created problems in their lives. Adolescents explained that they showed resistant in obeying their parents or teacher most of the time. They found difficulty in complying with the advices and instructions given to them. They also expressed their inability to build good career and progress in life.

"I think world is only for academically good students and for rich people, and I am not from any of these. Therefore, I do not have good friends here. Also I am not interested in making friends. I can move smoothly in my life but when obstacle comes I stop there and cannot progress."

### **Investigator's Observation Report**

During the phase of administering the measures, certain observations were made by the investigators. Some participants were excited to take part in the study whereas some were found to be confused whether to take part or not. During the phase of data collection, the investigator noticed that residential school students were more cooperative than nonresidential school students. Because investigator used to spend the entire day in the residential school and this made the students to feel affiliated and affectionate. It was also observed that less students drop out found from residential school than non-residential school. Assessments were challenging as it was not always possible to ensure the timetable of schools. Nevertheless, the deep level of interest of participants as well as the authorities of the schools helped the investigator to complete the assessment.

The investigator personally experienced and got the idea that the students do not know about their level of mental health and how the presence of mental health (flourishing) can help them to be a good student as well as good human being. When the investigator asked the participants about the assessment, most of the students said that this kind of assessment should be done from the early phase of life, as a result they would have a chance to know about themselves and change themselves and their environment, if required.

It was a matter of surprise that most of the adolescents are not satisfied in their career because of their parents' dominant nature and they do not have the freedom to choose about their type of education. Most of the students said that only studying books is necessary condition to get good marks as well as good job. Hardly their parents bother about their mental health condition and this leads an unhappy and unsatisfied life in adolescents.

From the first interaction with the school students, it was revealed that majority of students want to do job and become a source of livelihood by hook or crook. Nobody wants to do what they are passionate for because of parents' pressure. At the end, the investigator asked about their feelings or any important thing if they want to discuss regarding this assessment. Some participants responded that "this type of assessment should be done in all schools and colleges to know what the child goes through in this phase (e. g., purposeless life, lack of autonomy, identification of things which are important in life)". To conclude from the investigator's point of view, personal experience and the interaction with school students, teachers, and other non-teaching staff were impressive, pleasant, encouraging, educative, and enlightening.

#### **CHAPTER V**

### DISCUSSION AND CONCLUSION

This chapter presents the findings, limitations and future direction, implications, and conclusion of this study. *First*, findings are discussed according to the research questions, objectives, and hypotheses in light of relevant studies in the literature. *Second*, the major limitations and future direction are discussed. *Finally*, the implications of the present study are discussed followed by conclusion.

The main purpose of the study was to assess the level of flourishing in schoolgoing Indian adolescents and to find out its major indicators. The study explored the occurrence of natural groups using cluster analysis among them in terms of their flourishing and their variation in terms of the indicators of flourishing. In addition to this, the study also attempted to explore the lived experiences of the school-going Indian adolescents for understanding the process of flourishing.

To answer the first research question, it is evident from the results that there was no significant difference found between the Indian adolescents across two types of school and gender in relation to flourishing. As there was no variation, the school-going Indian adolescents were found as one homogeneous group. *Therefore, the first hypothesis of this study has been refuted*.

The investigator's observation suggests that most of the school going Indian adolescents follow more or less a similar path to go ahead in life. Though the schools included in the study vary in their category, they receive similar patterns of students. The findings are corroborated with other study, which states that female and male adolescents are equally flourished (Nosratabadi, Joshanloo, Mohammadi, & Shahmohammadi, 2010). Findings of other studies contradict the results. A study by Schotanus-Dijkstra et al. (2015) has found that female adolescents are significantly higher in relation to flourishing than male adolescents, whereas the opposite trend is noticed by Keyes and Simoes (2012). Moreover, research has found that residential school students perceive more mental health problems compared to the non-residential school students (Thirukkovela & Dhanalakota, 2015).

Further the results have revealed that only 6.2% school-going Indian adolescents are flourishing, 83.8% are moderately mentally healthy, and 10% are languishing. Keyes (2006) has found that higher number of participants belonging to the late adolescence fall under the category of moderately mentally healthy in comparison to other two categories. Study done on European population has also found that highest number of participants belong to the moderately mentally healthy category (Huppert et al., 2009). The decreased number of school-going Indian adolescents falling under the category of flourishing may be attributed to frequent academic failures, lack of social support, high aspiration and low achievement, parental excessive demands, and less understanding of the importance of mental health in life. Low level of flourishing among adolescents, however, leads to languishing. Study has shown that languishing increases the probability of all causes of mortality in female and male individual at all ages (Keyes & Simoes, 2012). In addition to this, Wood and Joseph (2009) have suggested that the absence of mental health increases the risk of depression in individual's future life.

To address the second research question, the major indicators of flourishing in the school-going Indian adolescents were identified. Out of 11 specific variables under study, eight—positive emotion, negative emotion, personal growth initiative, three sources of happiness (family, self, and friend), and two personality traits (agreeableness and conscientiousness)—were found to be significantly correlated with adolescents' flourishing. From these eight significantly correlated variables except friend as a source of

Out of these seven, negative emotions—anger, guilt, and shame that make the adolescents vulnerable to moderately mentally healthy and languishing—were negatively correlated with flourishing. Research findings state that negative emotions in adolescents reduce the level of engagement in academics, society, and personal growth (Reschly, Huebner, Appleton, & Antaramian, 2008). Research also states that frequently experiencing negative emotions reduces the level flourishing in adolescents (Brown, Williams, & Collins, 2007).

Moreover, in case of emotional well-being, three-positive emotion, negative emotion, and personal growth initiative—were found to be significant indicators. Research corroborated with similar findings state that high positive emotion is correlated with high emotional well-being (Quoidbach, Hansenne, & Mikolajczak, 2010). In case of social well-being, positive emotion, negative emotion, personal growth initiative, and two personality traits (agreeableness and conscientiousness) were found to be the significant indicators. The findings of a longitudinal study state that agreeableness and conscientiousness are positively correlated with social well-being (Hill, Turiano, Mroczek, & Roberts, 2012). The significant indicators of psychological well-being were positive emotion, negative emotion, personal growth initiative, two sources of happiness (family and self), and two personality traits (agreeableness and conscientiousness). Findings show that higher levels of anger are directly related to higher levels of stress, and lower levels of perceived support resources are related to lower levels of psychological well-being and greater psychological distress (Diong et al., 2005). On the contrary, a significant positive correlation has been found between happiness and psychological well-being (Kumar & Subramanian, 2012).

Moreover, studies have stated that positive emotion and negative emotion (Fredrickson, 2005), personal growth initiative (Robitschek, 2010), happiness (Seligman, 2011), personality traits—agreeableness (Salis, 2011) and conscientiousness (Gracia, 2011), and resilience (Strand et al., 2006) also have impact on adolescents flourishing. Personality is found as a significant predictor of mental health (Butkovic et al., 2012; Cloninger & Zohar, 2011; Davydov et al., 2010; Gestsdottir & Lerner, 2007; Josefsson et al., 2011). According to Diener (2008), there are multiple components that are correlated with flourishing, such as positive emotion, happiness, and conscientiousness. Research findings have found significant correlation between conscientiousness and psychological well-being (Lamers et al., 2012; Steel et al., 2008). In a study on adolescents, Seligman and Csikszentmihalyi (2000) suggest that various sources of happiness are correlated with psychological well-being.

