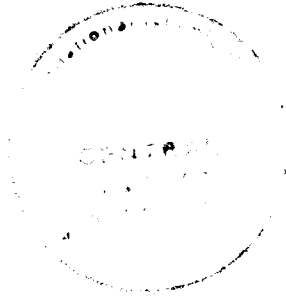


**EFFECTIVENESS OF POSITIVE PSYCHOTHERAPY ON  
MENTAL WELLBEING, SENSE OF COHERENCE, SOCIAL  
SUPPORT AND DIFFICULTIES AMONG CAREGIVERS OF  
CEREBRAL PALSY CHILDREN**



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CEREBRAL PALSY CHILDREN**

Submitted to the Department of Psychology (Female Campus), International  
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in partial fulfilment of the requirements  
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**PhD IN PSYCHOLOGY**

By

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## CERTIFICATION

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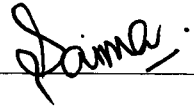
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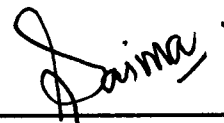
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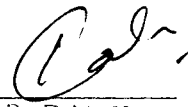
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## **Dedication**

**To**

### **My Parents, Husband & Children**

"Whose Affection, Love, encouragement and Prays of day and night makeme able to get such success and honour. Who have always teach me to trust in Allah, believe in hard work and teach me that so much could be done with little".

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### **List of Abbreviations**

CP	Cerebral palsy
SPSS	Statistical Package for Social Sciences
PPTI	Positive Psychotherapy Inventory
CDS	Caregiver Difficulties Scale
PBA	Parental Burnout Assessment
DASS	Depression, Anxiety and Stress Scale
SOC	Sense of Coherence
OLS	Orientation of Life Scale
MSPSS	Multidimensional Scale of Perceived Social Support
PPT	Positive Psychotherapy

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May Allah shower the above-cited personalities with success and honour in their life

(Ameen)

**Saima Waqar**

## **Abstract**

The current study was aimed to assess the effectiveness of positive psychotherapy for treating psychological issues of caregivers of cerebral palsy children. Sample of the present study was comprised of caregivers (mother, father and other related relatives) of cerebral palsy children. The data of the present study was collected from out patients & inpatient departments of National Institute of Rehabilitation Medicine (NIRM) Islamabad. The present research was based upon three studies. All the studies were interconnected with each other's. Study I was translation, adaptation and language validation of Caregiver difficulties Scale. In study I of the present research, translation, adaptation and cross language validation of caregiver difficulties scale was done. The major purpose of selecting this instrument was that it's purely developed for the caregivers of cerebral palsy children. Translation was carried out into four steps. After the translation of the scale, pilot study was carried out. The urdu translated scale was administered on 80 caregivers of cerebral palsy children. Age ranges of the participants was between 25 to 50 and pilot testing done. Findings of the present study (Table 3) showed that urdu translation of the Caregiver difficulties scale (CDS) scale was reliable and valid for the present study. Cross language, validation was also satisfactory for Caregiver difficulties scale (CDS). Confirmatory factor analysis was also carried out, which showed model fit for the translated scale. Study II dealt with translation, adaptation and validation of positive psychotherapy manual. The manual comprises of 15 sessions worksheets and clinician part. Positive psychotherapy (PPT) basic emphasis is on positive aspects of a client in their lives without focusing on symptoms, negative life stories, past negative memories, or abruptly substituting them with negatives. Translation of the worksheets & manual was completed in four steps (forward translation, committee approach, backward translation, committee approach). For adaptation and validation of PPT adaptation committee

approach and clinical expert consultation was carried out. Tryout testing (n=2) was done for feasibility testing of the therapy in both language on the sample of caregivers. Study III was comprised of the main study aimed at hypotheses testing. Depression Anxiety Stress Scale (DASS), Parental Burnout Assessment (PBA), Caregiver Difficulties Scale (CDS), Multidimensional Perceived Social Support (MPSS), Positive Psychotherapy Inventory (PPTI) (mental wellbeing) and Orientation of Life Scale (OLS) (sense of coherence) were administered on the sample of 100 caregivers of cerebral palsy children for collecting data of the main study. Study III of the present study also aimed at measuring the effectiveness of Positive Psychotherapy (PPT) and testing formulated hypotheses of the present study. For main study of the present research, sample of (N=100) caregivers of cerebral palsy children were selected with age ranges of the 25 to 55 years. Caregivers were approached by employing purposive sampling technique. During main study phase, at pretest level, screening of the participants was done on the basis of their moderate to high level scores on Caregiver Difficulties Scale (CDS), Parental Burnout Assessment (PBA), Depression Anxiety and Stress Scale (DASS-21), while lower scores on Multidimensional Perceived Social Support (MPSS), Orientation of Life Scale (OLS) (sense of coherence) and Positive Psychotherapy Inventor (PPTI) (mental wellbeing). After screening, participants (n=20) were randomly assigned into two groups, treatment group (positive psychotherapy group) and control group (counseling group). In treatment group, participants (n=10) were given urdu translated positive psychotherapy based interventional sessions and counseling sessions. Whereas for caregivers in control group (n=10) regular counseling sessions were provided. After completion of the interventional therapeutic sessions, assessment was done at posttest level for measuring the efficacy of positive psychotherapy for managing mental health issues of caregivers of cerebral palsy children. Present research indicated significant difference between the scores of treatment

