

**RESEARCH PAPER**

**“A STUDY TO EXPLORE THE IMPACT OF SMARTPHONE ADDICTION, DECISION MAKING AND SELF ESTEEM ON CAREER CHOICES/ ORIENTATION AMONG SLD’s AND NORMAL ADOLESCENTS OF THEIR AGE.”**

**Submitted to IGNOU**

**Master of Arts Degree in Psychology**

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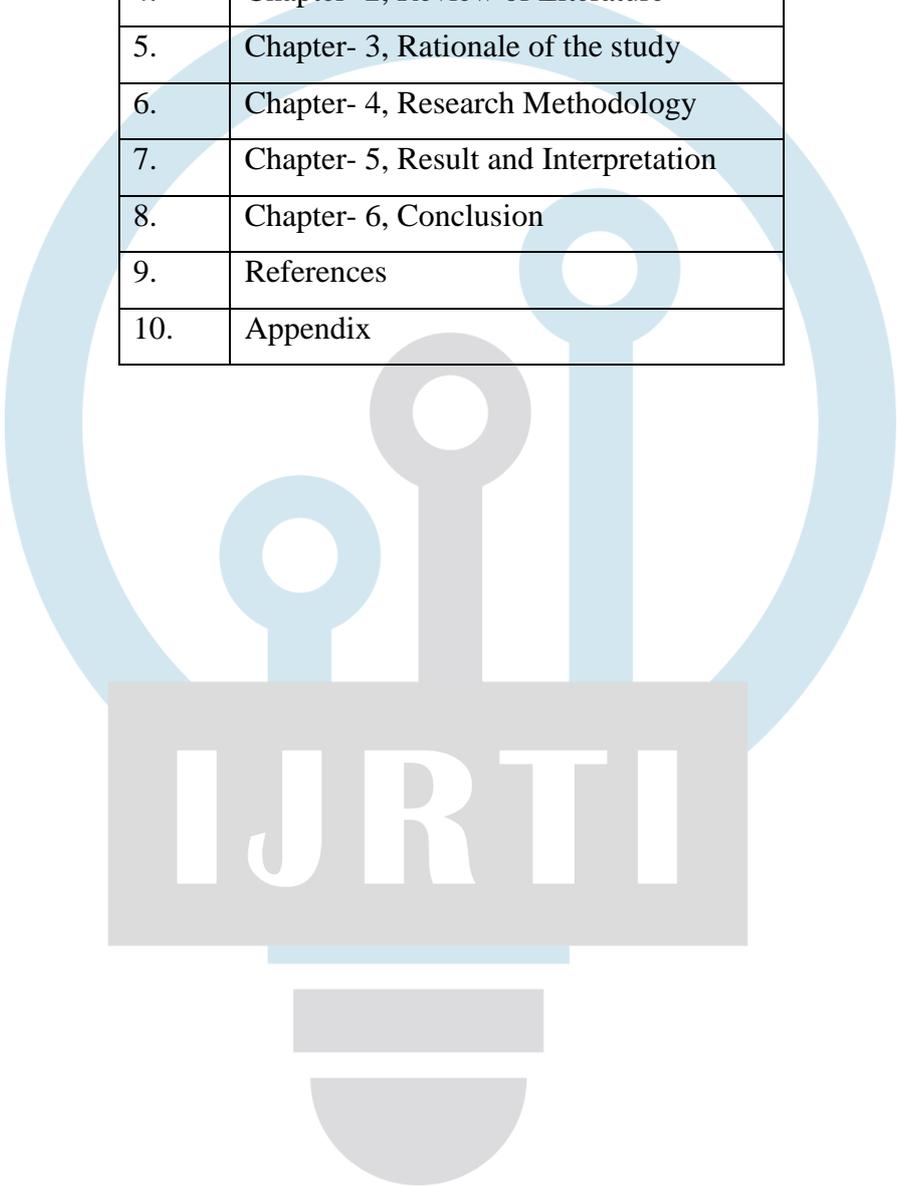


**SCHOOL OF SOCIAL SCIENCES**

**INDIRA GANDHI NATIONAL OPEN UNIVERSITY**

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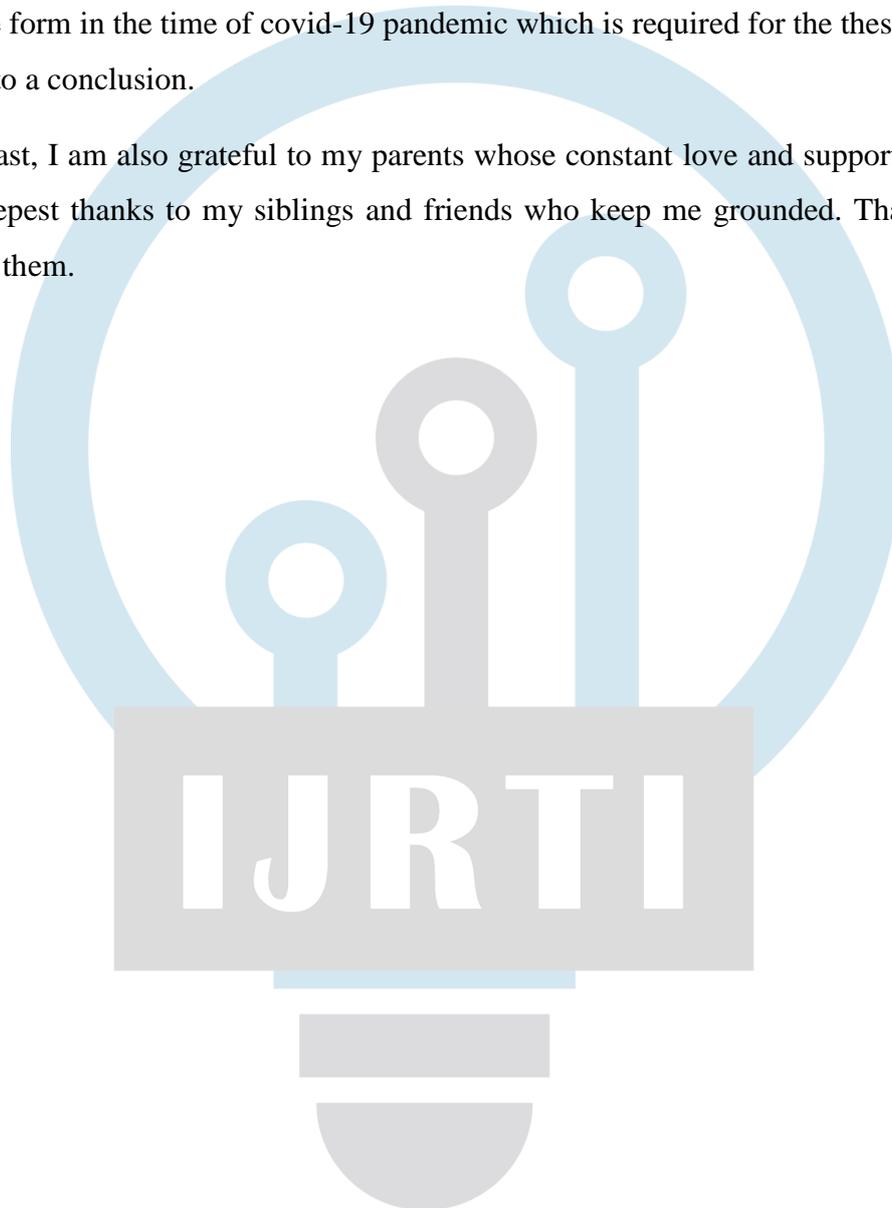
## **ACKNOWLEDGEMENT**

I would like to express my gratitude to Dr. Harmeet Kaur for the indispensable assistance and insight leading to the writing of this paper. She supported me with full encouragement and enthusiasm. With her valuable suggestions and motivation, I was able to pin down my thesis and made me confident that the topic was worthy of my investigation and that my investigation is worthy of the topic.

I am indebted to all the students from private schools and government schools who helped me in collecting the data via google form in the time of covid-19 pandemic which is required for the thesis to analyze various variables to come to a conclusion.

Last but not the least, I am also grateful to my parents whose constant love and support keep me motivated and confident. Deepest thanks to my siblings and friends who keep me grounded. Thanks for helping me wherever I needed them.

Tamanna Kinha



**ABSTRACT**

*This study aims to examine the impact of various elements like smart phone addiction, decision making and self- esteem on career choices or orientation among adolescents with specific learning disorders (SLDs) and normal adolescents of their age. Adolescents make complete utilization of smart phones for surfing internet, by being an active member on social media, for academics etc. Situations and circumstances can never be in favor of any individual, ups and downs are always there. How to deal with them is the major concern. This also affects the self- esteem of the individual. Earlier researches have successfully described the impact of these factors on individuals but adolescents. To examine the same with normal adolescents and adolescents with SLD's, this study has been done. The sample size taken for the study was 100 adolescents, 50 with SLD and 50 normal from private schools and government schools of Delhi. Exploratory research design was followed in order to find out the impact of smartphone addiction, decision make and self- esteem on career choices or orientation among SLDs and normal adolescents of their age. For identifying SLDs, Delhi government has already conducted various tests to find out the SLD among students in schools in order to take necessary measures. Decision making (ages 9- 18), Rosenberg self- esteem scale, Smart phone addiction scale and Career adapt- abilities scale were chosen as tools. T-test and correlation were used for analyzing the data descriptive statistics. A conclusive result has been explained in the study about the effect of these variables on the career choices of different adolescents. Also, various journals and research papers with similar issues were reviewed in this paper. The implications and limitations of the significant findings are also discussed in the paper.*

## Chapter 1

### Introduction

In present world, the uses of technology are plentiful and evident. However, with increase in the usage of it, one must also consider the negative impacts of technologies. For instance, smartphones. The comfort and readily availability that smart phones provide an unchangeable incentive for continuous and vast use and this trend is still having an increasing graph. This pattern is particularly salient among children and adolescents, who are among the heaviest consumers of digital media (Rideout, 2015). Indeed, 26% of adolescents endorse spending in excess of 8 hrs. per day using screen media (Rideout, 2015). Recent conceptualizations of excessive use—based on symptoms of addiction to or dependence on screen media—offer an alternative way to quantify problematic phone use. Specifically, the inclusion of Internet Gaming Disorder (IGD) in the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5; American Psychiatric Association [APA], 2013) provides a set of nine symptoms that captures disordered gaming (video game addiction), that has since been utilized to capture other types of problematic media use (e.g., Domoff et al., 2019; van den Eijnden, Lemmens, & Valkenburg, 2016).