The answer to the third research question has added a new dimension to the field of research on flourishing in Indian adolescents as the study has used cluster analysis—a multivariate technique rarely used in grouping adolescents on the basis of positive parameters. From the results, two natural groups were emerged—high flourishing and low flourishing group—on the basis of the three principal domains of flourishing—emotional well-being, social well-being, and psychological well-being. *Therefore, the third hypothesis of this study has been accepted*.

The findings would help to develop specific interventions for different groups so far as the fostering of flourishing is concerned. Heterogeneity among adolescents has also been observed in a related construct, i.e. positive emotions among adolescents (Rana & Nandinee, 2016). A similar type of result has been found by Conry et al. (2011), where they have found two clusters in relation to six health-related behaviour and reported that higher level of healthy behaviour is related to positive mental health (flourishing), lower levels of psychological distress, and better quality of life. In contrast, the participants belonging to group of low level of healthy behaviour have more issues related to mental health, low level of energy, and high level of mortality. Moreover, research done on homeless adolescents has shown three clusters—protected, at risk, and risky—on the basis of their functionality. Protected cluster participants have less absenteeism in school, easily make friends, and engage in positive behaviour, whereas risky cluster participants have less interest in school, emotional distress, and highly dysfunctional (Milburn et al., 2009).

In another research, k-means cluster solutions have been obtained on the basis of adolescents' life aspiration (Rijavec, Brdar, & Miljković, 2009), where well-being has been clustered in relation to intrinsic and extrinsic goals. The group with high scores on both intrinsic (financial success, social recognition, and appearance) and extrinsic (self-acceptance, affiliation, and community feeling) goals has possessed the highest scores on well-being, followed by the group with high intrinsic and low extrinsic aspirations.

Nevertheless, it was also hypothesized that because of the expected heterogeneity, the occurred natural groups of school-going Indian adolescents would differ in terms of the major indicators of flourishing. The occurred two natural groups were observed to be significantly different from each other only in terms of two types of emotion (positive and negative), personal growth initiative, three sources of happiness (family, friend, and self), and two personality traits (agreeableness and conscientiousness). It was also observed that the two natural groups were independent and not confounded by two factors—School and Gender. *Therefore, the fourth hypothesis has been partially accepted*.

Research by Huta and Ryan (2010) has suggested that the participants belonging to the high level of hedonic and eudaimonic well-being (high flourishing) have most favourable outcomes on vitality, awe, inspiration, transcendence, positive affect, and meaning than their counterparts (low flourishing). From the findings, it is evident that purpose, passion, and positive engagement are the characteristics of flourishing in school-going adolescents. A study has revealed that participants of low flourishing group have reported the highest levels of 'dark triad' traits (i.e., narcissism, Machiavellianism, and psychopathy) and participants of high flourishing group have showed lower levels of 'dark triad' traits (Moradi, Garcia, Van Quaquebeke, Filep, & Hunter, 2015).

In addition to the above three research questions and four hypotheses, this study has postulated the fourth research question to explore the lived experiences of the schoolgoing Indian adolescents for understanding the process of flourishing. To answer this question, IPA has been followed under the framework of qualitative research.

From the analyses, eight facilitating factors and seven barriers have been identified. These facilitating factors and barriers help the adolescents to identify the major principles which are essential for flourishing or languishing. The adolescents possessing more facilitating factors have lower risk factors and more protective factors, such as positive social relationship, higher self-perception, self-worth, and self-control.

The four identified internal and external significant facilitating factors are found to be instrumental in fostering flourishing. The four significant internal facilitating factors are shielding self against negativity, strategy to manage anger, proactive measures to transform self, and realization of mistakes and adaptation. The four important external facilitating factors include engaging self in leisurely activity, constructive measures to imbibe advices, engaging in pro-social behaviour, and parents' need satiation.

On the other hand, there are five internal and two external prominent barriers observed those are responsible for languishing. The five significant internal barriers are lack of internal resources, perception of failure, hypo-sensitivity to positive change, feeling of intense inferiority complex, and excessive reaction and intolerance. The two major external barriers include parental excessive imposition and inability to comply with rules and regulations.

In case of flourishing adolescents, it is observed that attending to strengths and positive outlooks increase the experience of positive emotion, resilience, vitality, and happiness. This experience decreases stress, anxiety, and depression. Mastering the principles of flourishing appears a big challenge for the adolescents who fall under the category of languishing. The emergence of the functional model from this study paves a way to understand the dynamics of adolescent's flourishing and foster adolescent's flourishing. Parents, peers, and teachers need to work together under the supervision of a psychologist to remove the barriers and nurture the facilitating factors to enhance the process of flourishing and its sustenance in adolescent's life.

This is the first study to describe the relationship between flourishing and its three principal domains with types of emotion, personal growth, sources of happiness, and personality traits on school-going Indian adolescents. This study has found that positive emotion invariably contributes to the flourishing. In addition to this, other variables such as personal growth initiative, sources of happiness, and personality traits, such as extraversion, agreeableness, and conscientiousness also significant contributors to the adolescents' flourishing. Previous studies have shown the great importance of virtue, meaning in life, and positive social relationship to lead a flourished life. The present study has provided additional evidence with respect to the experience of flourishing. A remarkable finding of this study is that specific positive aspects are found to be related to flourishing. The findings simultaneously project the indicators that help to lead a flourishing life as well as the facilitating factors and barriers that invlolve in the process of flourishing and its sustenance. Considering her observation during the process of this study, the investigator has emphasized upon the central role of Health Psychologist in the educational institutions for the positive psychological support during adolescence—a critical developmental phase. For instance, the adolescents as well as their parents and teachers need to be aware of the importance of the continuum of mental health and its impact in life. The adolescents belonging to the category of languishing or low flourishing group need to be identified by means of screening and assessment. Propoer psychological intervention is to be provided to the adolescents in order to master the dynamics of flourishing that are identified in this study.

### **Limitations and Future Direction**

While this study focused on an important facet of positive living, i.e. flourishing, there are certain limitations that are important to mention.

*First*, the study focused on the participants belonging to the last phase of adolescence. As the phase of adolescence is critical next to infancy, future study would include participants from three phases of adolescence and preferably involve longitudinal or sequential designs.

*Second*, there are two major shortcomings related to measurement. (i) The scale— SAHAS—was developed exclusively for this study involving Exploratory Factor Analysis and Confirmatory Factor Analysis. Considering the statistics used, the data were not robust to establish its psychometric properties in rigid sense. (ii) The five self-report measures used in this study were vulnerable to measurement error.

*Third,* the data analysis approach undertaken for qualitative data was not completely free from the subjective bias of the investigator leading to chance of error in

theory generation. Therefore, it is recommended for the future researcher to use grounded theory design to generate theory to explain the dynamics of adolescent's flourishing.

Nevertheless, to bring positive changes in the life of the adolescent during the process of study, action research may be conducted by the fellow researchers involving psychologists from the field of Developmental Psychology, Health Psychology, and Positive Psychology.

### Implications

This study suggests significant implications not only for practicing psychologists, but also for the researchers specifically from the fields of Developmental Psychology, Health Psychology, and Positive Psychology. The implications of the study are threedimensional in nature—assessment and evaluation, intervention, and theory generation and verification.

In terms of assessment and evaluation, one of the key contributions of the study was the development of a new instrument—SAHAS—to measure the sources of adolescent's happiness. The findings would also help the psychologists and researchers to identify and predict the major indicators of adolescent's flourishing. Further, a new instrument may be developed by taking into consideration the dynamics of flourishing as mentioned under the functional model.