group and control group. In treatment group (after taking complete 15 sessions of positive psychotherapy) the score of caregiver burden, burnout psychological distress (Depression, anxiety & stress) decreased as compared to the scores of caregivers of cerebral palsy children in control (after taking general counselling sessions). Whereas level of sense of coherence, social support & mental wellbeing increased among caregivers in positive psychotherapy treatment group as compared to caregivers in control group. Findings further revealed that positive psychotherapy is an effective intervention for psychological, social, emotional and behavioral rehabilitation of caregivers of CP children. The results can also be applied to the development of multi modal, holistic interventions that enhance the wellbeing of caregivers of cerebral palsy children and for all types of disabilities.

**Keywords:** Cerebral palsy, Caregiver, Caregiver Difficulties Scale, Depression Anxiety, Stress Scale, Social Support, Sense of Coherence, Positive Psychotherapy.



# **INTRODUCTION**

## Chapter 1

### Introduction

Any bodily or mental health condition (impairment) that create difficulty for the individual with the same state to perform specific activities (activity limitation) and having restricted activities of daily living is called disability. Disability is connected with the problems that started from birth and may affect later-life like physical, cognition (understanding, learning & memory), vision, hearing, behavior, and other areas (WHO, 2001). Approximately, there are more than 1 billion disabled individuals in the world. It indicates that around 15% of the world's population, with up to 190 million (3.8%) persons aged 15 and older are experiencing substantial functional physical challenges and required regular medical assistance. The spectrum of disability is enormous. However, persons with disabilities needs the same general healthcare requirements, which everyone required (WHO, 2011).

The World Health Organization (WHO) ranked Pakistan the sixth-highest disease burdened country. Prevalence of disability in Pakistan is about 13.4 %. The majority of disabilities are those that are lifelong and affect person's whole life. According to the WHO's estimate, 31 million people in Pakistan are expected to have some type of disability (WHO, 2011).

There are several many different kinds of disabilities, and many of those require lifelong rehabilitation. Cerebral palsy is regarded as a physical disability with multiple disabilities, including intellectual, speech, and physical, among many others. Intellectual disability (ID) and cerebral palsy (CP) are developmental disabilities that significantly restrict a person's ability to function. The frequent form of severe physical disability is cerebral palsy (CP), which affects 2 to 2.5 children out of every 1000 in developed nations (Taft, 1995). CP is a complex disorder in which mostly seizure disorders coexist frequently with the motor

disorders. Other symptoms of CP include sensation, perception, cognition, communication, and behavior disturbances (Gulati, & Sondhi, 2018). CP is a chronic condition that affects person's whole life from their own activities of daily living to learning every aspects of life (education & profession). They are reliant on their caregivers in every aspect of life (Schiariti, Selb, Cieza, & O'Donnell, 2015).

**Cerebral Palsy:** Cerebral palsy is collection of long-term, non-static, physical disability. (Cans, 2000). In the beginning, CP was known as Little's disease and was first identified by William Little in 1862. It is a condition that seemed to effect the new born before the age of one year, interfered with the development of social and cognitive skills, and did not get better with time. Little also made the connection between this disorder and inadequate oxygen during birth. It was hypothesized that CP may have its origins in the cortex development, as the fetus is developing, linking abnormal fetus brain development (Accardo, 1982). During birth oxygen deprivation alone was once believed to be the only cause of cerebral palsy (CP), but biomedical research in the 1980s discovered that this etiology was less likely and only one of many that could cause CP (Moster et al., 2001, Nelson & Ellenberg, 1986). CP has chronic symptoms of posture; movement and restricted function are believed to be brought on by non-progressive disruptions in the newborn brain. Cerebral palsy is a motor disorder that is frequently occurred with muscular issues as well as epilepsy, problems in cognitive ability, communication, and behavior (Rosenbaum, Paneth et al., 2007).