**Smartphone addiction** has various adverse effects on human mental health. Although smartphones have transformed lives in positive ways, such as increased productivity and social networking, there is growing evidence indicating that people overuse their phones in ways that interfere with their daily lives and mental health (Cheever NA, Rosen LD, Carrier LM, Chavez A). Various terms have been used to describe different patterns of smartphone overuse, such as “smartphone addiction”, “problematic smartphone use”, and “excessive smartphone use” (Elhai JD, Dvorak RD, Levine JC, Hall BJ)

Smartphone addiction is a type of disorder involving irresistible overuse of the mobile devices, usually valuated as the number of times users access their devices and/or the total amount of time they are online over a distinct period. According to a study conducted by the International Center for Media and the Public Agenda (ICMPA) at the University of Maryland, researchers took away user access to social media for 24 hours. Participants described their reactions in terms that are very typical of addiction: *In withdrawal, frantically craving, very anxious, extremely antsy, miserable, jittery, crazy.*

**Gaming and watching short films** are all associated with smartphone addiction. Smartphone addiction and internet addiction are interlinked with technology addiction which is defined as a behavioral addiction of non-chemical nature which involves human-machine interaction. Internet gaming disorder is listed as a subcategory of “substance related and addictive disorders” in Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5). Game like blue whale give birth to suicidal tendencies. Similarly, Pubg brings rough and aggressive behavior.

Addiction to smartphone leads to a tremendous decision in choosing career. Adolescents get influenced very easily and the games they play, the films they watch, all their effects influence the lives and decisions of adolescents. Under the influence of gaming and use of social media, young minds fail to understand the rights and wrongs, goods and bads; they follow what they find tempting which sometimes leaves a negative impact on their lives especially when it comes to **career choices** and **decision making**.

**Decision making** is a process of making choices by identifying a decision, gathering information about the decision and assessing alternative resolutions about the same. In psychology, decision making is selecting a belief or a course of action among several other possibilities by processing the thoughts cognitively; it could be rational or irrational. Decision-making process is a reasoning process based on assumptions of values, preferences and beliefs of the decision-maker (Herbert Alexander Simon (1977)).

A decision is the preference of a course of action (or decision) out of many available substitutes. The decision making is the basic and fundamental of all directorial activities. It is the study of recognizing and picking best possible choice (or option) based on the desirability and selectivity.

Decision making can be contemplate as a **problem-solving** activity producing a solution considered to be optimal or at least satisfactory. It is essential to distinguish between problem-solving or problem-analyzing and decision making.

### **Characteristics of problem solving**

- Problems are merely deviations from performance standards.
- Problems must be precisely identified and described.
- Problems are caused by a change from a distinctive feature.
- Something can always be used to distinguish between what has and hasn't been affected by a cause.
- Causes of problems can be deduced from relevant changes found in analyzing the problem.
- Most likely cause of a problem is the one that exactly explains all the facts, while having the fewest (or weakest) assumptions (Occam's razor).

### **Characteristics of decision-making**

- Objectives must first be established.
- Objectives must be classified and placed in order of importance.
- Alternative actions must be developed.
- The alternatives must be evaluated against all the objectives.
- The alternative that is able to achieve all the objectives is the tentative decision.
- The tentative decision is evaluated for more possible consequences.

- The decisive actions are taken, and additional actions are taken to prevent any adverse consequences from becoming problems and starting both systems (problem analysis and decision-making) all over again.
- There are steps that are generally followed that result in a decision model that can be used to determine an optimal production plan (Monahan, George E., 2000).
- In a situation featuring conflict, role-playing may be helpful for predicting decisions to be made by involved parties (Armstrong, Jon Scott, 2001).

During adolescence years, teens are known for their high-risk behaviors and rash decisions. When adolescents are exposed to socio-emotional stimuli, their socioemotional network is activated.

**Self-esteem-** Psychologically, the term self-esteem is used to explain a person's overall sense of self-worth or personal value. Self-esteem plays a remarkable role in one's motivation and success throughout his/her life. Low self-esteem may hold an individual back from succeeding at school or work because one don't believe in oneself to be capable of success.

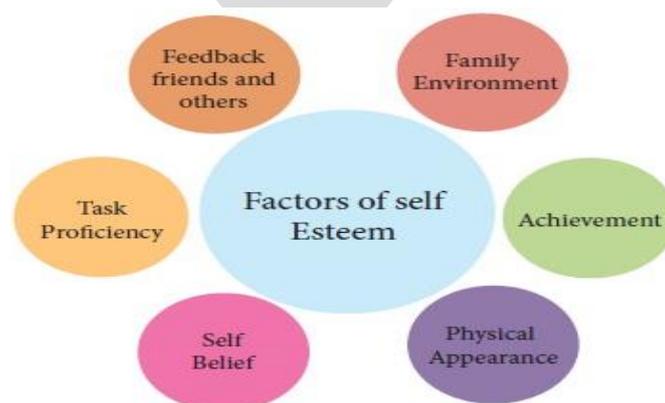
By contrast, having a healthy self-esteem can help an individual to achieve because one navigate life with a positive, assertive attitude and believe that he/she can accomplish your goals. It is beneficial to note that self-esteem is a concept different from self-efficacy, which involves how well an individual believe he/she will handle future actions, performance, or abilities.

Self-esteem is an individual's value judgement of their own worth. Self-esteem is an attractive psychological construct because it predicts certain outcomes, such as happiness (Baumeister, R. F.; Campbell, J. D.; Krueger, J. I.; Vohs, K. D. (2003)), satisfaction in marriage and relationships and criminal behavior (Orth U.; Robbins R.W., 2014)

“Self Esteem is the satisfaction or dissatisfaction with oneself.” (James – 1980).

“Self-esteem is the judgment or opinion we hold about ourselves. It's the extent to which we perceive ourselves to be worthwhile and capable human beings.” (Coopersmith, 1967).

There are several factors that influence self-esteem. Self-esteem of adolescents is based on six domains.



”

## **Family Environment**

Family is the first learning ground for a child. A child's life is mainly determined by the family environment; it is the primary source of social development. Each family is different from the others, as it is tranquil of different members.

## **Achievement**

Academic achievement and achievement of one's goals related to their hobbies play a crucial role in forming a positive and healthy self.

## **Physical Appearance**

Physical characteristics also influences the self- esteem of an individual, such as hair, figure, height, weight, skin color.

## **Self-Belief**

A person with high confidence level are quick learners, they too believe that they can complete tasks to a good standard and this subsequently may boost their self-esteem.

## **Task Proficiency**

This incorporate the skills required for performing tasks and the potential to complete the task. Task proficiency sways the personality of an individual.

## **Feedback Friends and others**

Positive & Negative communication and feedback from friends and others may uplift or shatter an individual's self-esteem.

Career counselling engrossed in helping students to understand and accept themselves as well as to accomplish plans of his future. According to Harkness (2008) good career planning help a person determine appropriate career choices to achieve career success and satisfaction. This view supports the career theory of Super (Gibson and Michell, 2006) that adolescents face exploration stage career and need help in fulfilling their career developmental task well.

In the procedure of career investigation and **career adaptability**, teens need to be escorted in the planning of a career that will assist them find suitable career choice. Career planning is a dynamic process that adapt to change in a person experiences formed over increasing professional knowledge or career competence, experience and self-identity. Bringing career planning into play, there are a number of sustainable activities in the form of self-understanding, understanding the environment and the world of work, decision-making and implementation. Decision regarding career can be a big decision and or small decisions about jobs, education, hobbies and other life roles.

The development stages of individuals in late adolescence to adulthood, it has been proposed that this stage is a new and different potential developmental period, called emerging adulthood or between adolescence and

adolescence (Arnett, 2003). At this stage, the individual has a developmental task that is making provision related to commitment in life. These commitments, for example, establish romantic relationships, make career choices, and so on. At this stage, the individual must fulfil the task of psychological development that is to establish the identity of a stable and decent individual as to direct and maintain this commitment (Schwartz, Côté, & Arnett, 2005)

Adaptability is 'quality can change, without great difficulty, to adapt new or changed circumstances' (Savickas, 2007). Career adaptability is one psychosocial constellation that shows individual resources to address current tasks and anticipate the development, transition of work, and job traumas, which is to some degree is large or small, and alter the social integration of individuals (Savickas, 2007). Career adaptability can be explored in various forms depending on the domain. In the career development domain, career adaptability is highly relevant. It shows psychosocial constructs that reflect individual resources to overcome challenges, such as developmental task sand work transitions, which are an inevitable part of life (Savickas & Porfeli, 2012). . Super and colleagues (Super & Kidd, 1979; Super & Knasel, 1981) introduced the psychosocial construct of career adaptability to acknowledge the importance of new and ongoing career-related challenges individuals encounter throughout their life cycle (Savickas, 1997, 2013b). These challenges are not driven by maturational factors and are not within the person exclusively (Super & Knasel, 1981), and the skills individuals manifest are a product of an interaction between the person and his or her environment (Lent, Brown, & Hackett, 2000; Savickas, 1997). Thus, it is important to appreciate the reciprocity between cognitive person variables and one's behavior and context (e.g., gender, ethnicity, barriers, support systems) and how these might impact an individual's ability to temper and adapt to the negative effects of unemployment (Lent et al., 2000).

Career construction theory emphasizes specific attitudes, beliefs, and competencies of career construction, namely, concern, control, curiosity, and confidence (Savickas, 2013b). These are central to problem-solving strategies and coping behaviors and serve to synthesize vocational self-concepts with work roles. Hence, adaptive individuals are viewed as people who (a) become concerned about their future, (b) increase personal control over their future, (c) display curiosity by exploring future selves and scenarios, and (d) strengthen the confidence to pursue their aspirations (Savickas & Porfeli, 2012). More specifically, career adaptability is defined as being ready to cope with the predictable tasks of preparing for a work role in conjunction with unpredictable changes in work and work conditions (Savickas, 1997).

Now-a-days, this has been noticed that there is a linkage between adolescent career development with positive youth development, the emerging interdisciplinary study of antecedents and consequences of well-being and thriving. Adolescents, who failed in their education or vocational training, may face problem with career adaptation and career future. They are considered as a group with no motivation for job search and career

future. Whereas individuals in the 15-19 age range will create added value if they use social media effectively, and if they are well-trained and participate in production by working in a career-focused way (Dama, 2017). Super (1980) defined the career as “the combination and sequence of roles played by a person during the course of a lifetime” and these roles include student in the exploration stage. The circumstances are changing rapidly due to the character of the global economy in contemporary years, an individual should have additional coping skills and resources to improve his or her career adaptability and career in future (Rottinghaus et al., 2017). Career adaptability is defined as the idea of the individual’s own “capacity to cope with and capitalize on change in the future, level of comfort with new work responsibilities, and ability to recover when unforeseen events alter career plans” (Rottinghaus et al., 2005).

Skorikov & Vondracek (2007) tested the hypothesis that positive career orientation can prevent adolescents from engaging in or escalating problem behavior. A 1-year, longitudinal study was conducted on a sample of 234 junior-high and high-school students, who were 14.8 years old on the average in the beginning of the study. Using structural equation modelling, a developmental, two-wave, two-factor empirical model corresponding to the predicted relationships between career orientation and problem behavior was found to fit the data well. According to the fitted model, positive career orientation had a significant negative longitudinal effect on problem behavior. In contrast, we found no evidence in support of the assumption.