No intervention has been developed to date in India to foster flourishing in adolescents. The findings of this study would help developing and designing effective intervention programme to be implemented in school and family to enhance positive living in adolescents.

This study discovered important facilitating factors and barriers of adolescent's flourishing. This discovery gave rise to a functional model of adolescent's flourishing

encompassing the significant dynamics. The existence of this dynamics would significantly contribute to generate new theory of Indian adolescent's flourishing and its verification.

### Conclusion

This study emphasizes on adolescent's positive living in terms of flourishing-a dynamic and complex process. The findings of the study have revealed that the Indian adolescents do not vary in terms of their level of flourishing across school and gender. It is observed that 6.2% school-going Indian adolescents fall under the category of flourishing, which needs to be increased by means of proper intervention designed by the Health Psychologists. This study, however, has identified seven major indicators of adolescent's flourishing. Cluster analysis has revealed two natural groups-high flourishing and low flourishing group—and these two natural groups have been observed to be significantly different from each other in terms of the indicators of flourishing. In addition to this, the study has contributed a specific instrument-SAHAS-to measure the sources of adolescent's happiness. The findings have also unfolded eight facilitating factors and seven barriers in the form of a functional model of the dynamics of adolescent's flourishing which would help in developing intervention programme for fostering flourishing during adolescence, theory generation, and verification. Nevertheless, these findings would help the researchers in the field of Developmental Psychology, Health Psychology, and Positive Psychology to undertake further research in describing and explaning the complex dynamics of the process of floursihing in Indian adolescents.

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### APPENDIX A



# Institute Ethics Committee, University of Hyderabad

Justice Rangarajan Chairperson Prof. Geeta K. Vemuganti Member Secretary

IEC No Application No:	UH/IEC/2014/19	Date of review	21-4-2014
Project Title:	Flourishing of Adolesco	ents: Contribution	of positive emotions
Principal Investigator/ Co-PI:	Ms.Durgesh Nandinee Dr.Suvashisa Rana		
Participating Institutes if any	Krypton Science College,Bhubaneswar, Odisha	Approval from Participating Institute	yes
Documents received and reviewed	Protocol, Questionnai	re & ICF	1. A.
In case of renewal submission of update	9-09-2015		
Decision of the IEC:	Approved Duration of Approval	: One year from	date of approval
Any other Comments Requirements for conditional Approval		k.	
Members Present	Sri Justice Rangarajan, P Kalyankar, Dr.B.Sesikera Hariharan & Ms.M.Varala	n, Prof.Aparna Dutta	

#### Decision Letter of Institute Ethics Committee,

Please note:

- a. Any amendments in the protocol must be informed to the Ethics committee and fresh approval taken.
- Any serious adverse event must be reported to the Ethics Committee within 48 hours in writing (mentioning the protocol No. or the study ID)
- c. Any advertisement placed in the newspapers, magazines must be submitted for approval.
- d. The results of the study should be presented in any of the academic forums of the hospital annually.
- e. If the conduct of the study is to be continued beyond the approved period, an application for the same must be forwarded to the Ethics Committee.
- f. It is hereby confirmed that neither you nor any of the members of the study team participated in the decision making/voting procedures.

Chairperson

(Justice Rangarajan)

Member Secretary

(Prof. Geeta K Vemuganti)

Member Secretary Institutional Ethics Committee (IEC) School of Medical Sciences University of Hyderabad Hyderabad-500046.

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#### **INFORMED CONSENT FORM** University of Hyderabad Centre for Health Psychology

Please read this consent form carefully. Ask as many questions as you like before you decide whether your students want to participate in this research study. You are free to ask questions at any time before, during, or after your students' participation in this research.

Title of the Study: Flourishing adolescents: Contribution of positive emotions

Researchers: Dr. Suvashisa Rana (Assistant Professor) & Ms. Durgesh Nandinee (PhD Research Scholar) Organization: Centre for Health Psychology, University of Hyderabad, Central University Campus PO, Hyderabad-500046, India. Telephone No. +91-40-23134790

Description of the study: The main purpose of this study is to measure the positive health of the schoolgoing adolescents with reference to their positive emotions and how these positive emotions help them flourishing in life.

In order to make your students participate in this research study, it is necessary that you give your informed consent. By signing this informed consent statement you are indicating that you understand the nature of the research study and the role of your students in that research and that your students agree to participate in the research.

When filling out questionnaires/scales or answering to the questions asked, your students may come across a question or answer choice that they find unpleasant, upsetting or otherwise objectionable. For instance, a few of the questions may cause them to think about negative emotional states. They may also feel that they have performed poorly, but there is no right or wrong answer. They will be asked to provide confidential information about themselves. When your students' participation is complete, they will be given an opportunity to learn about this research, which may be useful to them in understanding themselves and others. They will have an opportunity to contribute to psychological science by participating in this research. There is no known or possible risks for your students in this study. Please consider the following points before signing this Consent Form:

1. I understand that I am allowing my students who are below or above 18 years of age to participate in this psychological research.

2. I understand that my students' identities will not be linked with their data, and that all information they provide will remain confidential. Results of the study, including all collected data, may be published in investigators' thesis and in possible future journal articles and professional presentations, but my students' names or any identifiable references to them will not be included.

3. I understand that I or my students will be provided with an explanation of the research in which they participate. Any questions I or these students may have about this study will be answered by Ms. Durgesh Nandinee, PhD Research Scholar, Centre for Health Psychology, University of Hyderabad, Central University Campus PO, Hyderabad-500046, India, Telephone No. +91-40-23134790.

4. I understand that certain facts about the study might be withheld from me or my students, and the researchers might not, initially, tell us the true or full purpose of the study. However, the complete facts and true purpose of the study will be revealed to us at the completion of the study session.

5. I understand that my students will not be paid any financial compensation for their participation, nor will they incur any costs as a result of their participation in this research.

6. I understand that the participation in research is voluntary. If I or my students decide now or at any point to withdraw this consent or stop participating, I or they are free to do so at no penalty to myself or themselves.

I have read and understood this consent form, and I voluntarily consent to my students' participation in this research study. I understand that I will receive a copy of this form.

Signature of the Principal/Head of the Department

NAME: \_\_\_\_\_ Date: \_\_/ \_\_/ \_\_\_\_

Signature of the Co-investigator NAME: Dr. SUVASHISA RANA Date: \_\_/ \_\_/ \_\_\_\_

Signature of the Principal Investigator NAME: Ms. DURGESH NANDINEE Date: \_ \_ / \_ \_ / \_ \_ \_ \_

#### INFORMED CONSENT FORM University of Hyderabad Centre for Health Psychology

Please read this informed consent form carefully. Ask as many questions as you like before you decide whether you want to participate in this research study. You are free to ask questions at any time before, during, or after your participation in this research.

Title of the Study: Flourishing adolescents: Contribution of positive emotions

Researchers: Dr. Suvashisa Rana (Assistant Professor) & Ms. Durgesh Nandinee (PhD Research Scholar)

**Organization:** Centre for Health Psychology, University of Hyderabad, Central University Campus PO, Hyderabad-500046, India. Telephone No. +91-40-23134790

**Description of the study:** The main purpose of this study is to measure the positive health of the school-going adolescents with reference to their positive emotions and how these positive emotions help them flourishing in life.