Cerebral palsy effect an individual's movement, maintaining balance and restricted posture. It is the disability of motor impairment in children. Cerebral is related to brain related disability and palsy referred to as muscular weakness. Individual is unable to control their muscles because of abnormal brain development or damage. A non-progressive trauma to the brain occurred during or shortly after birth up to the age of one year causes cerebral palsy (CP). It is a developmental disorder. Children who have cerebral palsy are unable to reach

typical motor developmental milestones, which results in a variety of condition that effect their daily living (Molner, 1991).

According to Paneth, Hong, and Korzeniewski (2006), non-progressive disturbance in the developing brain can cause cerebral palsy (CP), which can happen prior to, during, or after birth. Motor function disorders are just a few of the conditions that fall under the umbrella term "CP" (Rosenbaum et al., 2007). According to Sajedi, Soleiman, and Ahmadi (2013), in Iran prevalence of CP is 2.6 per 1,000 births. According to Pearsall-Jones, Piek, and Levy (2010) no treatment is currently effective in healing the affected areas of brain that regulate movement and muscles. Because a child with CP frequently requires extensive special care over a long period, families with CP children frequently have poor physical and mental health.

### **Classification of Cerebral Palsy:**

A wide range of clinical syndromes with altered muscular issues and postural responses are included in the definition of cerebral palsy. These neurological abnormalities frequently result in recognizable abnormal movement patterns that are known as cerebral palsy's distinguishing features. Although a motor deficit that results in ambulation dysfunction or delay as well as difficulty in performing self-care tasks is the key diagnostic indicator. In cerebral palsy, spastic & diplegia are the most prevalent types (Dias & Dias, 2017).

Cerebral palsy is classified according to motor function impairment are spastic cerebral palsy, athetoid, ataxic, mixed and hypotonic CP. Spastic cerebral palsy indicates heightened tone in the muscles. Because muscles are always contracting, limbs are stiff, unyielding, and unable to flex or relax. Exaggerated reflexes and abrupt, clumsy movements are common. Afflicted legs and arms frequently. There are other conditions that can also affect the tongue, mouth, and pharynx, including mixed cerebral palsy, hypotonic cerebral palsy, athetoid cerebral palsy (dyskinetic CP, which causes difficulty controlling muscular movements and

twisted, abrupt movements), and speech impairments, eating difficulties, chewing and swallowing difficulties. Classification according to patterns of involvement of limbs are monoplegia (one limb is affected.), diaplegia (legs affected, mainly affects the lower body), hemiplegia (one sided arm and leg of the body is affected) & paraplegia (lower part of the body, including both legs, are affected), triplegia (three limbs affected, including face). Double hemiplegia (four limbs affected, but one side of the body is more affected than the other). Tetraplegia (all four limbs are involved, major three limb are more affected than one). Quadriplegic (four limbs affected). Pentaplegia (four limbs are involved, with neck and head paralysis, mostly having feeding and respiratory complication) (Ferluga et al., 2013).

CP's Spastic, hypotonic, athetoid, ataxic and dystonic are based on muscle tone and CP's based on body parts involvement are monoplegia, diplegia and hemiplegia. According to a second method, CP can be classified as either pyramidal (spastic) or extra pyramidal (nonspastic), depending on the area of the brain that has been affected and the predominant motor disorder. Spastic CP is also known as upper motor neuron damage. About 30% of cases of CP are thought to be spastic, which makes up 70% to 80% of all cases (Taft, 1995 & Thorogood, 2001). Athetoid and dystonic CP are the subsequent subtypes of dyskinetic CP (Rosebaum, 2003). According to Sanger et al. (2003) from all 15% to 20% of cerebral palsy, dyskinetic CP is accounting for 10 to 15%. Myopathy and neuropathy is major cause of hypotonia, so it should be addressed before diagnosing CP. Major symptom is floppiness, noticeable decline in gross muscle tone, develop their motor milestones significantly later. Feeding issues are frequently present due to weak facial and oral muscles (Taft, 1999).

Additionally in children about 20% of cerebral palsy in the 1960s had athetoid CP (less than 5 to 10% now), with 80–90% of cases being caused by spastic CP. This decline is primarily attributable to improvements in the management of hyperbilirubinemia. Acute bilirubin encephalopathy, or bilirubin passing into the brain, is a possibility if a newborn has

intense jaundice. Orthopedic surgeon William Little classified the CP first. Hemiplegia affects just one side of the body, though less impairment of the limb that appeared unaffected was frequently noted; generalized rigidity, which affects both legs more than the arms, and paraplegia (Dunn, 1995). According to Swedish classification of cerebral palsy, it is divided as according to affected limbs (monoplegia, hemiplegia, diplegia, tetraplegia, and quadriplegia), and according to type of muscle tone (spastic, dyskinetic, ataxic, or mixed) (Hedgberg, 1989).