**Adolescence** (from Latin *adolescere* to grow up') (*Macmillan Dictionary for Students* Macmillan) is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood (age of majority) (*Macmillan Dictionary for Students* Macmillan) (“Adolescence”. *Merriam-Webster.*) (“Puberty and adolescence”. *MedlinePlus*) Adolescence is generally related with the teenage years, but its physical, psychological or cultural expressions may begin earlier and end later.

**Adolescence** is the transitional phase of growth and development which is associated from childhood to adulthood. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19. This age range falls within WHO’s definition of *young people*, which refers to individuals between ages 10 and 24.

“Adolescence” is an influentially growing theoretical construct informed through psychosocial, physiologic, cultural and temporal lenses. This critical developmental period is conventionally understood as the years between the onset of puberty and the establishment of social independence (Steinberg, 2014). The most commonly used chronologic definition of adolescence includes the ages of 10-18, but may incorporate a span of 9 to 26 years depending on the source (APA, 2002).

The brain of adolescents remains under development during this time. Adolescents often engage in increased risk-taking behaviors and experience heightened emotions during puberty; this may be due to the fact that the

frontal lobes of their brains—which are responsible for judgment, impulse control, and planning—are still maturing until early adulthood (Casey, Tottenham, Liston, & Durston, 2005).

Current research, including the use of functional magnetic resonance imaging (fMRI) technology, has contributed significantly to new understandings of adolescent brain development (Geidd, 2015; Stienberg, 2014). Fueled in part by the surge of sex hormones, the adolescent brain demonstrates unique plasticity through the strengthening of frequently used neuronal connections, the pruning of unused connections and increased sensitivity to environmental influences (Geidd, 2015; Steinberg, 2014).

Many children are struggling in school with some topics or skills from time to time. When children try to their level best and still struggle with a particular set of skills over time, it could be an indication of a learning disorder. Learning disorder means that a child has difficulty in one or more dimensions of learning, even when altogether intelligence or motivation is not affected. Some of the symptoms of learning disorders are-

- Difficulty in indicating right from left.
- Reverse sequencing in letters, words, or numbers, after first or second grade.
- Difficulties in recognizing patterns or sorting items by size or shape.
- Difficulty in understanding and following instructions or remain organized.
- Difficulty in remembering what was just said or what was just read.
- Lacking in coordination when moving around.
- Difficulty in doing tasks with the hands, like writing, cutting or drawing.
- Difficulty in understanding the concept of time.

Children with learning disorders may get exasperate that they cannot adept a subject despite trying hard, and may act out, act helpless, or withdrawn. Learning disorders can also be present with emotional or behavioral disorders, such as attention-deficit/hyperactivity disorder (ADHD), or anxiety. The amalgamation of problems can make it difficult for a child to succeed in school. Proper diagnosis of each disorder is crucial, so that the child can receive attention accordingly.

### Specific Learning Disabilities

**Dyslexia** is a type of reading disorder. It occurs in children with normal vision and intelligence.

#### Symptoms of Dyslexia

- Reading fine, below the expected level for age
- Difficulty in remembering the sequences
- Difficulty in understanding similarities and differences in letters and words
- Difficulty in giving spelling of words
- Avoid activities that involve reading

**Dysgraphia** affects written expression, for example difficulties with spelling, poor handwriting and trouble in putting thoughts on paper.

### Symptoms of Dysgraphia

- Difficulty in writing letters
- Trouble in spacing letters correctly on a page
- Difficulty in writing in a straight line
- Difficulty in holding paper with one hand while writing with the other
- Struggling in holding and controlling a pencil or other writing tool
- Difficulty in putting the right amount of pressure on the paper with a writing tool
- Trouble in maintaining the right arm position and posture for writing

**Dyscalculia** causes difficulty in learning arithmetic, understanding numbers and doing mathematical calculations. About 3 to 6% of population is influenced with some degree of dyscalculia.

### Symptoms of dyscalculia

- Difficulty in reading analog clocks
- Difficulty in finding which of two numbers is larger
- Issues in sequencing things
- Difficulty with multiplication, subtraction, addition, and division tables, mental arithmetic, etc.
- Problems with differentiating between left and right
- Difficulty with time, directions, recalling schedules, sequences of events, keeping track of time, frequently late or early
- Inability to concentrate on mentally intensive tasks

**NOTE:** The term **acalculia** is used for an acquired impairment in which people have difficulty in performing simple tasks. Acalculia is differentiated from dyscalculia in a way that acalculia is acquired late in life due to neurological injury such as stroke, while dyscalculia is a specific developmental disorder first observed during the attainment of mathematical knowledge.

**Dyspraxia** is also known as developmental co-ordination disorder (DCD). It is a condition in which physical co-ordination gets affected. It causes a child to perform less than expected in daily activities for their age, and appear to move gracelessly. Dyspraxia can also be termed as motor learning difficulties, perceptuo-motor dysfunction, and developmental coordination disorder (DCD). The terms “minimal brain damage” and “clumsy child syndrome” are not in use now.

According to the National Centre for Learning Disabilities, individuals with dyspraxia have difficulties in planning and completing fine and gross motor tasks. This can range from simple motor movements, such as waving goodbye, to more complex ones like sequencing steps to brush one’s teeth.

## Symptoms of dyspraxia

- Difficulty in performing physical activity and sports. Problems in performing simple actions, such as running, jumping, hopping, and kicking or catching a ball.
- Lack of coordination in body movement and clumsiness while performing various tasks.
- Difficulty while walking up or down a flight of stairs.
- Handwriting appears scribbled and drawings appear shabbier than that of their peers.
- Difficulty in using certain objects, such as scissors.
- Dressing difficulties, such as trouble tying shoelace and buttoning their clothes.
- Problem in keeping body still, has a tendency to move arms and legs often.
- Struggle in using cutlery.
- Tendency to drop items often, bump into objects, etc.

## Developmental Aphasia

It is an impairment of language, affecting the presentation or comprehension of speech and the ability to read or write. Aphasia is always due to injury to the brain, most commonly from a stroke, particularly in older individuals.

### Symptoms of aphasia

- Trouble in speaking
- Struggling with choosing the right term or word
- Using uncommon or wrong words in conversation
- Trouble in understanding what other people say or follow conversations
- Writing irrelevant sentences or trouble in expressing self in writing
- Converse in short sentences or phrases
- Using irrelevant words

Children with learning disabilities may also exhibit behavior problems or have co-occurring behavior disorders. In some cases, learning disabilities can lead to behavior problems such as acting out, avoidance, and emotional outbursts. One study published in the journal *Paediatrics* found that children with learning disabilities often experienced behavior problems related to reduced self-confidence and increased anxiety and stress (Diakakis P, Gardelis J, Ventouri K, et al.). Other symptoms such as aggressive behavior and social isolation were also common.

## Learning disabilities cause frustration

Young children, adolescents, and adults with learning disabilities often exhibit confusing and contradictory patterns of performance (Backenson EM, Holland SC, Kubas HA, et al.). They perform certain tasks while struggling considerably with other tasks.

Adolescents with learning disabilities are uncertain about their future and their personal goals. Depression may manifest when opportunities seem limited while trying to reach their personal and educational goals. They are often haunted by the stigma of having a learning disability. Youths are inclined to develop emotional difficulties and are likely to inflict self-harm (Gates & Edwards, 2007).

For example, a child is bright and interested in learning but have to struggle to behave appropriately when placed in a reading group with peers. The child may frequently get overexcited and disruptive, causing the teacher to remove him/her from the group. The student might enjoy hearing the story read to the group, but then put his/her head down and kick his/her feet when asked to read aloud.

### **Behaviors can hide learning disabilities**

In other cases, children may engage in certain behaviours to suppress a problem in school. Here are some examples of how children may inadvertently or purposefully misbehave in the classroom in order to impersonate a learning disability:

- A 10-year-old who finds difficulty with multiplication might become frustrated and throw a tantrum when asked to complete the problem.
- A 13-year-old who is facing trouble in focusing in class might have an outburst by slamming their book shut and saying that they can't read because there are lot of disturbances.
- A 16-year-old who studies at a fourth-grade level might frequently skip school. They appear bored when they do attend class. When asked to read aloud, the child throws a book on the floor, calls the reading "stupid," and refuses to read the passage.

Such behaviours can offer clues into the deeper-rooted, underlying causes of non-compliant behaviour in children with learning disabilities. Kids who exhibit such behaviours are sometimes seen as agitator, which can lead to their learning problems going unacknowledged.

### **Signs of learning disability**

A child's learning disability may result in an emotional battering that impacts their everyday interactions with teachers and peers at school, with parents at home, and others in the community (Backenson EM, Holland SC, Kubas HA, et al.). Some other portent signs of learning disabilities include:

- Anxiety or depression
- Blaming teachers or others for bad grades
- Bullying their peers
- Physical affliction, such as stomach aches or headaches

- Not doing assignments
- Not willing to attend to school
- Not willing to show homework to their parents
- Self-disparaging or self-criticizing comments
- Refuse to communicate to avoid confrontation
- Avoid doing an in-class assignment or task
- Reluctant in following classroom rules
- Excuses for not doing work by calling it too difficult
- Bunk class

In some situations, children will deliberately engage in behaviours that are planned to force their removal from the classroom. Behaving this way, they are excluded from the class and are not allowed to engage in the learning activities that are a source of exasperation.

### **Impact**

Learning disabilities and behavioral problems can have a remarkable impact on a child's life, particularly if these issues are not diagnosed and treated. This can beget kids to miss more school, engage with peers, and have more academic difficulties.

Children with learning disabilities and behavioral issues are too at a much greater risk of suspension. According to the U.S. Department of Education, two-thirds of disciplinary school removals involving children with an Individualized Education Program (IEP) involved children who had a learning disability or other health impairment (U.S. Department of Education, Office for Civil Rights.).

### **Damage to Self- Esteem**

A learning disability can not only affect a child's learning and behaviors; it can also have a devastating effect on their self-esteem (Alesi M, Rappo G, Pepi A.). Some of the ways that learning disabilities and behavioral problems can affect a child's self-esteem and confidence include:

- Children with learning disabilities often have difficulty asking for help with peer-related situations.
- They may be lacking the social and emotional skills necessary to handle peer pressure.
- They may be subjected to bullying from peers or may bully others as a way to cope with their emotions.
- They may have trouble knowing how to interact appropriately with their teachers and peers (American Academy of Paediatrics).
- They may struggle to understand the social cues of others.

Despite the efforts of parents and teachers toward a child's academic success, the repeated disappointments and lack of progress for many children with learning disabilities can result in what is known as learned helplessness (Gacek M, Smoleń T, Pilecka W.)

These children start calling themselves “foolish” and believe that there is nothing they can do to become brighter, be admired by their peers, and be recognized by teachers and other adults in the school. When they achieve victory at a task, they often credit it to luck rather than brainpower and strenuous work.