In order to participate in this research study, it is necessary that you give your consent. By signing this informed consent statement you are indicating that you understand the nature of the research study and your role in that research and that you agree to participate in the research. When filling out questionnaires/scales or answering to the questions asked, you may come across a question or answer choice that you find unpleasant, upsetting or otherwise objectionable. For instance, a few of the questions may cause you to think about negative emotional states. You may also feel that you have performed poorly, but there is no right or wrong answer. You will be asked to provide confidential information about yourself. When your participation is complete, you will be given an opportunity to learn about this research, which may be useful to you in understanding yourself and others. You will have an opportunity to contribute to psychological science by participating in this research. There is no known or possible risks for you in this study.

#### Please consider the following points before signing this Informed Consent Form:

1. I understand that I am participating in this psychological research.

2. I understand that my identity will not be linked with my data, and that all information I provide will remain confidential. Results of the study, including all collected data, may be published in investigators' thesis and in possible future journal articles and professional presentations, but my name or any identifiable references to me will not be included.

3. I understand that I will be provided with an explanation of the research in which I participate. Any questions I may have about this study will be answered by Ms. Durgesh Nandinee, PhD Research Scholar, Centre for Health Psychology, University of Hyderabad, Central University Campus PO, Hyderabad-500046, India. Telephone No. +91-40-23134790.

4. I understand that certain facts about the study might be withheld from me, and the researchers might not, initially, tell me the true or full purpose of the study. However, the complete facts and true purpose of the study will be revealed to me at the completion of the study session.

5. I understand that I will not be paid any financial compensation for my participation, nor will I incur any costs as a result of my participation in this research.

6. I understand that the participation in research is voluntary. If I decide now or at any point to withdraw this consent or stop participating, I am free to do so at no penalty to myself.

I understand the above information and consent to participate in this study voluntarily. I also declare that I am above 18 years of age. I understand that I will receive a copy of this form.

Signature of the Co-investigator NAME: Dr. SUVASHISA RANA Date: \_\_/\_\_/\_\_\_ Signature of the Principal Investigator NAME: Ms. DURGESH NANDINEE Date: \_\_/\_/\_\_\_

#### ASSENT FORM

#### University of Hyderabad Centre for Health Psychology

Please read this assent form carefully. Ask as many questions as you like before you decide whether you want to participate in this research study. You are free to ask questions at any time before, during, or after your participation in this research.

Title of the Study: Flourishing adolescents: Contribution of positive emotions

Researchers: Dr. Suvashisa Rana (Assistant Professor) & Ms. Durgesh Nandinee (PhD Research Scholar)

**Organization:** Centre for Health Psychology, University of Hyderabad, Central University Campus PO, Hyderabad-500046, India. Telephone No. +91-40-23134790

**Description of the study:** The main purpose of this study is to measure the positive health of the school-going adolescents with reference to their positive emotions and how these positive emotions help them flourishing in life.

In order to participate in this research study, it is necessary that you give your assent. By signing this assent statement you are indicating that you understand the nature of the research study and your role in that research and that you agree to participate in the research. When filling out questionnaires/scales or answering to the questions asked, you may come across a question or answer choice that you find unpleasant, upsetting or otherwise objectionable. For instance, a few of the questions may cause you to think about negative emotional states. You may also feel that you have performed poorly, but there is no right or wrong answer. You will be asked to provide confidential information about yourself. When your participation is complete, you will be given an opportunity to learn about this research, which may be useful to you in understanding yourself and others. You will have an opportunity to contribute to psychological science by participating in this research. There is no known or possible risks for you in this study.

#### Please consider the following points before signing this Assent Form:

1. I understand that I am participating in this psychological research.

2. I understand that my identity will not be linked with my data, and that all information I provide will remain confidential. Results of the study, including all collected data, may be published in investigators' thesis and in possible future journal articles and professional presentations, but my name or any identifiable references to me will not be included.

3. I understand that I will be provided with an explanation of the research in which I participate. Any questions I may have about this study will be answered by Ms. Durgesh Nandinee, PhD Research Scholar, Centre for Health Psychology, University of Hyderabad, Central University Campus PO, Hyderabad-500046, India. Telephone No. +91-40-23134790.

4. I understand that certain facts about the study might be withheld from me, and the researchers might not, initially, tell me the true or full purpose of the study. However, the complete facts and true purpose of the study will be revealed to me at the completion of the study session.

5. I understand that I will not be paid any financial compensation for my participation, nor will I incur any costs as a result of my participation in this research.

6. I understand that the participation in research is voluntary. If I decide now or at any point to withdraw this assent or stop participating, I am free to do so at no penalty to myself.

I understand the above information and assent to participate in this study voluntarily. I understand that I will receive a copy of this form.

 Signature of the participant

 NAME:
 \_\_\_\_\_\_

Signature of the Co-investigator NAME: Dr. SUVASHISA RANA Date: \_\_/\_\_/\_\_\_ Signature of the Principal Investigator NAME: Ms. DURGESH NANDINEE Date: \_\_/\_/\_\_\_

### APPENDIX B

## Instructions

There are five Sections mentioned in this booklet. The statements in each section explain different dimensions of your life. In each Section, different scales are mentioned with digits (1, 2, 3, ...). For each statement, please choose one of the scales that you think to be your best response. Write the corresponding digit in the appropriate place of the Response Sheet provided to you separately. There is no right or wrong answer to any statement. Hence, please write your original answer honestly.

Your responses will be used only for the purpose of research and your identity from every angle will be kept confidential.

# ନିର୍ଦ୍ଦେଶାବଳୀ

ଏହି ପୁଞ୍ଚିକାରେ ପାଞ୍ଚଟି ବିଭାଗ ରହିଛି । ପ୍ରତ୍ୟେକ ବିଭାଗରେ ଥିବା ବାକ୍ୟଗୁଡିକ ଆପଶଙ୍କ ଜୀବନର ବିଭିନ୍ନ ଦିଗ ବିଷୟରେ କିଛି ବର୍ଣ୍ଣନା କରୁଛି । ପ୍ରତ୍ୟେକ ବିଭାଗରେ ଭିନ୍ନ ଭିନ୍ନ ପରିମାପକ, ଅଙ୍କ (୧, ୨, ୩, ...) ସହିତ ସୂଚିତ କରାଯାଇଛି । ପ୍ରତ୍ୟକ ବାକ୍ୟପାଇଁ ଦୟାକରି ନିଜ ମତ ଅନୁସାରେ ଉଚିତ ପରିମାପକ ବାଛନ୍ତୁ । ସେଇ ପରିମାପକ ପାଇଁ ଉପଯୁକ୍ତ ଅଙ୍କ ଅଲଗାକରି ଦିଆଯାଇଥିବା ଉତ୍ତରପତ୍ରରେ ସଠିକ ଜାଗାରେ ଲେଖନ୍ତୁ । ଦୟାକରି ପ୍ରତ୍ୟେକ ବାକ୍ୟକୁ ମନଯୋଗ ସହକାରେ ପଢନ୍ତୁ । କୌଣସି ବାକ୍ୟ ପାଇଁ ନିର୍ଦ୍ଧିଷ୍ଟ ସଠିକ୍ କିମ୍ବା ଭୁଲ୍ ଉତ୍ତର ନାହିଁ । ଏଣୁ ଦୟାକରି ପ୍ରତ୍ୟେକ ବାକ୍ୟ ପାଇଁ ସ୍ୱତଃପ୍ରବୃତ୍ତ ଉତ୍ତର ଦିଅନ୍ଥୁ ।