**Prevalence of cerebral palsy:** it is treatment wise most costly childhood disability and its prevalence is increasing day-by-day (Darras et al., 2009). In both the United States and different countries, there are 1.5 to 2.0 cases of CP for every 1000 live births. Despite technological advancements are reducing infant mortality in term and preterm infants, this rate has remained stable from almost forty years (Clark & Hankins, 2003; Gibson et al., 2003). Prevalence of CP's worldwide is around 3.16% (Livinec, 2005). About 2-5 per 1000 newborn in USA have this disease which affects about 0.7 Million. It has a very broad range of etiology including congenital, genetic, inflammatory, infectious, traumatic, and metabolic. Prenatal, natal, or postnatal trauma to the developing brain are all possible reasons. Less than 10% of cases are the result of severe birth trauma or asphyxia, while up to 75% to 80% are the result of prenatal injury (Patel et al., 2020).

Premature birth and low birth weight appears to be main risk factors of cerebral palsy. Risk of disability increases as gestational age and birth weight decreases (Li, Hong, Wang et al., 2003). According to different studies worldwide, its prevalence ranges from 1.5 to 4 per 1000 births. Despite of recent improvements in obstetric and neonatal care its prevalence is same. In spite of the fact that infant mortality has decreased, cerebral palsy has become more common and severe. Premature babies are more affected as compared to full term babies.

Males are more likely than females to have cerebral palsy, and black children are more likely to have it than in white children. Spastic cerebral palsy (77.4%) is more common (Hirtz & Thurman et al., 2007).

Due to higher survival rates, the prevalence has risen globally over the past few decades. In western countries, approximately 10,000 infants are born with cerebral palsy yearly. The birth prevalence ranges from 3.4 per 1000 live births. In UK Between 1,200 to 1,500 school-aged children are diagnosed with CP each year (McIntyre & Goldsmith, et al., 2022). The prevalence of CP in Asia is 2.19 per 1000 children (Andromeda, Hartini, & Suryanto, 2023).

**Etiology of cerebral palsy:** There are many risk factors associated with CP during prenatal, perinatal and postpartum (Rosebaum, 2003). Currently, it is believed that the majority of cases are perinatal and postnatal due to asphyxia and preterm birth (Moster et al., 2001). A quarter to one third of infants having CP were born before 37 gestational week. The major risk is associated with newborn weights less than 1.5kg (Winter et al., 2002). The motor tracts in the developing brain are particularly vulnerable between 24 and 32 weeks of gestation, which is the cause of these injuries (Naeye et al., 1989). According to Perlman (1996) CP develops in 80% to 85% of infants with periventricular white matter damage. The prevalence of CP can be decreased because of better medical care of mothers during pregnancy.

**Risk Factors:** Major risk factors for CP including, problem in prenatal, perinatal, and postnatal stages. Causes of CP in prenatal stage included premature birth, low birth weight, due mother's poor nutritional status, and maternal epilepsy. It can be if a mother has hyperthyroidism or any infections, including severe toxicemia, eclampsia, rubella, cytomegalovirus (CMV), syphilis, or any other. Children can develop CP because of a mother's history of placental insufficiency, drug abuse, trauma, or multiple pregnancies. Risk factors for

postnatal (0–2 years) include head trauma, hypoxia, seizures, neonatal issues and infections of the central nervous system (encephalitis, meningitis). None of these causes always causes brain damage, and even when it does, Cerebral palsy has no guaranteed outcome. As an illustration, some kids may have isolated hearing loss as a result of meningitis, while others may have severe intellectual disability or cerebral palsy (Abd Elmagid et al., 2021). Birth asphyxia & low birth weight were common risk factors, reported as 25.6% & 28.8 % respectively (van Lieshout et al., 2107).

**Diagnosis of cerebral palsy:** Clinical observations play a large part in the diagnosis of CP. First of all focus neonatal history of the child is important. Slow motor and neuro development, poor reflexes, and deviant body postures are the main symptoms in a CP diagnosis. There is no single abnormal physical symptom that can be used as a diagnostic tool, multiple symptoms and abnormal movements can be signs of CP (Batshaw, 2002). If there is known brain damage that has been detected through cranial ultrasound, or MRI, the diagnosis is frequently made more quickly. The more severe cases are typically diagnosed by the time a child is 6 months old, while the milder cases take longer. Problems with feeding, sleeping, and temperament are also frequent. Confirmed diagnosis enables family to be prepared for long term management of the child (Bennett, 1999).