Parents and pedagogue can help students with learning disabilities who are struggling with low self-esteem and feelings of helplessness by calling attention of their strengths. For instance, during children with dyslexia may have problem in decoding the phonologic elements of words, they may have other strengths in vocabulary, general knowledge, problem-solving, concept formation, comprehension, critical thinking and reasoning.

**Inclusive education** is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum (Bui, Quirk, Almazan, & Valenti, 2010; Alquraini & Gut, 2012).

The school and classroom operate on the premise that students with disabilities are as fundamentally competent as students without disabilities. Therefore, all students can be full participants in their classrooms and in the local school community. Much of the movement is related to legislation that students receive their education in the least restrictive environment (LRE). This means they are with their peers without disabilities to the maximum degree possible, with general education the placement of first choice for all students (Alquraini & Gut, 2012).

### UNICEF'S work to promote inclusive education

To erase the education gap for children with disabilities, UNICEF succors government endeavors to foster and monitor inclusive education systems. Our work emphasis on four key areas:

- **Advocacy:** UNICEF encourages inclusive education in discussions and brain storming, high-level events and other forms of exceeded geared towards policymakers and the general public.
- **Awareness-raising:** UNICEF gives a spotlight to the needs of children with disabilities by administering research and hosting seminars, roundtables, workshops and other events for government partners.
- **Capacity-building:** UNICEF establishes the dimensions of education systems in ally countries by priming teachers, administrators and communities, and accommodating technical help to Governments.

- **Implementation support:** UNICEF boosts with monitoring and evaluation in associate countries to close the implementation gap between policy and practice.

**THE RIGHTS OF PERSONS WITH DISABILITIES ACT, 2016;** defines specific learning disability as "specific learning disabilities" means a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty to comprehend, speak, read, write, spell, or to do mathematical calculations and includes such conditions as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia and developmental aphasia (THE RIGHTS OF PERSONS WITH DISABILITIES ACT, 2016)



## Chapter 2

### Review of literature

According to a research, **Addictive phone use and academic performance in adolescents** conducted by Sarah E. Domoff, Ryan P. Foley and Rick Ferkel, Adolescents are the ones who utilize smartphones and social media applications largely in the United States. The purpose of their study was to develop a reliable and valid measure of addictive phone use, and to examine the association between addictive phone use and academic performance in adolescents. With the APU scale, they found that addictive phone use can be reliably measured and appears to consist of two separate domains—cognitive emotional symptoms and social problems. They found that addictive phone use associated with poorer academic performance, over and above the impact of school day social media use. These results indicate that addictive use of cell phones may be a risk factor for decreased academic performance and is distinct from other technology-related risk factors [Domoff, S. E., Foley, R. P., & Ferkel, R. (2019)].

Another research has demonstrated that greater dependence on Smartphones is associated with lower GPA in college students (e.g., Felisoni & Godoi, 2018; Giunchiglia et al., 2018; Paul et al., 2012; Wentworth & Middleton, 2014).

Similar findings have been reported when examining problematic media use in younger children and psychosocial outcomes (Domoff et al., 2019). This study provides preliminary evidence linking addictive use of Smartphones and reduced academic performance among adolescents but does not provide insights into how such use confers this risk. Future research should consider examining sleep health as potential mediator, as this has been supported in youth outside the United States (Vernon et al., 2015)

According to a research by Rodríguez et al., 2020; shows direct associations between addiction symptoms caused by smartphone use (withdrawal, tolerance, excessive use, problems caused by the same) and the variables of extrinsic motivation (fear and avoidance of work) and intrinsic motivation (motivation toward the task). Correlations were also found between the problems caused by excessive smartphone use and anxiety and extrinsic motivation toward learning, while an inverse relationship was observed between smartphone addiction and the emotional intelligence dimension of clarity of feelings.

Awareness regarding the severity of smartphone addiction has already been reflected in clinical science and praxis. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5, American Psychiatric Association (APA), 2013) introduced the diagnostic criteria for Internet gaming disorder and encouraged further research for listing it as a formal diagnosis. Oulasvirta et al. (2012) reported that the awareness of problems with repeated use of smartphones was underestimated, and only a few reported that they were aware of it. The few respondents reported repeated usage of a smartphone as annoying, addicting, “a trap,” and distracting. They were aware that repeated use could lead to addiction; however, they were not aware of the

severity of the repeated and intense use of a smartphone. If one is aware of the risks posed by smartphone addiction, one would do something against it. The awareness of the severity of smartphone addiction can, therefore, play a role in preventing it.

Addiction to media could increase depressive symptoms and substance use, and it could decrease well-being (Ha and Hwang, 2014; Yoo et al., 2014). Samaha and Hawi (2016) showed that smartphone addiction is not directly linked to life satisfaction, but it is linked via perceived stress and academic performance.

Based on a research, **Impact of Parents' Knowledge about the Development of Self-Esteem in Adolescents and Their Parenting Practice on the Self-Esteem and Suicidal Behavior of Urban High School Students in Nepal**, it has been found out that male adolescents had a significantly higher self-esteem score than female adolescents. Adolescents whose families had higher SES had a significantly higher self-esteem score. The prevalence of suicidal risk behavior among the adolescents was 11.3% and was significantly higher among female adolescents than among male adolescents, and among adolescents who attended private schools than among those who attended government/public schools. It is also noticed that significant positive associations were observed between the score on parents' knowledge about the development of self-esteem in adolescents and the scores on their parenting practice and authoritative parenting. (Banstola, R. S., Ogino, T. & Inoue, S., 2020)

According to a study of **career adaptability and career planning of faculty in education students of Universitas Negeri Malang**, students' career adaptability; career concern, career curiosity, career control, and career confidence tends to categorize in the medium level. A unique finding is, entrepreneur has become new favorite career choice. The results of study suggested to (1) academics and researchers in the field of career counselling for assessing the adaptability of a career on the subject of wider design correlational research or qualitative (2) practitioners Guidance and Counselling in Higher Education, especially at UM, in order to provide career guidance program to improve the career adaptability of student early (Muslihati, 2017).

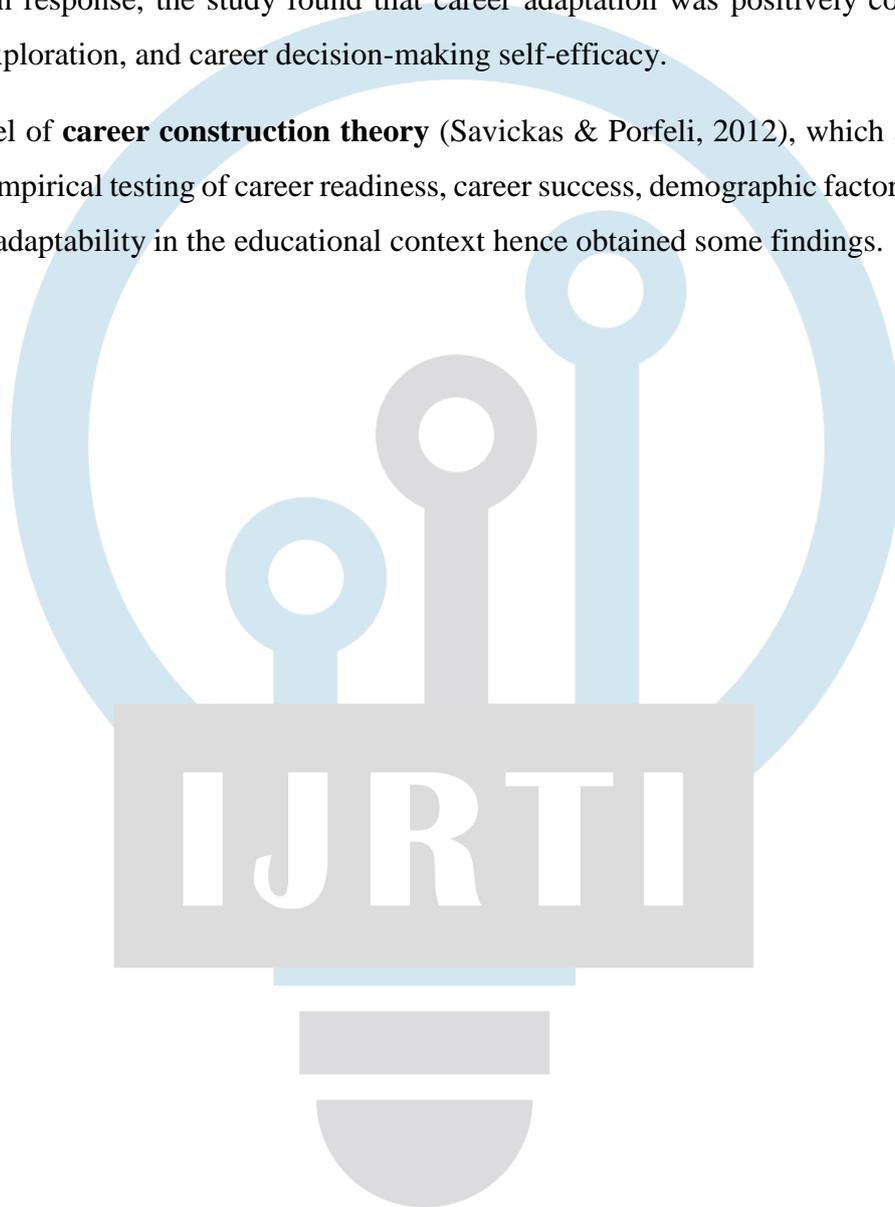
A study by Guan et al. (2013) mainly took Chinese college students as the research subjects and conducted research on the role of career adaptability of Chinese college graduates in the job-seeking process. Among the four dimensions of career adaptability, career concern and career control were the strongest predictors of job-seeking self-efficacy. In addition, career adaptability also significantly predicted the employment situation and person–environment (P–E) adaptability. These findings carried implications for research on career construction theory, as well as career education and career counselling practices.

Koen, Klehe, and Van developed training aimed at providing graduates with career adaptability resources (Koen et al., 2012). The training included four parts: participants' self-knowledge, professional environment knowledge, implementation overview, and specific implementation. Koen et al. found that the training successfully enhanced the control and curiosity of college students in the training group by comparing the

results of college graduates who received career adaptability training (i.e., the training group) and those who did not receive career adaptability training (i.e., the control group).

Rudolph (2017) used meta-analysis to explore career adaptability and adaptation results. One of the studies was based on the career structure model of adaptation and used meta-analysis to examine career adaptability and adaptation measurement, adaptation response, and adaptation relationships. The results supported the significance of career adaptability and related it with personality and other individual difference structures. In terms of adaptation response, the study found that career adaptation was positively correlated with career planning, career exploration, and career decision-making self-efficacy.

Based on the model of **career construction theory** (Savickas & Porfeli, 2012), which aims to examine the various results of empirical testing of career readiness, career success, demographic factors and environmental factors and career adaptability in the educational context hence obtained some findings.