ଆପଣଙ୍କ ଉତ୍ତର କେବଳ ଗବେଷଣା ପାଇଁ ବ୍ୟବହାର କରାଯିବ ଓ ସମୟ ଦିଗରୁ **ଆପଣଙ୍କ ପରିଚୟ ଗୋପନୀୟ ରଖାଯିବ**ା

# Section A ("କ" ବିଭାଗ)

	Scale		ପରିମାପକ
1	Never	9	ଆଦୌ ନୁହେଁ
2	Once or twice	9	ଥରେ/ଦୁଇ ଥର
3	About once a week	୩	ସସ୍ତାହକୁ ପ୍ରାୟ ଥରେ
4	Two or three times a week	४	ସସ୍ତାହକୁ ଦୁଇ/ତିନି ଥର
5	Almost every day	8	ପ୍ରାୟ ସବୁଦିନ
6	Every day	୬	ସବୁଦିନ

During the past month, how often did you feel
ଗତ ଏକ ମାସ ଧରି, ଆପଶ କେତେ ଥର ଅନୁଭବ କରିଛନ୍ତି
1. happy
୧. ଖୁସି
2. interested in life
୨. ବଞ୍ଚିବାର ଆଗ୍ରହ
3. satisfied with life
୩. ଜୀବନଯାପନରେ ସନ୍ତୋଷ
4. that you had something important to contribute to society
୪. ନିଜ ପାଖରେ ଥିବା ମୂଲ୍ୟବାନ ଜିନିଷକୁ ସମାଜକୁ ଅର୍ପଣ କରିବାର
5. that you belong to a community (social group, school, neighborhood)
୫. ଏକ ଦଳରେ (ସାମାଜିକ ଗୋଷି, ବିଦ୍ୟାଳୟ, ପଡୋଶୀ) ଅନ୍ତର୍ଭୁକ୍ତ ବୋଲି
6. that our society is a good place for all people
୬. ଆମ ସମାଜଟି ସମଞ୍ଚଙ୍କ ପାଇଁ ଭଲ ସ୍ଥାନ ବୋଲି
7. that people are basically good
୭. ଲୋକମାନେ ପ୍ରକୃତରେ ଭଲ ବୋଲି
8. that the way our society works makes sense to you
୮. ସାମାଢଟି ଯେଉଁ ମାର୍ଗରେ ପରିଚାଳିତ ହେଉଛି ତାର ଅର୍ଥ ଅଛି ବୋଲି
9. that you liked most parts of your personality
୯. ନିଜ ବ୍ୟକ୍ତିତ୍ସର ବେଶୀ ଭାଗ ଭଲଲାଗିବା ବୋଲି
10. good at managing the responsibilities of your daily life
୧୦. ଦୈନଦିନ ଜୀବନର ଦାୟିତ୍ସକୁ ଭଲଭାବରେ ତୁଲାଉଛନ୍ତି ବୋଲି
11. that you had warm and trusting relationships with others
୧ ୧ . ଅନ୍ୟମାନଙ୍କ ସହ ଆପଣଙ୍କର ଭଲ ଓ ବିଶ୍ୱାସଭରା ସମ୍ପର୍କ ରହିଥିଲା ବୋଲି
12. that you had experiences that challenged you to grow and become a better person
୧ ୨ . ଆପଣଙ୍କ ବ୍ୟକ୍ତିଗତ ବ୍ୟକ୍ତିତ୍ସର ଅଭିବୃଦ୍ଧି ସହିତ ଉତ୍ତମ ବ୍ୟକ୍ତି ହେବାଦିଗରେ ସହାୟକ ହେଉଥିବା ଆହ୍ୱାନପୂର୍ଷ ଅନୁଭୂତିକୁ
13. confident to think or express your own ideas and opinions
୧୩. ନିଜ ବିଚାର ଓ ମତକୁ ଚିନ୍ତା କିମ୍ବା ପ୍ରକାଶ କରିବାର ଆତ୍ପବିଶ୍ୱାସକୁ
14. that your life has a sense of direction or meaning to it
୧୪. ଆପଣଙ୍କ ଜୀବନର ଏକ ଦିଗ ଓ ଅର୍ଥ ରହିଛି ବୋଲି

# Section B ("ଖ" ବିଭାଗ)

	Scale		ପରିମାପକ
0	Never	0	ଆଦୌ ନୁହେଁ
1	Rarely	6	କ୍ୱଚିତ୍
2	Some of the time	9	ବେଳେ ବେଳେ
3	Often	୩	ଅଧିକାଂଶ ସମୟରେ
4	Most of the time	४	ପ୍ରାୟ ସବୁସମୟରେ

During the past month, how often did you feel … ଗତ ଏକ ମାସ ଧରି, ଆପଣ କେତେ ସମୟରେ ଅନୁଭବ କରିଛନ୍ତି
1. most amused, fun-loving, or silly ୧. ଖୁବ୍ ବେଶୀ ଖୁସି, ମଢାଳିଆ, କିମ୍ବା କୌତୁକିଆ
2. most angry, irritated, or annoyed ୨. ଖୁବ୍ ବେଶୀ କ୍ରୋଧାନ୍ସିତ, ଚିଡିଚିଡାଭାବ, କିମ୍ବା ଅସତ୍ତୋଷ
3. the most ashamed, humiliated, or disgraced ୩. ଖୁବ୍ ବେଶୀ ଲଜିତ, ଅପାମନିତ, କିମ୍ବା ଅବହେଳିତ
4. most awe, wonder, or amazement ୪. ଖୁବ୍ ବେଶୀ ଶ୍ରଦ୍ଧାପୂର୍ଣ୍ଣ, ବିସ୍ମୟାଭୁତ, କିମ୍ବା ଆଣ୍ଟର୍ଯ୍ୟାନ୍ସିତ
5. most contemptuous, scornful, or disdainful ୫. ଖୁବ୍ ବେଶୀ ତିରୟାରପୂର୍ଣ୍ଣ, ଅବମାନିତ, କିମ୍ବା ଅବହେଳନାପୂର୍ଣ୍ଣ
6. most disgust, distaste, or revulsion ୬. ଖୁବ୍ ବେଶୀ ବିରକ୍ତି, ବିତୃଷା, କିମ୍ବା ବିକର୍ଷିତ
7. most embarrassed, self-conscious, or blushing ୭. ଖୁବ୍ ବେଶୀ ଲଜିତ, ନିଜସମ୍ପର୍କୀୟଭାବମୟ କେନ୍ଦ୍ରିତ, କିମ୍ବା ଲାଜକୁଳା
8. most grateful, appreciative, or thankful ୮. ଖୁବ୍ ବେଶୀ କୃତଜ୍ଞ, ପ୍ରଶଂସକ, କିମ୍ବା କୃତଜ୍ଞତାଭରା
9. most guilty, repentant, or blameworthy ୯. ଖୁବ୍ ବେଶୀ ଦୋଷଯୁକ୍ତ, ଅନୁତାପଗ୍ରଞ, କିମ୍ବା ଦୋଷୀ
10. most hate, distrust, or suspicion ୧୦. ଖୁବ୍ ବେଶୀ ଘୃଶିତ, ଅବିଶ୍ୱାସନୀୟ, କିମ୍ବା ସନ୍ଦେହଯୁକ୍ତ
11. most hopeful, optimistic, or encouraged ୧ ୧. ଖୁବ୍ ବେଶୀ ଆଶାପୂର୍ଣ୍ଣ, ଆଶାବାଦୀ, କିମ୍ବା ଉସାହିତ
12. most inspired, uplifted, or elevated ୧୨. ଖୁବ୍ ବେଶୀ ଅନୁପ୍ରେରିତ, ଭନ୍ନତି, କିମ୍ବା ଭଞିତ
13. most interested, alert, or curious ୧୩. ଖୁବ୍ ବେଶୀ ଇଛୁକ, ସତର୍କୀତ, କିମ୍ବା ଜିଜ୍ଞାସୁ
14. most joyful, glad, or happy ୧୪. ଖୁବ୍ ବେଶୀ ହର୍ଷିତ, ପ୍ରସନ୍ନତା, କିମ୍ବା ସୁଖୀ
15. most love, closeness, or trust ୧୫. ଖୁବ୍ ବେଶୀ ଭଲପାଇବା, ନୀବିଡତା, କିମ୍ବା ଭରସା