**Prognosis & other health related conditions in cerebral palsy:** Unfortunately, there is frequently a "wait and watch" element. At times, CP patients have normal intellectual functioning, but due to orol-motor, fine motor, and gross motor difficulties, their communication skills are compromised; this could affect the child's academic ability and in their social relationships. The degree and number of functional disabilities vary in their impact on survival and quality of life (Hutton & Pharoah, 2002). Limited intellectual functioning, language impairment,

feeding difficulties, severe physical impairment, and history of fits are all contributing factors that reflect the severity of the disability (Katz, 2003). The ability to walk or ambulate their own is one of the most important concerns of the child. Rosenbaum et al. (2002) developed a 5-level Gross Motor Function Measure to create the Gross Motor Functional Classification System. It has five levels: Level I is the ability to move freely; Level II is the ability to move freely without devices; Level III is the ability to move freely with mobility devices; Level IV is the ability to move freely with some restrictions (power mobility); and Level V is the ability to move freely with significant limitations, even with the aid of supportive technology. Prognosis of CP is not as much good due to their multiple health related concerns. Due to their inability to reach typical motor developmental milestones, they have variety of functional limitations, such as motor dysfunction and intellectual impairment, and they typically require assistance in activities of daily living (Molner, 1991). According to Rosenbaum et al. (2007) and Novak, Hines, Goldsmith & Barclay (2012), CP's have multiple issues including motor, cognitive, behavioral, sensory & perceptual developmental delay.

### **Taking care of children diagnosed as cerebral palsy**

**Caregiver:** A family member, friend, or neighbor who provides care to someone who has an acute or chronic condition without any payment in return. Caregivers provide support to disabled who needs help in multiple activities, from self-based activities to medications to tube feeding and other related care. 44 million adults over the age of 18 are estimated to be caregiver, according to recent studies (about one in five adults) (National Alliance for Caregiving and AARP, 2004). Anyone who provide care to a person who is disabled, or has some other condition that needs assistance are known as informal caregivers (Schulz & Tompkins, 2010).

Peoples have the ability to love and care for others from the moment they are born. It is a natural element of being a nurturing person. While it comes readily to the majority of

people, it can be difficult for some. Persons with chronic diseases and with disabilities need assistance. Caring to family member is a rewarding experience that offers benefits beyond the duties, one assumes. Being a caregiver is providing care to another person without anticipating payment or any other sort of reward. The purpose of caregiver is to empower and support the person they are caring for in making responsible decisions. Setting boundaries and limits with both the person receiving care and yourself is a necessary part of caring for someone. As a caregiver, taking care of oneself is essential to the wellbeing of everyone involved (Kent et al., 2016).

Definitions can be narrow or wide, and they have an impact on the subjects of basic and applied caring research. More stringent definitions restrict the eligibility of caregivers to those who meet requirements for the number of hours of care given or assistance with daily care chores. For instance, according to some research, a family member must give at least four hours of care everyday or assistance with one action of daily living (ADL). Other studies only allow people who are the "primary" caregivers to participate. The only need for broader categories is that the care recipient must have some level of disability. It can be advantageous to have a lower threshold for Classifying someone as a "caregiver" in order to draw in a bigger sample, but some of the people so classified may not actually be providing much "hands-on" care (especially with regard to ADLs). This can be a significant problem because research including caregiver with light care- giving obligations may understate the effects of family care-giving (Kent et al., 2016).

**Types of Caregivers:** There are different caregiver roles in many different setups. Although all caregivers share the desire to assist others. The primary caregiving focus is on offering non-medical services to the weak elder, ill, injured, and disabled in the comfort of their homes. The major type of caregiver is a family caregiver, who provides care to member

of their family unconditionally. The other types of caregivers are paid, private, informal, and volunteer ones. Family caregivers are family member who cares for disabled person at home on regular basis. They provide emotional, monetary, nursing, social, homemaking, and other services. Familycaregivers give their time and unpaid services to support their disabled.

Professional caregivers are professionals in the field who are hired for disabled. They offer non-medical or medical care in a facility or at home. Informal caregivers or casual caregiver, an unpaid informal caregiver is someone who has a close personal relationship with the person they are caring for. They are closed family members, friends, or neighbors. An informal caregiver is typically unrelated to the care recipient, which is a small difference from a family caregiver. It has been observed that family members provide care to those in need in family including geriatric population and any disabled child. The committee used the term "care-giving trajectories" to conceptualize the evolution of care giving. Transitions in both the need of disabled and environment of care provision are parts of care-giving trajectories. (Gitlin & Wolff, 2012).