## Chapter 3

### Rationale of study

Teens are eminently vulnerable to developing a cell phone craving or addiction. The human brain isn't completely developed until about 25 years of age. Adolescents who are dependent on their smartphones could encounter negative alterations in brain development. Every decision has repercussion that affect the person in making the decision. These ramification can be immediate or ever-lasting. The out- turn of decisions may be positive, negative, or a combination of both. Nevertheless the belief about one's capabilities, skills, and other attributes, people with high self-esteem feel good about themselves on the contrary people with low self-esteem feel bad about themselves, even when perceiving themselves to be proficient. Self-esteem is an important variable that influence various aspects of life, together with occupation and job performance. Basic self-assessment include self-esteem where thoughtful variables are present which explain career decision-making and self-efficacy. In other words, people with a high perception of self-esteem had a high propensity to aim for actions and competency, resulting in improved career decision-making self-efficacy.

**Inclusive education** means regardless of class, greed, color or sex, all students are welcomed by their neighborhood schools in age-appropriate classes and are supported to learn, contribute and participate in all milestones of the life of the school. Inclusive education is about how we develop and design our schools, classrooms, programs and activities so that all students learn and participate together. Inclusive education is about corroborating access to quality education for all students by productively meeting their diverse needs in a way that is accessible, responsive, accepting, gracious and supportive.

The results of the study will be beneficial not only for teachers but for parents also to understand about the working of a child, be he/she a slow learner or a normal adolescent of their age. The understanding about how smartphone addiction can impact decision making and self-esteem of a child and how its repercussion will affect career choices and orientation.

## Chapter 4

### Methodology

#### Objectives

The main objectives of study are as follows.

- To study smartphone addiction among normal students and students with Specific Learning Disability
- To study decision making among normal students and students with Specific Learning Disability.
- To study self-esteem among normal students and students with Specific Learning Disability.
- To study career adaptability among normal students and students with Specific Learning Disability.
- To study the relationship between smartphone addiction, decision making, self-esteem and career adaptability among normal and students with Specific Learning disability.

#### Hypothesis

To related objectives of this study, null-hypothesis is as under;

- There will be no significant difference on smartphone addiction among normal students and students with Specific Learning Disability
- There will be no significant difference on decision making among normal students and students with Specific Learning Disability.
- There will be no significant difference on self-esteem among normal students and students with Specific Learning Disability.
- There will be no significant difference on career adaptability among normal students and students with Specific Learning Disability.
- There is a significant relationship between smartphone addiction, decision making, self-esteem, career adaptability among students with specific learning disability and normal student.

#### Operational Definitions (Variables)

##### Decision Making

According to D. E. Mcfarland, “A decision is an act of choice wherein an executive forms a conclusion about what must be done in a given situation. A decision represents behavior chosen from a number of alternatives.”

According to Haynes and Massie, “a decision is a course of action which is consciously chosen for achieving a desired result”.

According to R. A. Killian, “A decision in its simplest form is a selection of alternatives”.

##### Self- Esteem

“Self Esteem is the satisfaction or dissatisfaction with oneself” (James – 1980)

“Self-esteem is the judgment or opinion we hold about ourselves. It’s the extent to which we perceive ourselves to be worthwhile and capable human beings.” (Coopersmith, 1967)

## Adolescence

The American Academy of Paediatrics (AAP) “Bright Futures” recommendations for paediatric preventive services identifies adolescence as the ages of 11-21 years (2015). The U.S. Department of Health and Human Services (USDHHS) “Adolescent and Young Adult Health Program” webpage defines adolescents as ages 10-19 and young adults as ages 20-24 (2015). The World Health Organization (WHO) defines “adolescents” as individuals between 10 and 19 years, “youth” between 15 and 24 years, and “young people” between 10 and 24 years (Blum & Nelson-Nmari, 2004; WHO, 2015)

## Specific learning disorder

**Dyslexia**, also known as **reading disorder**, is characterized by trouble with reading despite normal intelligence. (Siegel LS (November 2006) ("Dyslexia Information Page". National Institute of Neurological Disorders and Stroke)

**Dyscalculia** is a disability resulting in difficulty learning or comprehending arithmetic, such as difficulty in understanding numbers, learning how to manipulate numbers, performing mathematical calculations and learning facts in mathematics. It is sometimes informally known as "math dyslexia", though this can be misleading as dyslexia is a different condition from dyscalculia ("What Is Dyscalculia? What Should I Do if My Child Has It?").

The DSM-IV (2000) Document used by educational psychologists, defines “mathematics disorder in term of the scores and as measured by a standard test that is given individually, the person’s mathematical ability is substantially less than would be expected from the person’s age, intelligence and education. This deficiency materially impedes academic achievement living.”

DSM-5 defines dyscalculia as a specific learning disorder, an impediment in mathematics, evidencing problems with:

- Number sense
- Memorization of arithmetic facts
- Accurate and fluent calculation
- Accurate math reasoning.

Butter Worth (2001) Says, “most dyscalculia learners will have cognitive and language abilities in the normal range, and may excel in non-mathematical subjects”.

The National Numeracy Strategy DFES (2001) offers the following definition “Dyscalculia is a condition that affects the ability to acquire arithmetical skills. Dyscalculia learners may have difficulty understanding simple number concepts, lack an intuitive grasp of numbers, and have problems in learning of number facts and procedures. Even if they produce a correct answer or use correct method, they may do so mechanically and without confidence.”

**Dysgraphia** is a deficiency in the ability to write, primarily handwriting, but also coherence (Chivers, M. (1991). "Definition of Dysgraphia (Handwriting Difficulty)

Dysgraphia is a specific learning disability as well as a transcription disability, meaning that it is a writing disorder associated with impaired handwriting, orthographic coding, and finger sequencing (the movement of muscles required to write). (Berninger, Virginia W.; Wolf, Beverly J. (2009).)

**Dyspraxia** is a chronic neurological disorder beginning in childhood. It is also known to affect planning of movements and co-ordination as a result of brain messages not being accurately transmitted to the body. Impairments in skilled motor movements per a child's chronological age interfere with activities of daily living (Kotsopoulos, S. (2013-05-22). "Neurodevelopmental Disorders")

**Aphasia** is an inability to comprehend or formulate language because of damage to specific brain regions (Damasio AR (February 1992). "Aphasia").

### Sample

According to the purpose of this study, the total sample size was 100 divided into two sections. First section of Sample size of 50 adolescents with SLD, Second section of Sample size of 50 adolescents without SLD.

### Research Design

Exploratory randomized research design was followed in this research study in order to establish a relationship between variables.

### Tests to be administered

For the purpose of this research study, following test tools shall be considered. In this study four inventories shall be used. These are as follows:

- 1 **Career adaptability**- Career adaptability skill is measured with the help of Career Adapt-Abilities Scale (CAAS) (Savickas and Porfeli, 2012). CAAS consisted of 24-items and four subdomains: concern, control, curiosity, and confidence. Each subdomain has 6 items. The reliability coefficient of CAAS was .90. Responses were made on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items of these scales are "Thinking about what my future will be like" (concern, Cronbach alpha= .87), "Keeping upbeat" (control, Cronbach alpha= .87), "Exploring my surroundings" (curiosity, Cronbach alpha= .88), and "Performing tasks efficiently" (tolerance, Cronbach alpha= .86). CAAS were used successfully in the Turkish context (Kanten, 2012).
- 2 **SAS (Smartphone Addiction Scale)**: which consisted of 33 questions and 6 points, to evaluate the smartphone addiction using self-reporting. The following six factors were considered in the questionnaire, I would say, daily-life disturbance, positive anticipation, withdrawal, cyberspace-oriented relationship, overuse, and tolerance. However, this scale conducted in university students and adults showed limited results due to the study participants and their ages.

- 3 **Rosenberg Self Esteem Scale-** Rosenberg self- esteem scale is a self-report instrument investigated using response theory for evaluating individual self-esteem. A 10 item scale measures both positive and negative feelings about the self. It has 5 positively worded items and 5 reversed worded.

According to Sbicigo, Bandeira & Dell'aglio (2010) The RSES was proposed as a one-dimensional measure, in which self-esteem is classified in three levels: low, characterized as feelings of incompetence, inadequacy and inability to face life's challenges; medium, characterized by fluctuation between feelings of approval and rejection; and high, consisting of self-judgment of value, confidence and competence.

#### 4 **Decision Making:**

Description: Five items assess decision making skills. Items were adapted from Mincemoyer and Perkins' scale "Making Decisions in Everyday Life". Psychometrics: Information on reliability and validity are provided below. If information on a particular psychometric was not found, it is indicated as "no information provided." It should be noted that this is not necessarily an indication of a lack of reliability or validity within a particular scale/instrument, but rather a lack of rigorous testing, for various reasons, by the developers or other researchers. Reliability: A correlation of at least .80 is suggested for at least one type of reliability as evidence; however, standards range from .5 to .9 depending on the intended use and context for the instrument. Internal Consistency: .83 Inter-rater reliability: No information provided Test-Retest: No information provided Validity: The extent to which a measure captures what it is intended to measure. Content/Face Validity: No information provided Criterion Validity: No information provided Construct Validity: No information provided.

#### **Data Analysis Technique**

The data will be analyzed using relevant statistical techniques i.e. Mean, SD, T-test and correlation in this study.

## Chapter 5

### Results and Discussion

**Table 1: Table showing t-value**

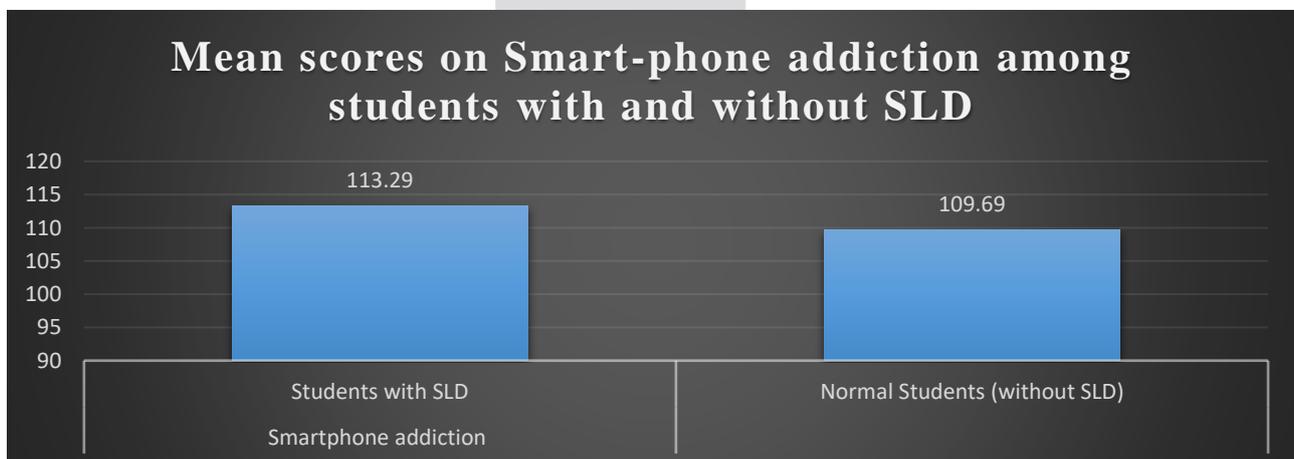
	Variable	N	Mean	Std. Deviation	t-value
Smartphone addiction	Students with SLD	65	113.29	26.506	.857
	Normal Students (without SLD)	78	109.69	23.696	0.196 (P-value) (NS)

❖ H01: There will be no significant difference on smartphone addiction among normal students and students with specific learning disorder.