16. most proud, confident, or self-assured ୧୬. ଖୁବ୍ ବେଶୀ ଗର୍ବିତ, ଆତ୍ମବିଶ୍ୱାସୀ, କିମ୍ବା ଆଶ୍ୱଞି
17. most sad, downhearted, or unhappy ୧୭. ଖୁବ୍ ବେଶୀ ଦୁଃଖ, ହୋତୋହାହିତ, କିମ୍ବା ଅସୁଖ
18. most scared, fearful, or afraid ୧୮. ଖୁବ୍ ବେଶୀ ଭୀତଃତ୍ରଷ, ଭୟଭୀତ, କିମ୍ବା ଡରଭାବପୂର୍ଷ
19. most serene, content, or peaceful ୧୯. ଖୁବ୍ ବେଶୀ ଛିର, ସନ୍ତୁଷ୍ଟ, କିମ୍ବା ଶାନ୍ତ
20. most stressed, nervous, or overwhelmed ୨୦. ଖୁବ୍ ବେଶୀ ଚାପଗ୍ରଷ୍ଟ, ସାହସହୀନ, କିମ୍ବା ବିହ୍କଳିତ

# Section C ("ଗ" ବିଭାଗ)

	Scale		ପରିମାପକ
1	Strongly disagree	9	ସମ୍ପୂର୍ଣ୍ଣ ଅସହମତ
2	Moderately disagree	9	ମଧ୍ୟମ ମାତ୍ରାର ଅସହମତ
3	Slightly disagree	୩	ଅକ୍ସ ଅସହମତ
4	Slightly agree	لا	ଅଳ୍ପ ସହମତ
5	Moderately agree	8	ମଧ୍ୟମ ମାତ୍ରାର ସହମତ
6	Strongly agree	୬	ସମ୍ପୂର୍ଣ ସହମତ

1. I know how to change specific things that I want to change in my life
୧. ମୋ ଜୀବନରେ ଯାହାପରିବର୍ତ୍ତନ ଚାହେଁ ସେସବୁ କିପରି ବଦାଳାଇବାକ୍ରହେବ ତାହା ମୁଁ ଜାଶେ
2. I have a good sense of where I am headed in my life
୨. ମୋ ଜୀବନରେ ମୁଁ କେଉଁ ଦିଗକୁ ଅଗ୍ରସର କରେ ସେ ବିଷୟରେ ମୋର ସଠିକ  ଧାରଣା ଅଛି
3. If I want to change something in my life, I initiate the transition process ୩. ଯଦି ମୋ ଜୀବନରେ କିଛି ପରିବର୍ତ୍ତନ କରିବାକୁ ଚାହେଁ ମୁଁ ପରିବର୍ତ୍ତନର ଧାରା ଆରୟ କରେ
4. I can choose the role that I want to have in a group ୪. ମୁଁ ସଙ୍ଘରେ ଯେଉଁ ଭୁମିକା ନବାକୁ ଚାହେଁ ତାହା ବାଛିପାରେ
5. I know what I need to do to get started toward reaching my goals ୫. ଲକ୍ଷ୍ୟ ସ୍ଥଳରେ ପହଞ୍ଚିବାକୁ ମୋତେ ଯାହାକରିବାକୁ ଅବଶ୍ୟକ ତାହା ମୁଁ ଢାଶେ
6. I have a specific action plan to help me reach my goals ୬. ମୋ ଲକ୍ଷ୍ୟ ସ୍ଥଳରେ ପହଞ୍ଚିବାପାଇଁ ମୋ ପାଖରେ ନିର୍ଦ୍ଦିଷ୍ଣ ଯୋଜନା ଅଛି
7. I take charge of my life ୭. ମୁଁ ମୋ ଜୀବନର ଦାୟିତ୍ୱ ନିଏ
8. I know what my unique contribution to the world might be
୮. ବିଶ୍ୱଜଗତ ପାଇଁ ମୋର ବିଶେଷ ଅବଦାନ କ'ଶ ହେଇଥିବ ତାହା ମୁଁ ଜାଶେ
9. I have a plan for making my life more balanced ୯. ମୋ ଜୀବନରେ ଅଧିକ ସନ୍ତୁଳନ ଆଶିବାପାଇଁ ମୋର ଗୋଟିଏ ଯୋକନା ଅଛି

## Section D ("ଘ" ବିଭାଗ)

Scale											
Complete absence of happiness	1	2	3	4	5	6	7	8	9	10	Most intense happiness possible
ଆଦୌ ଖୁସି ନୁହେଁ	6	9	୩	४	8	૭	୭	Г	୯	60	ଅତିମାତ୍ରାରେ ଖୁସି
ପରିମାପକ											