### **Theories on Care-giving**

**Attachment-care giving social bond:** According to attachment theory (Bowlby, 1969), people have an innate psycho-biological system that drives them to seek out the presence of important people especially their mothers when they are feeling vulnerable in order to feel secure (Shaver, 2000). ***Middle range theory of caregiving dynamics:*** Role negotiation, expectation management, and commitment are the three main ideas of this theory. According to Williams (2008), commitment is the ongoing caregiver duty that motivates life changes to place the patient first. According to the **Respite Care theory**, temporary relief from caregiving duties can reduce caregiving stress and increase wellbeing of caregivers (Montgomery et al., 2009). Caregivers encounter burden when they perform caregiving related tasks (Montgomery & Kosloski, 2013).

**Model of Caregivers Stress:** The experience of providing care and the resulting stress process are reflections of a dynamic process. Stressors are defined by Pearlin and colleagues as "tough conditions and challenging circumstances experienced by caregivers" that exceed or put undue demand on an individual's ability to adjust. It has two types: primary and secondary. According to Pearlin et al. (1990) the demands of the caring job itself are the source of secondary stressors, so the primary stressors are directly related to the individual and their handicap.

**Integrative Model of Informal Caregiving (ICIM):** The foundation of this paradigm is the merging of professional burnout and informal caregiving stress (Gérain & Zech, 2019).

**Phases in the Caregiving:** Although the role of care giving is changing day by day. Trajectory of care giving may reflect growing care-giving responsibilities interspersed with episodic occurrences like hospital stays and placement in long-term care or rehabilitation facilities. Although there are recognizable phases in the care-giving trajectory. Continuous problem-solving, decision-making, interpersonal communication and constant vigilance over the welfare of the care recipient are some of the examples of caregivers tasks (Gitlin & Wolff, 2012).

Every aspect of a caregiver's life is affected and may have a negative impact on their well-being too. Caregiving has both negative and positive impacts on life. Approximately 20% of caregivers reported that providing care is challenging for them both financially and physically, and 44% say that it is emotionally challenging. Caregiving is challenging depending on people's need. Caregivers express comparatively higher levels of exhaustion, overwhelmed, and limited time for one's self (Kasper et al., 2013). According to Pinquart and Sörensen (2003), providing care has positive and negative psychological impact on the caregiver, major focus of the research was on the issues linked with caregiving. Individual's intrinsic and extrinsic characteristics also play an important role in caregiving perspective. There is a dire

need to create interventions based publicpolicy to address caregiver's mental health related concerns.

**Caregiver's health status:** Generally speaking, caregivers do not take care of their own health. Higher subjective health status is routinely reported by caregivers for elderly care receivers(Berglund et al., 2015; Pinquart & Sörenson, 2003). A lower degree of correlation exists betweenpoorer physical health of caregivers and depressive symptoms, caregivers burden, hours in care giving, activities performed, time spent in caregiving, behavioral, physical impairments and issuesof the disabled (Pinquart & Sörenson, 2007).

A significant amount of physical difficulties was found in 20% of caregivers and 39% of caregivers of older individuals with high needs. Over 40% of caregivers experienced sleep issues, which were strongly connected with reports of significant negative consequences of providing care(Wolff & Spillman, 2014).

Stenberg et al. (2010) conducted a research based on 192 articles covering caregiving from1990 to 2008 and discovered that common issues for caregivers were sleep deprivation, exhaustion, body aches, physical weakness, poor appetite, and weight loss. The prolonged, persistent stress that caregivers frequently endure can have a severe impact on their health, whichis partly mediated by immunological and autonomic disorders. Every day, doctors and their multidisciplinary teams are exposed to individuals delivering this type of care and have the chanceto intervene (Bevans & Sternberg, 2012). Findings were published in 2013 by Perkins and colleagues, reported that caregivers having high levels of caring strain had a 55 percent higher chance of death than those who did not report any stress. A study by several recent population- based research, however, point to the opposite conclusion also, according to that, providing care is linked with lower risk of death (Langer et al., 2009).

**Need of self-health promoting behaviors in caregivers:** Neglecting one's own health

can exacerbate underlying conditions or make caregivers more susceptible to stress-related issues (Vitaliano et al., 2003). All of these caregiver's health dimensions like worst self-reported health, more unhealthy behaviors, and more use of medical services were linked to higher levels of stressors. Feelings of being burdened served as a mediator between objective pressures and health. These outcomes underscore how crucial subjective assessments of stress and show how vulnerable caregivers are to the impacts of stressors on all the dimensions of health (Son et al., 2007).