❖ **Hypothesis 1**

Table 1 is showing mean scores on smart phone addiction of students with specific learning disorder and normal students i.e. students without specific learning disorder. Students with SLD has mean score on smartphone addiction is **113.29** and students without SLD i.e. normal students' mean score on smartphone addiction is **109.69**. From the mean scores of smartphone addiction it is visible that students with SLD are slightly high on smart phone addiction in comparison to students without SLD. The difference between the two is non-significant and the t-value is **0.196**. The standard deviation of mean score of Students with SLD is **26.50** and without SLD is **23.69**. Null hypothesis is accepted here.

**Graph 1: Graph showing mean scores on smartphone addiction of students with SLD and students without SLD.**



Discussion: Thus, data shows that although there is difference in mean scores on smartphone addiction among students with SLD and students without SLD. But the difference between the two is not significant.

**Table 2: Table showing t-value**

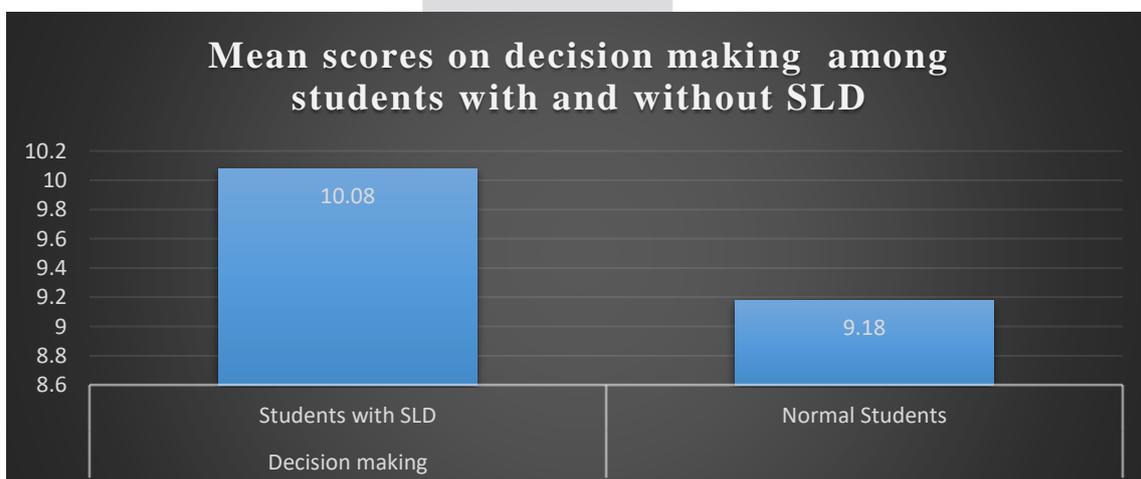
	Variable	N	Mean	Std. Deviation	t-value
Decision making	Students with SLD	65	10.08	2.545	2.178
	Normal Students	78	9.18	2.373	0.0155 (S)

❖ H02: There will be no significant difference on decision making among normal students and students with specific learning disorder.

❖ **Hypothesis 2**

Table 2 is showing mean scores on decision making of students with specific learning disability and normal students i.e. students without specific learning disorder. Students with SLD has mean score on decision making is **10.08** and students without SLD i.e. normal students' mean score on decision making is **9.18**. From the mean scores of decision making it is visible that students with SLD are slightly high on decision making in comparison to students without SLD. The difference between the two is significant and the t-value is **0.015**. The standard deviation of mean score of students with SLD is **2.54** and without SLD is **2.37**. Null hypothesis is rejected here.

**Graph 2: Graph showing mean scores on decision making of students with SLD and students without SLD.**



Discussion: Thus, data shows that although there is difference in mean scores on decision making among students with SLD and students without SLD. But the difference between the two is significant. This can be concluded that despite of learning disorders, students with specific learning disability show good performance on decision making.

**Table 3: Table showing t-value**

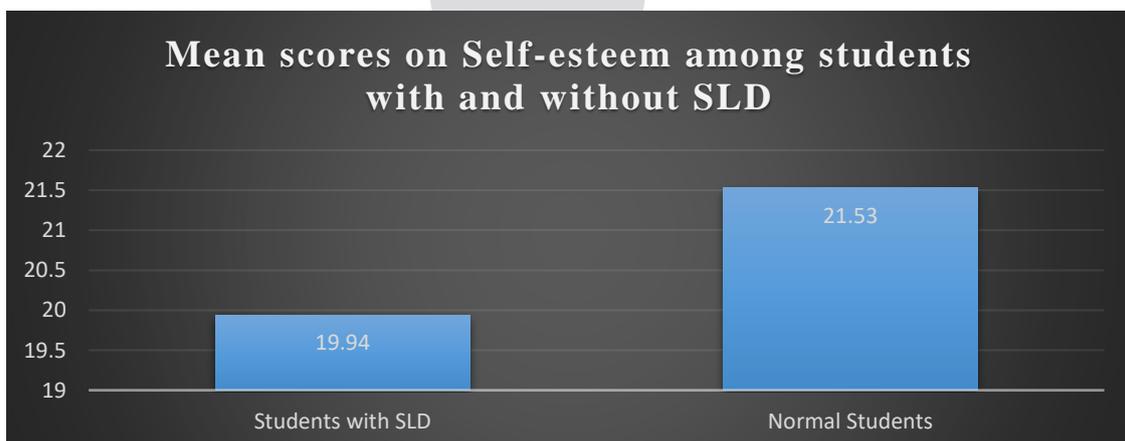
	Variable	N	Mean	Std. Deviation	t value
Self Esteem	Students with SLD	65	19.94	3.864	-2.115
	Normal Students	78	21.53	4.914	.0180 (S)

❖ H03: There will be no significant difference on self-esteem among normal students and students with specific learning disorder.

❖ **Hypothesis 3**

Table 3 is showing mean scores on self-esteem of students with specific learning disorder and normal students i.e. students without specific learning disorder. Students with SLD has mean score on self-esteem is **19.94** and students without SLD i.e. normal students' mean score on decision making is **21.53**. From the mean scores of self-esteem it is visible that students with SLD are slightly low on self-esteem in comparison to students without SLD. The difference between the two is significant and the t-value is **0.018**. The standard deviation of mean score of students with SLD is **3.86** and without SLD is **4.91**. Null hypothesis is rejected here.

**Graph 3: Graph showing mean scores on self-esteem of students with SLD and students without SLD.**



Discussion: Thus, data shows that although there is difference in mean scores on self-esteem among students with SLD and students without SLD and the difference between the two is significant. This can be concluded that learning disorders effects negatively on students' self-esteem.

**Table 4: Table showing t value**

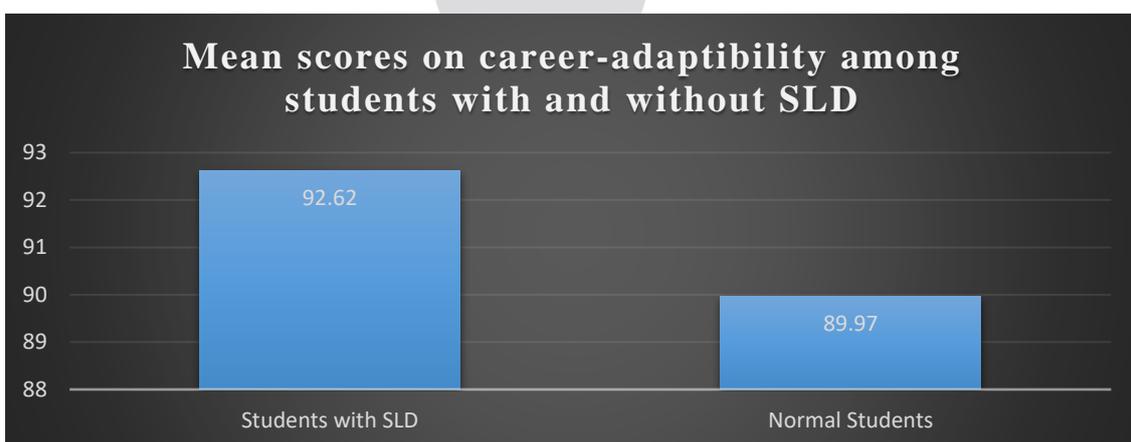
	Variable	N	Mean	Std. Deviation	t-value
Career adaptability	Students with SLD	65	92.62	18.145	.942
	Normal Students	78	89.97	15.370	.173 (NS)

❖ H04: There will be no significant difference on career adaptability among normal students and students with specific learning disorder.

❖ **Hypothesis 4**

Table 4 is showing mean scores on career adaptability of students with specific learning disorder and normal students i.e. students without specific learning disability. Students with SLD has mean score on career adaptability is **92.62** and Students without SLD i.e. normal students' mean score on career adaptability is **89.97**. From the mean scores of career adaptability it is visible that students with SLD are slightly high on career adaptability in comparison to students without SLD. The difference between the two is non-significant and the t-value is **0.173**. The standard deviation of mean score of students with SLD is **18.145** and without SLD is **15.370**. Null hypothesis is accepted here.

**Graph 4: Graph showing mean scores on career adaptability of students with SLD and students without SLD.**



Discussion: Thus, data shows that although there is difference in mean scores on career adaptability among students with SLD and students without SLD. But the difference between the two is not significant.