-

1. I am happy because I know the purpose of my life
୧. ମୋ ଜୀବନର ଉଦ୍ଦେଶ୍ୟ ଜାଣିଥିବାରୁ ମୁଁ ଖୁସି ଅଛି
*2. I become happy when I successfully manage my problem
୨. ସମସ୍ୟାର ସମାଧାନ ସୁଚାରୁରୂପେ କଲେ ମୁଁ  ଖୁସି ହୋଇଥାଏ
3. I become happy when I know that my friend(s) like me
୩. ମୋ ସାଙ୍ଗମାନେ ମୋତେ ପସନ୍ଦ କରନ୍ତି ବୋଲି ଜାଶିବାକୁ ପାଇଲେ ମୁଁ ଖୁସି ହୋଇଥାଏ
4. Receiving support from my family makes me happy
୪. ମୋ ପରିବାର ମୋତେ ସାହାଯ୍ୟ କଲେ ମୁଁ ଖୁସି ହୋଇଥାଏ
5. Good academic performance by me makes me happy
୫. ପାଠପଢାରେ ଭଲକଲେ ମୁଁ ଖୁସି ହୁଏ
6. Success makes me happy
୬. ସଫଳତା ମୋତେ ଖୁସି କରାଏ
*7. I become happy when my family trusts me
୭. ମୋ ପରିବାର ମୋ ଉପରେ ଭରସା ରଖିଲେ ମୁଁ ଖୁସି ହୋଇଥାଏ
*8. Encouragement from my family makes me happy
୮. ମୋ ପରିବାରଠାରୁ ଉସ୍ପାହ ମୋତେ ଖୁସି କରାଏ
9. I am happy when my parents guides me
୯. ବାପାମା' ମୋର ମାର୍ଗ ଦର୍ଶନ କଲେ ମୁଁ ଖୁସି ହୁଏ
*10. I become happy when I give happiness to my parents
୧୦. ବାପାମା'ଙ୍କୁ ଖୁସି ଦେଲେ ମୁଁ ଖୁସି ହୁଏ
11. Having a good family makes me happy
୧ ୧ . ଭଲ ପରିବାର ଥିବାରୁ ମୁଁ ଖୁସି ଅନୁଭବ କରେ
12. Having good friends makes me happy
୧ ୨. ଭଲ ସାଙ୍ଗମାନେ ଥିବାରୁ ମୁଁ ଖୁସି ଅଛି
13. I become happy when I understand myself correctly
୧୩. ନିଜକୁ ସଠିକ ଭାବରେ ବୁଝିପାରିଲେ ମୁଁ ଖୁସି ହୋଇଥାଏ
*14. Realizing my dreams makes me happy
୧୪. ମୋ ସ୍ୱପ୍ନକୁ ସାକାର କରିବା ମୋତେ ଖୁସି କରାଏ
*15. I become happy when I understand my friend correctly
୧୫. ମୋ ସାଙ୍ଗମାନଙ୍କୁ ସଠିକ ଭାବରେ ବୁଝିପାରିଲେ ମୋତେ ଖୁସି ଲାଗେ
16. Fulfilling my parents' dream makes me happy
୧୬. ବାପାମା'ଙ୍କ ସ୍ୱପ୍ନକୁ ସାକାର କଲେ ମୋତେ ଖୁସି ଲାଗେ
*17. Thinking positive gives me happiness
୧୭. ସକାରାତ୍ମକ ଚିନ୍ତା ମୋତେ ଖୁସି ଦିଏ

*18 I become happy when I understand my life correctly
୧୮. ମୋର ଜୀବନକୁ ସଠିକଭାବରେ ବୁଝିଲେ ମୁଁ ଖୁସି ହୋଇଥାଏ
*19. I become happy when my family cares for me
୧ ୯. ପରିବାର ମୋ ଯଉ୍ନ ନେଲେ ମୁଁ ଖୁସି ଅନୁଭବ କରେ
*20. I become happy when my family gives me importance
୨୦. ପରିବାର ମୋତେ ଗୁରୁତ୍ତ୍ୱ ଦେଲେ ମୁଁ  ଖୁସି ହୋଇଥାଏ
21. I become happy when my family involves me in decision making
୨ ୧ . ପରିବାର ନିର୍ଶ୍ୱୟ ନେବାରେ ମୋତେ ସାମିଲ କଲେ ମୁଁ ଖୁସି ହୋଇଥାଏ
22. The company of good people gives me happiness
୨ ୨ . ସନ୍ଜନଙ୍କ ସଙ୍ଗତି ମୋତେ ଖୁସି ଦିଏ
*23. Enjoying life with no fear gives me happiness
୨୩. ନିର୍ଭୟରେ ଜୀବନକୁ ଉପଭୋଗ କଲେ ମୋତେ ଖୁସି ଲାଗେ
*24. I am happy when I am confident
୨୪. ମୁଁ ଆତ୍ସବିଶ୍ୱାସୀ ହେଲେ ଖୁସି ହୁଏ
*25. Good financial status of my family makes me happy
୨୫. ଆମ ପରିବାରର ସ୍ୱଚ୍ଛଳ ଆର୍ଥିକ ପରିସ୍ଥିତି ମୋତେ ଖୁସି କରାଏ

*Note.* The items marked with asterisks (\*) are retained after Confirmatory Factor Analysis for the final version of SAHAS. These items are taken for analyzing results. The SAHAS includes three sources—Family (2, 7, 8, 10, and 24), Self (14, 18, 20, 23, and 25), and Friend (15, 17, and 19).

# Section E ("ଙ" ବିଭାଗ)

	Scale		ପରିମାପକ
1	Strongly disagree	9	ସମ୍ପୂର୍ଷ ଅସହମତ
2	A little disagree	9	ଅକ୍ସ ମାତ୍ରାରେ ଅସହମତ
3	Neither disagree nor agree	୩	ନା ଅସହମତ ନା ସହମତ
4	A little agree	لا	ଅକ୍ସ ସହମତ
5	Strongly agree	8	ସମ୍ପୂର୍ଣ୍ଣ ସହମତ

l see myself as someone who … ମୁଁ ନିଜକୁ ବ୍ୟକ୍ତି ବୋଲି ମନେକରେ	
ୀ is reserved ୧ ସଙ୍କୋଚ ସ୍ୱଭାବର	
2 is generally trusting	
୨ ସାଧାରଣତଃ ଭରସା ଯୋଗ୍ୟ	
3 tend to be lazy	
୩ ଅଳସୁଆ	
4 is relaxed, handles stress well	
୪ କ୍ଳାନ୍ତିହୀନ ଓ ସୁଚାରୁରୂପେ ମାନସିକ ଚାପ ସୟାଳୁଥିବା	
5 has few artistic interest	
୫ କିଛି କଳାତ୍ମକ ଅଭିରୁଚି ଥିବା	

- 6. ... is outgoing, sociable
- ୬. ... ଖୁସି ମିଞ୍ଜାସ ଓ ମେଳାପି ...
- 7. ... tends to find fault with others
- ୭. ... ଅନ୍ୟମାନଙ୍କର ଭୁଲ ବାଛୁଥିବା ...
- 8. .... does a thorough job
- ୮. ... ପୂର୍ତ୍ତତଭାବରେ କାର୍ଯ୍ୟକୁ ସମାସ୍ତ କରିବା ଭଳି ...
- 9. ... gets nervous easily
- ୯. ... ସହଜ୍ ଭାବରେ ବିବ୍ରତ ହେଉଥିବା ...
- 10. ... has an active imagination
- ୧୦. ... ଭାବନାରେ ସକ୍ରିୟ ଭାବରେ ବୁଡିରହୁଥିବା ...

### **Response Sheet**

Sect	ion A	Section B		Section C		Section D				Section E			
Q	Ans.	Q	Ans.	Q	Ans.	Q	Ans.	Q	Ans.	Q	Ans.	Q	Ans.
1		1		15		1		1		15		1	
2		2		16		2		2		16		2	
3		3		17		3		3		17		3	
4		4		18		4		4		18		4	
5		5		19		5		5		19		5	
6		6		20		6		6		20		6	
7		7				7		7		21		7	
8		8				8		8		22		8	
9		9				9		9		23		9	
10		10						10		24		10	
11		11						11		25			
12		12						12					
13		13						13					
14		14						14					

### Personal Details

#### APPENDIX C

### Steps of Construction of the Source of Adolescent's Happiness Scale (SAHAS)

A survey from various nations around the globe has revealed that happiness is highly valued and essential for living a good life (Diener & Diener, 2008). Happiness can be defined as satisfaction of wants (Primasari & Yuniarti, 2012), the absence of worries (Tkach & Lyubomirsky, 2006), expression of positive emotions, and fulfillment of relational needs (Lu & Gilmour, 2004). Moreover, happiness is a construct that has cognitive, affective, and behavioral dimensions (Datu & Valdez, 2012). According to research, happiness has three parts, such as pleasure, engagement, and meaning. Diener and Seligman (2002) have stated that all of these three are important, but engagement and meaning make the most difference to live a happy life. Research has added that adolescents who are discontent from society have a higher risk of committing suicide (Santrock, 2006). Therefore, it is essential to foster happiness in adolescents. Adolescent's happiness has an impact on later stages of life (Bernardes, 1997). Research findings suggest that intimacy with parents (Holder & Coleman, 2010), parenting style (Furnhman & Cheng, 2000), education, and social relation (Diener & Oishi, 2005) are predictors of adolescent happiness. There is a need of measuring the sources of happiness in order to assess the positive living of adolescents. The source of adolescent's happiness refers to the person, situation, or event from which happiness comes to an adolescent or is acquired by an adolescent.