The goals of health-promoting self-care practices are to enhance overall wellbeing, preserve optimal functioning, and promote health. Caregivers can take steps to promote their own health and well-being by getting enough sleep, eating a balanced diet, exercising, getting preventive care and finding respite care when necessary (Acton, 2002; Collins & Swartz, 2011).

Previous research findings show that caregivers with higher levels of stress related to providing care had worse physical and mental health, more medical symptoms, high levels of depression and stress. The study found that early interventions to improve functional ability and self-care behaviors in response to symptoms experienced by some caregivers are necessary (Lu, & Wykle, 2007).

Health-risky behaviors for caregivers can include alcohol use (de Nooijer et al., 2003) and smoking. Around 39% of caregivers reported smoking, which is considerably higher than others (Salgado-Garcia et al., 2015). Poor diets, substance abuse, psychological distress and inactive behaviors (Vitaliano et al., 2003) are included in health risky behaviors. They may ignore self-health due to caregiving responsibilities. Limited time and strength for self-care and the disintegration of social networks is also present. Reduced self-efficacy, perceived stress, and higher caregiver load were linked to a general decline in health promoting behavior practice (Son et al., 2023). In a research on caregiver's physical health it was seen that about

one-third missed their own medicine doses frequently, and nearly half missed their own doctor's appointments (Piette et al., 2010). Salgado-Garcia et al. (2015) found that in a different sample of caregivers 40% of them admitted to quit smoking, and 25% of them said they had recently started more smoking.

Miserable caregiver's health behavior is more common in females, older & younger (Wang et al., 2015). The connection between providing care and healthy habits and self-care, however, is nuanced. Research demonstrates that stress, sadness, and burden affect health-related behaviors. Risky health behaviors are more likely to be reported by caregivers having higher stress level (Sisk, 2000; Zarit, Bottigi & Gaugler, 2007). Negative health behaviors of caregivers are linked with worse condition of ill person (Rabinowitz et al., 2007). Higher depression ratings are linked with caregivers who smoke more (Salgado-Garcia et al., 2015). All the time keeping record of the medicine for patients, multiple appointments schedule by the caregivers and increased dependency in daily living activities are linked with self-neglected behavior of the caregivers (Wang et al., 2015). According to Martindale-Adams et al. (2015), those caregivers who even spend limited time in taking care also utilize more medical services for them. It was reported that as compared to caregivers with higher subjective burden, individuals who perceive less subjective burden engage in more health-promoting behaviors (Sisk, 2000). Adopting healthy behaviors for caregivers and feeling competent to handle challenges of caregiving are connected. Higher self-efficacy in managing distressing thoughts and getting breaks are linked with less risky health behaviors and more participation in healthy behavior (Rabinowitz et al., 2007).

Changes in family connections plays an important role while caregiving, including those with a spouse, kids and other near relatives. Socialization and family support from a larger network are dire need of caregiving. There may be a decrease in the time and effort spent fostering social connections, which can lead to social constriction over time and isolation

(Hajek, 2021). Hence, moments of helplessness and a corresponding sense of being alone were found to be the primary causes of feelings of loneliness. However, feelings of loneliness were also felt in the absence of others and in the presence of their support indicating that a variety of situations can contribute to feelings of aloneness (Vasileiou et al., 2017).

The pressure of providing care can also affect family relationships and quality of life. According to Amirkhanyan and Wolf's (2006) the negative psychological effects of caring is not limited to the primary caregivers but rather affect the entire family. It may take some time for negative effects to become apparent because according to Bookwala (2009) caregivers are unhappy in their marriage life mostly depends upon length of caregiving role.

Conflict, arguments, and adversity in the caregiver's family were known to have a direct impact on caregiver strain. In particular, family conflict was found to partially moderate the effects of caregiver income and caregiver-care receiver relationship, as well as the effects of caregiver's mental health and educational level on caregiver's stress (Scharlach et al., 2006). Research findings showed a negative correlation between the difficulty of caring for family members and depressed symptoms in those who receive social support. The connection between social support and depressive symptoms were somewhat mediated by the caregiver burden. Increasing social support, keeping an eye on health, and implementing planned interventions are all important ways to help family caregivers manage their caregiving responsibilities and lessen their depressive symptoms (Zhong, 2020).