**Table 5: Table showing t value**

**Correlations of scores of students with SLD**

		<b>Self Esteem</b>	<b>Decision Making</b>	<b>Career Adaptability</b>	<b>Smartphone Addiction</b>
<b>Self- Esteem</b>	<b>Pearson Correlation</b>	<b>1</b>	<b>0.124</b>	<b>.367(**)</b>	<b>-0.119</b>
	<b>Sig. (2-tailed)</b>		<b>0.324</b>	<b>0.003</b>	<b>0.345</b>
	<b>N</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>
<b>Decision Making</b>	<b>Pearson Correlation</b>	<b>0.124</b>	<b>1</b>	<b>.431(**)</b>	<b>-0.102</b>
	<b>Sig. (2-tailed)</b>	<b>0.324</b>		<b>0.000</b>	<b>0.418</b>
	<b>N</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>
<b>Career Adaptability</b>	<b>Pearson Correlation</b>	<b>.367(**)</b>	<b>.431(**)</b>	<b>1</b>	<b>-0.046</b>
	<b>Sig. (2-tailed)</b>	<b>0.003</b>	<b>0.000</b>		<b>0.716</b>
	<b>N</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>
<b>Smartphone Addiction</b>	<b>Pearson Correlation</b>	<b>-0.119</b>	<b>-0.102</b>	<b>-0.046</b>	<b>1</b>
	<b>Sig. (2-tailed)</b>	<b>0.345</b>	<b>0.418</b>	<b>0.716</b>	
	<b>N</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>

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

## Correlations of scores of students (Normal)

		Self Esteem	Decision Making	Career Adaptability	Smartphone Addiction
<b>Self- Esteem</b>	<b>Pearson Correlation</b>	<b>1</b>	<b>-.343(**)</b>	<b>0.166</b>	<b>-0.158</b>
	<b>Sig. (2- tailed)</b>		<b>0.002</b>	<b>0.147</b>	<b>0.168</b>
	<b>N</b>	<b>78</b>	<b>78</b>	<b>78</b>	<b>78</b>
<b>Decision Making</b>	<b>Pearson Correlation</b>	<b>-.343(**)</b>	<b>1</b>	<b>0.156</b>	<b>0.000</b>
	<b>Sig. (2- tailed)</b>	<b>0.002</b>		<b>0.173</b>	<b>0.997</b>
	<b>N</b>	<b>78</b>	<b>78</b>	<b>78</b>	<b>78</b>
<b>Career Adaptability</b>	<b>Pearson Correlation</b>	<b>0.166</b>	<b>0.156</b>	<b>1</b>	<b>-0.047</b>
	<b>Sig. (2- tailed)</b>	<b>0.147</b>	<b>0.173</b>		<b>0.683</b>
	<b>N</b>	<b>78</b>	<b>78</b>	<b>78</b>	<b>78</b>
<b>Smartphone Addiction</b>	<b>Pearson Correlation</b>	<b>-0.158</b>	<b>0.000</b>	<b>-0.047</b>	<b>1</b>
	<b>Sig. (2- tailed)</b>	<b>0.168</b>	<b>0.997</b>	<b>0.683</b>	
	<b>N</b>	<b>78</b>	<b>78</b>	<b>78</b>	<b>78</b>

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

## Correlations scores overall (students with and without learning disability)

		Self Esteem	Decision Making	Career Adaptability	Smartphone Addiction
<b>Self- Esteem</b>	<b>Pearson Correlation</b>	<b>1</b>	<b>-0.162</b>	<b>.239(**)</b>	<b>-0.150</b>
	<b>Sig. (2- tailed)</b>		<b>0.054</b>	<b>0.004</b>	<b>0.074</b>
	<b>N</b>	<b>143</b>	<b>143</b>	<b>143</b>	<b>143</b>
<b>Decision Making</b>	<b>Pearson Correlation</b>	<b>-0.162</b>	<b>1</b>	<b>.305(**)</b>	<b>-0.037</b>
	<b>Sig. (2- tailed)</b>	<b>0.054</b>		<b>0.000</b>	<b>0.659</b>
	<b>N</b>	<b>143</b>	<b>143</b>	<b>143</b>	<b>143</b>
<b>Career Adaptability</b>	<b>Pearson Correlation</b>	<b>.239(**)</b>	<b>.305(**)</b>	<b>1</b>	<b>-0.040</b>
	<b>Sig. (2- tailed)</b>	<b>0.004</b>	<b>0.000</b>		<b>0.631</b>
	<b>N</b>	<b>143</b>	<b>143</b>	<b>143</b>	<b>143</b>
<b>Smartphone Addiction</b>	<b>Pearson Correlation</b>	<b>-0.150</b>	<b>-0.037</b>	<b>-0.040</b>	<b>1</b>
	<b>Sig. (2- tailed)</b>	<b>0.074</b>	<b>0.659</b>	<b>0.631</b>	
	<b>N</b>	<b>143</b>	<b>143</b>	<b>143</b>	<b>143</b>

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

❖ H05: There will be a significant relationship between smartphone addiction, decision making, self-esteem, career adaptability among students with specific learning disorder and normal student.

❖ **Hypothesis 5**

Table 5: According to table no. 5 it is visible that career adaptability, self-esteem and decision making have positive correlation with each other. All three of these variables create significant impact on each other. Smart phone addiction is not significantly correlated with another variable.



## Chapter 6

**Conclusion:** Research on the study to explore the impact of smartphone addiction, decision making and self-esteem on career choices or orientation among adolescents with SLDs and normal adolescents of their age. The data was collected to examine the effect of these variables on the career choices or orientation among adolescents. The data illustrates that a few of the variables are have significant difference among adolescents with SLD and normal adolescents, for example, decision making and self- esteem. Similarly, smartphone addiction and career adaptability have no significant difference among adolescents with SLD and normal adolescents of their age. To analyze the data, descriptive statistics, t- test and correlation are used.

Smartphone addiction scale was used to measure the significant difference of the addiction of smartphone among adolescents with SLD and normal adolescent. The mean score of smartphone addiction on adolescents with SLD and normal adolescents are 113.29 and 109.69 respectively. The difference between the two is non-significant and t- value of the same is 0.196. The standard deviation of mean score with SLD is 26.50 and without SLD is 23.69. This result shows that the effect doesn't exist. Null hypothesis is accepted here.

For analyzing the significant difference of decision making among SLD adolescents and normal adolescents, decision making test was used. The mean score of SLD adolescents and normal adolescents on decision making is 10.08 and 9.18 respectively. From the mean score, SLD adolescents are slightly high on decision making in comparison to normal adolescents. The difference between the mean scores is significant and the t- value is 0.015. Standard deviation of mean score with SLD and without SLD are 2.54 and 2.37 respectively. Null hypothesis gets rejected here because despite having specific learning disorders, students with SLD show good performance on decision making.

Rosenberg self- esteem scale was used to measure the self- esteem quotient among adolescents. The mean score among SLD adolescents is 19.94 and normal adolescents is 21.53. From the mean score of self- esteem, adolescents with SLD are slightly low at self- esteem as compared to the normal adolescents. The difference between them is significant and the t- value is 0.018. The standard deviation of mean score of SLD adolescents and normal adolescents are 3.86 and 4.91 respectively. Null hypothesis again gets rejected here because learning disorders effects negatively on self- esteem of adolescents.

To measure career adaptability among adolescents, career adapt- adaptability scale was used. The mean score of adolescents with SLD and normal adolescents are 92.62 and 89.97 respectively. From the mean score, adolescents with SLD are slightly high on career adaptability. There is no significant difference among the two. The t- value is 0.173 and standard deviation of the mean score with SLD and without SLD are 18.145 and 15.370 respectively. Null hypothesis gets accepted here.

Few variables show a significant relationship with each other. For instance, decision making, self- esteem and career adaptability have positive correlation with each other. These three variables create a significant impact

on each other. On the contrary of it, smart phone addiction shows negative correlation with other variables which means smart phone addiction is not significantly correlated with another variables.

#### **Implications of the current study are as follows:**

- The study provides insight about the impact of smartphone addiction, self- esteem and decision making on career choices or orientation among SLDs and normal adolescents of their age.
- Specific learning disorder included dyslexia, dyscalculia, dysgraphia, dyspraxia and aphasia. Students with SLD may not be able to perform well in learning areas but there is no ill effect on decision making skill and self- esteem of the individual. Results have shown that SLD adolescents have better self- esteem and decision making quality.
- It becomes necessary to look beyond those variable which are not actually affecting SLD adolescents.

#### **Limitations:**

- This study is confined to the private and government schools of Delhi only.
- The sample size of the research is small. (The sample size planned for this research was 50 SLD adolescents and 50 normal adolescents. But because of COVID- 19 pandemic, while collecting data through google forms, I received a data of 65 SLD adolescents and 78 normal adolescents. So, research conducted on finally collected data.)
- The other related variables to the study for example, leadership qualities, public speaking, motivational speaker, types of phobia etc. are not taken into consideration.

#### **Future suggestions:**

- There is a scope for further study thereby including larger area. (It was easy to collect data in the COVID- 19 pandemic for SLD adolescents from Delhi because Delhi government has already conducted various tests to identify the specific learning disorders in order to provide assistance to them accordingly.)
- There is a scope to increase the sample size of the research.
- The other related variable to the study especially related to SLD can be taken into consideration in the future studies.

## References

- Rideout, V. (2015). The common sense census: Media use by tweens and teens. Common Sense Media. Retrieved from <https://www.commonsense-media.org/research/the-common-sense-census-media-use-by-tweensand-teens>
- Domoff, S. E., Borgen, A. L., Foley, R. P., & Maffett, A. (2019). Excessive use of mobile devices and children's physical health. *Human Behavior and Emerging Technologies*, 2, 169–175.
- Domoff, S. E., Harrison, K., Gearhardt, A. N., Gentile, D. A., Lumeng, J. C., & Miller, A. L. (2019). Development and validation of the problematic media use measure: A parent report measure of screen media “addiction” in children. *Psychology of Popular Media Culture*, 8, 2–11. <https://doi.org/10.1037/ppm0000163>
- van den Eijnden, R. J., Lemmens, J. S., & Valkenburg, P. M. (2016). The social media disorder scale. *Computers in Human Behavior*, 61, 478–487.
- Lemmens, J. S., Valkenburg, P. M., & Gentile, D. A. (2015). The internet gaming disorder scale. *Psychological Assessment*, 27, 567–582.
- Cheever NA, Rosen LD, Carrier LM, Chavez A. Out of sight is not out of mind: The impact of restricting wireless mobile device use on anxiety levels among low, moderate and high users. *Computers in Human Behavior*. 2014; 37:290–7. <https://doi.org/10.1016/j.chb.2014.05.002>.
- Clayton RB, Leshner G, Almond A. The Extended iSelf: The Impact of iPhone Separation on Cognition, Emotion, and Physiology. *Journal of Computer-Mediated Communication*. 2015; 20(2):119–35. <https://doi.org/10.1111/jcc4.12109>
- Elhai JD, Dvorak RD, Levine JC, Hall BJ. Problematic smartphone use: A conceptual overview and systematic review of relations with anxiety and depression psychopathology. *Journal of affective disorders*. 2017; 207:251–9. Epub 2016/10/14. <https://doi.org/10.1016/j.jad.2016.08.030> PMID: 27736736
- Herbert Alexander Simon (1977). *The New Science of Management Decision*. Prentice-Hall.
- Monahan, George E. (2000). *Management decision making: spreadsheet modeling, analysis, and application*. Cambridge, UK; New York: Cambridge University Press.
- Armstrong, Jon Scott (2001). "Role playing: a method to forecast decisions". In Armstrong, Jon Scott (ed.). *Principles of forecasting: a handbook for researchers and practitioners*. International series in operations research & management science. 30. Boston, MA: Kluwer Academic Publishers.
- Urbina Robalino, Gisella del Rocio; Eugenio Piloso, Mery Aracely (2015). *Efectos de la violencia intrafamiliar en el autoestima de los estudiantes de octavo y noveno año de la Escuela de educación básica*

*11 de Diciembre* (bachelor thesis) (in Spanish). Advised by S. Yagual. Ecuador: Universidad Estatal Península de Santa Elena.