The source of happiness is multifaceted. As there is no such measures available, this study has attempted to construct a new scale to measure the major sources of adolescent's happiness and establish the initial psychometric properties. After identifying the need, the measure has been developed through five phases—item writing, content evaluation, pre-test to explore the internal structure, confirmation of the structure, and establishment of initial psychometric properties.

**Phase 1: Item Writing**. Before writing the items, the recent research findings on adolescent's happiness were reviewed. The scales on happiness were also referred. In addition to this, multiple in-depth interview sessions were conducted with 10 school-going Indian adolescents to explore their sources of happiness. The obtained qualitative data were analyzed by means of content analysis and categories of sources of happiness —family, self, and friend—were identified, and the items were written. There were 45 items initially written for the measure (15 for family, 15 for self, and 15 for friend). These items were revisited to increase the readability and bring clarity and simplicity. At this step, five items were removed from the source 'friend'. Hence 40 items were retained and the measure was named as Source of Adolescent's Happiness Scale, and abbreviated as SAHAS.

**Phase 2: Content evaluation.** The SAHAS underwent the process of content validity in order to assess whether the three sources of adolescent's happiness were represented in their correct spirit. Therefore, five experts from the field of Psychology were asked to evaluate each item carefully and suggest whether the item was constructed to measure the corresponding source of adolescent's happiness. The criterion of retention of an item was fixed at 100% agreement of the experts. Thus, out of 40, 32 items were retained after having 100% agreement from all the five experts. As per the recommendation of the

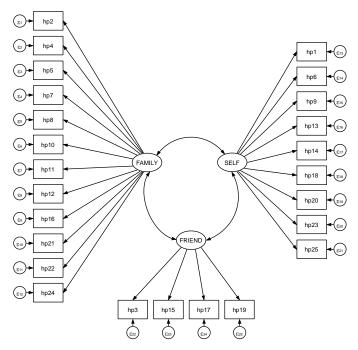
experts, a 10-point scale was adopted for the SAHAS, where '1' represented 'Complete absence of happiness' and '10' represented 'Most intense happiness possible'.

**Phase 3: Pre-test to explore the internal structure.** The SAHAS having 32 items was administered on 278 adolescents (Female adolescents = 108, Male adolescents = 170). As the sources were already identified, to find out the factor structure for each source, one factoring approach was adopted by means of Exploratory Factor Analysis (EFA) using Principal Component Analysis. The software used to run EFA was IBM SPSS Statistics 20. For each source (considered as factor), the Bartlett's Test of Sphericity was found to be significant (p < .001), and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was higher than .90, which supported the factorability. The items having communalities less than .40 were deleted. Thus, there were 25 items retained in this phase (family = 12, self = 9, and friend = 4) for the final administration of the SAHAS on 400 participants in the main study.

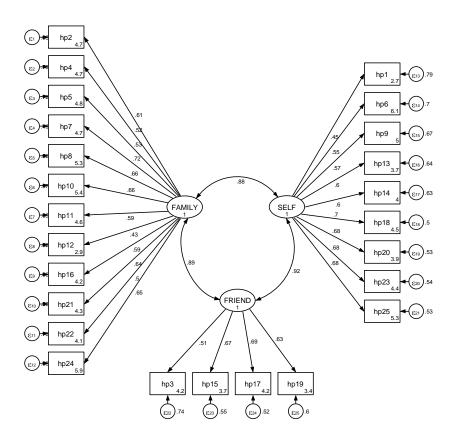
**Phase 4: Confirmation of the structure.** In the main study, the SAHAS was administered on the 400 selected participants. Confirmatory Factor Analysis (CFA) by means of Structural Equation Modelling was run using Stata Special Edition 12.0 to confirm the stability of the factor structure of the SAHAS. The objective was to determine which factor structure best fitted the SAHAS to measure the adolescent's happiness. The hypothesized model is shown in Figure 1. The hypothesized model was tested and shown in Figure 2. The maximum likelihood method was used for estimating the model. To obtain better fit and parsimonious model, the hypothesized model was modified and re-tested. The modified model is presented in Figure 3. The model fit indexes were found to be adequate, such as RMSEA = .07, CFI = .95, and SRMR = .04. The results revealed suitability and good fit of the model to the data. Therefore, this modified model was treated as final version of the SAHAS.

**Phase 5: Establishment of initial psychometric properties.** The final established model included 13 items comprising of three sources—family (2, 7, 8, 10, and 24), self (14, 18, 20, 23, and 25), and friend (15, 17, and 19). The SAHAS is appended (*Appendix B:* **Section D**), where the items of its final version are marked with asterisks (\*). The internal consistencies of family (Cronbach's alpha = .83), self (Cronbach's alpha = .81), and friend (Cronbach's alpha = .70) were observed to be high (N = 400). Significant positive correlations were found between the sources of happiness and flourishing (N = 400). The correlation between family as a source of happiness and flourishing was r = .13, p < .001, self as a source of happiness and flourishing was r = .21, p < .001. From these analyses, it was observed that the SAHAS is not only a reliable measure, but also a valid one.

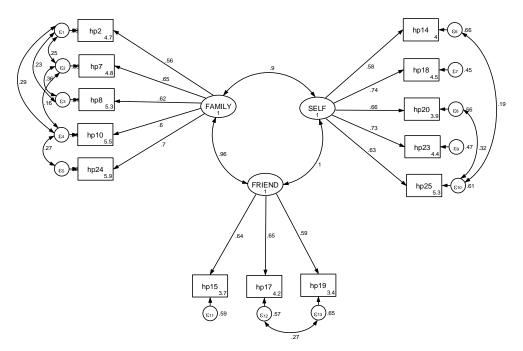
Nevertheless, the norm of the measure needs to be established. For its wide acceptability, participants from different cultures are to be studied. The SAHAS is the first of its kind to measure adolescent's sources of happiness. It is not only a research instrument, but also may be used as a screening measure to evaluate the positive parameter of adolescent.



*Figure 1*. The hypothesized model of SAHAS having 25 items. The circles represent latent variables and the rectangle represent the variables measured in the SAHAS.



*Figure 2.* Initial testing of the hypothesized model of SAHAS. The circles represent latent variables and the rectangle represent the variables measured in the SAHAS.



*Figure 3*. The final model for the factor structure of the SAHAS. The circles represent latent variables and the rectangle represent the variables measured in the SAHAS.

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# FLOURISHING AND ITS MAJOR INDICATORS IN SCHOOL GOING INDIAN ADOLESCENTS

by Durgesh Nandinee

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3	Durgesh Challeng Interpret Persons	Kallavarapu, Su Nandinee. "'Liv es is a New Op ative Phenomer with Cardiovaso ogical Studies, 2	ing Through portunity': An hological Ana cular Disease	lysis on	% <b>1</b>
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