Baumeister, R. F.; Campbell, J. D.; Krueger, J. I.; Vohs, K. D. (2003). "Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles?". *Psychological Science in the Public Interest*.

Orth U.; Robbins R.W. (2014). "The development of self-esteem". *Current Directions in Psychological Science*.

Harkness, H. 2004. A model for your future Career: You're On Your Own. Career planning and adult development journal Volume 24, number 2

Gibson, L. R dan Mitchell, M. H. 2006. Introduction to Career Counseling for the 21st Century. Columbus Ohio: Pearson Merrill Prentice Hall.

Arnett, J. J. (2003). *Emerging Adulthood : Understanding the New Way of Coming of Age*.

Schwartz, S. J., Côté, J. E., & Arnett, J. J. (2005). *Youth & Society*.  
<https://doi.org/10.1177/0044118X05275965>.

Savickas, M. L. (2007). Career Adaptability : An Integrative Construct for Life-Span , L i fe-Space Theory, 45, 247–259.

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale : Construction, reliability , and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661–673.  
<https://doi.org/10.1016/j.jvb.2012.01.011>.

Savickas, M. L. (2013b). Career construction theory and practice. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 147–186). New York, NY: Wiley.

Savickas, M. L., & Porfeli, E. J. (2012). Career adapt-abilities scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80, 661–673.  
doi:10.1016/j.jvb.2012.01.011

Super, D. E., & Knasel, E. G. (1981). Career development in adulthood: Some theoretical problems. *British Journal of Guidance and Counseling*, 9, 194–201.

Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, 47, 36–49. doi:10.1037/0022-0167.47.1.36

Savickas, M. L., & Porfeli, E. J. (2012). Career adapt-abilities scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80, 661–673. doi:10.1016/j.jvb.2012.01.011

Dama, N. (2017). “Türkiye’nin eğitim, öğrenim ve çalışma sürecinde olmayan gençleri (The young not in education, employment and training in Turkey)”, *SETA*, 198, 1-27.

Rottinghaus P., Day, S.X., and Borgen, F.H. (2005). “The career futures inventory-A measure of career-related adaptability and optimism”, *Journal of Career Assessment*, 13(1), 3–24.

Rottinghaus, P.J., Eshelman, A., Gore, J.S., Keller, K.J., Schneider, M., and Harris, K.L. (2017). “Measuring change in career counseling: Validation of the career futures inventory-revised”, *International Journal for Educational and Vocational Guidance*, 17(1), 61-75.

*Macmillan Dictionary for Students* Macmillan, Pan Ltd. (1981), page 14, 456. Retrieved July 15, 2010.

"Adolescence". *Merriam-Webster*. Retrieved May 9, 2012.

"Puberty and adolescence". *MedlinePlus*. Archived from the original on April 3, 2013. Retrieved July 22, 2014.

Casey BJ, Tottenham N, Liston C, Durston S. Imaging the developing brain: what have we learned about cognitive development? *Trends in Cognitive Science*. 2005;9(3):104–110. [PubMed] [Google Scholar]

Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Boston, MA: Houghton Mifflin Harcourt.

APA (2002). *Developing adolescents: A reference for professionals*. Washington, DC: American Psychological Society.

Giedd, J.N. (2015). The amazing teen brain. *Scientific American*, 312, 32-37. doi:10.1038/scientificamerican0615-32

Diakakis P, Gardelis J, Ventouri K, et al. Behavioral problems in children with learning difficulties according to their parents or teachers. *Pediatrics*. 2008;121:S100-S101. doi:10.1542/peds.2007-2022CC

Backenson EM, Holland SC, Kubas HA, et al. Psychosocial and adaptive deficits associated with learning disability subtypes. *J Learn Disabil*. 2015;48(5):511-22. doi:10.1177/0022219413511861

U.S. Department of Education, Office for Civil Rights. 2013-2014 civil rights data collection: A first look. Published October 28, 2016.

Alesi M, Rappo G, Pepi A. Self-esteem at school and self-handicapping in childhood: Comparison of groups with learning disabilities. *Psychological Reports*. 2012;111(3):952-962. doi:10.2466/15.10.pr0.111.6.952-962.

American Academy of Pediatrics. Learning disabilities: What parents need to know. Updated November 11, 2015.

Gacek M, Smoleń T, Pilecka W. Consequences of learned helplessness and recognition of the state of cognitive exhaustion in persons with mild intellectual disability. *Adv Cogn Psychol*. 2017;13(1):42–51. doi:10.5709/acp-0205-6

Bui, X., Quirk, C., Almazan, S., & Valenti, M. , "Inclusive education research & practice. ," Maryland Coalition for Inclusive Education

<http://www.tezu.ernet.in/PwD/RPWD-ACT-2016.pdf>

Felisoni, D. D., & Godoi, A. S. (2018). Cell phone usage and academic performance: An experiment. *Computers & Education*, 117, 175–187.

Giunchiglia, F., Zeni, M., Gobbi, E., Bignotti, E., & Bison, I. (2018). Mobile social media usage and academic performance. *Computers in Human Behavior*, 82, 177–185.

Paul, J. A., Baker, H. M., & Cochran, J. D. (2012). Effect of online social networking on student academic performance. *Computers in Human Behavior*, 28, 2117–2127

Wentworth, D. K., & Middleton, J. H. (2014). Technology use and academic performance. *Computers & Education*, 78, 306–311.

Domoff, S. E., Harrison, K., Gearhardt, A. N., Gentile, D. A., Lumeng, J. C., & Miller, A. L. (2019). Development and validation of the problematic media use measure: A parent report measure of screen media “addiction” in children. *Psychology of Popular Media Culture*, 8, 2–11. <https://doi.org/10.1037/ppm0000163>

Vernon, L., Barber, B. L., & Modecki, K. L. (2015). Adolescent problematic social networking and school experiences: The mediating effects of sleep disruptions and sleep quality. *Cyberpsychology, Behavior and Social Networking*, 18, 386–392

Domoff, S. E., Foley, R. P. & Ferkel, R.(2019). Addictive phone use and academic performance in adolescents. *Empirical Article*, Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1002/hbe2.171>, accessed on 10.02.21

Banstola, R. S., Ogino, T. & Inoue, S. (2020), Impact of Parents' Knowledge about the Development of Self-Esteem in Adolescents and Their Parenting Practice on the Self-Esteem and Suicidal Behavior of Urban High School Students in Nepal. *Environmental research and public health*, 17

Muslihati, (2017), A Study of Career Adaptability and Career Planning of Faculty of Education Students of Universitas Negeri Malang. *Advances in Social Science, Education and Humanities Research*, 118.

Guan, Y.; Deng, H.; Sun, J.; Wang, Y.; Cai, Z.; Ye, L. Career adaptability, job search self-efficacy and outcomes: A three-wave investigation among Chinese university graduates. *J. Vocat. Behav.* 2013, 83, 561–570.

Koen, J.; Klehe, U.C.; Van Vianen, A.E. Training career adaptability to facilitate a successful school-to-work transition. *J. Vocat. Behav.* 2012, 81, 395–408

Rudolph, C.W.; Lavigne, K.N.; Zacher, H. Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting, responses, and adaptation results. *J. Vocat. Behav.* 2017, 98, 17–34.

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661–673. <https://doi.org/10.1016/j.jvb.2012.01.011>.

Rodríguez, F. M. M., Lozano, J. M. G., Mingorance, P. L. & Mármol, J. M. P. (2020) Influence of Smartphone Use on Emotional, Cognitive and Educational Dimensions in University Students. *Sustainability*, 12

Gates, B., & Edwards, H. M. (2007). Learning disabilities. (B. Gates & H. M. Edwards, Eds.). Philadelphia, PA: Elsevier.

Oulasvirta A, Rattenbury T, Ma L, et al. (2012) Habits make smartphone use more pervasive. *Personal and Ubiquitous Computing* 16(1): 105–114.

Ha YM and Hwang WJ (2014) Gender differences in internet addiction associated with psychological health indicators among adolescents using a national web-based survey. *International Journal of Mental Health and Addiction* 12: 660–669.

Samaha M and Hawi NS (2016) Relationships among smartphone addiction stress, academic performance, and satisfaction with life. *Computers in Human Behavior* 57: 321–325.

AAP (2105). Bright futures guidelines for health supervision of infants, children and adolescents. Retrieved from <https://brightfutures.aap.org/Bright%20Futures%20Documents/18-Adolescence.pdf>

USDHHS (2015). Adolescent and young adult health program. Retrieved from <http://mchb.hrsa.gov/programs/adolescents/>.

Blum, R., W., & Nelson-Nmari, K. (2004). The health of young people in a global context. *Journal of Adolescent Health*, 35, 402-418.

Butter worth: <http://www.mathematical brain.com/inT06.html> DSM- 1V, 2000, 315.1)

<http://www.mathematical brain.com/inT06.html>

<https://www.dyslexia.uk.net/specific-learning-difficulties/dyscalculia/>

Chivers, M. (1991). "Definition of Dysgraphia (Handwriting Difficulty). *Dyslexia A2Z*. Retrieved from [http://www.dyslexiaa2z.com/learning\\_difficulties/dysgraphia/dysgraphia\\_definition.html](http://www.dyslexiaa2z.com/learning_difficulties/dysgraphia/dysgraphia_definition.html) Archived 20 11-02-19 at the Wayback Machine

Berninger, Virginia W.; Wolf, Beverly J. (2009). *Teaching Students with Dyslexia and Dysgraphia: Lessons from Teaching and Science*. Baltimore, Maryland: Paul H. Brooks Publishing Co. ISBN 978-1-55766-934-6.

Damasio AR (February 1992). "Aphasia". *The New England Journal of Medicine*. **326** (8): 531–9. doi:10.1056/NEJM199202203260806. PMID 1732792.

Kotsopoulos, S. (2013-05-22). "Neurodevelopmental Disorders". *Diagnostic and Statistical Manual of Mental Disorders. Journal of Psychiatry and Neuroscience*. DSM Library. **26**. American Psychiatric Association. p. 257. doi:10.1176/appi.books.9780890425596.dsm01. ISBN 978-0890425558. PMC 1408294.

"What Is Dyscalculia? What Should I Do if My Child Has It?". *WebMD*. Retrieved 19 September 2019.

"Dyslexia Information Page". National Institute of Neurological Disorders and Stroke. 2 November 2018.

Siegel LS (November 2006). "Perspectives on dyslexia". *Paediatrics & Child Health*. **11** (9): 581–7. doi:10.1093/pch/11.9.581. PMC 2528651. PMID 19030329.