**Risk factors associated with caregiving:** There are many risk factors associated with caregiving i.e, caregiving time, sex, relationship (wives are more affected than husbands are), and awkward behavioral symptoms of the patients. In population-based studies, the level of caring intensity has been demonstrated to be a reliable predictor of detrimental psychological impacts. According to Cannuscio et al. (2002), an increase in caring time commitment was associated with an increased level of depressive or anxious symptoms. Women, who cared for

a sick or disabled spouse for 36 hours or more a week, experienced depressive or anxious feelings at a rate that was almost six times higher than that of non-caregivers. Caregivers who gave extensive care for prolonged period, experienced higher level of psychological distress; more women than males were found to be affected. The longer a person spent providing care each week, the higher they are experiencing distress (Hirst, 2005). According to findings from recent systematic review females reported higher levels of psychological discomfort than male caregivers, women experienced lower level of mental well-being and higher level of burden and depression as compared to men in their meta-analysis of 229 researches. Disparities in caregiver stressors, such as longer weekly caregiving hours and a higher proportion of caregiving responsibilities carried out by women have been implicated in explaining gender variations in depression (Pinquart & Sörensen, 2006).

A negative impact on caregiver is also linked to behavioral symptoms of care recipients, such as agitation, irritability, and aggressiveness (Gitlin et al., 2012). Van der Lee and colleagues (2014) found that care recipient issues such as difficulty sleeping, refusal to take help, and verbal and physical aggression are major causes of caregiver burden and depression than the care recipient's cognitive or functional status. Additionally, Pinquart and Sorensen (2003) discovered that behavioral issues had a higher effect on caregiver stress and depression than physical and cognitive deficits did. According to Torti et al. (2004), behavioral issues are linked, in both cultural and geographical contexts, to caregiver burden. According to Hinton and colleagues (2003), family caregivers of Latinos with cognitive impairments who experience behavioral issues are more likely to experience depressive symptoms; however, this relationship is strongest among caregivers who are not spouses.

**Caregiver Burden:** Caregiver Burden (CB) is a multifaceted response to providing care that encompasses issues that are social, psychological, emotional, physical, and economical (Kasuya et al., 2000). Burden is the stress or load that a person has when taking

care of a family member who is disabled, or chronically sick. Understanding the traits associated with caregivers load is essential, as it affects both the caregiver and the person receiving care (Stucki, 2000). Caregiver burden denote to the level of stress felt by people who are caring for another disabled or ill person, typically a family member with some kind of illness (Kim, Chang et al., 2012).

Level of stress caregiver experiences because of providing long-term care to the family member is known as caregiver burden. According to the literature, self-perception, multifarious strain, and over time are the three main characteristics of caregiver burden. The study indicated that lack of social activities, tackling multiple responsibilities, and limited financial resources are the root causes. The negative effects leads to caregiver burden, poor quality of life and poor physical and mental health (Liu et al., 2020). Caregivers often quit their regular jobs due to taking care of their closed ones that affect them financially. 18% of caregivers reported that it leads to financial stress (National Alliance for Caregiving, 2005). Caregivers need psychological, physical and spiritual support as well required self-care, assistance in daily activities, emotional support, and medication monitoring (Toseland et al., 2001). Caregivers have spouses, kids, or relatives, and have to execute multiple roles, and they struggle to balance between these roles while fulfill caregiving responsibilities (Stamataki, 2014). Caregivers who are involved in long-term care of others typically experience caregiver strain (Park et al., 2012). According to Goldstein et al., (2004), caregivers with limited social networks are more likely to feel burdened. Even in cases where caregiver burden was reduced due to social support, there is an improvement in symptoms related to caregiver burden (mood & coping) (Adelman et al., 2014). According to a study by Given et al. (Given et al., 2011) quality of life is affected by caregiver's level of stress. A caregiver's physical and mental health, their perception of child's condition, have an impact on the child's physical and mental health (Chou et al., 2000). They give all their time to the child and due to limited time, caregivers

frequently neglect their own health, when they suffer from some health issue, they do not take medical treatment (Song et al., 2011). Caregivers of developmental disabled children are burdened due to lifelong caregiving. Compared to fathers, mothers felt more burdened as caregivers. Parents of neurodevelopmental disabled children reported higher levels of caregiver burden. Mothers of down syndromes and with numerous other disabilities reported more burden (Roper et al., 2014). Parental and child-related factors influence caregiver strain. The majority of parents have high level of caregiver load, high levels of social support, moderate to severe sadness, weariness, anxiety, and poor sleep quality. The characteristics associated with the parent's burden are, minimum educational level, disturbed sleep patterns, depressive state, anxiety, limited social support, child's issues, such as treatment kind and duration. 73.5% of the caregiver burden experienced by parents could be described by the effective predictive parameters (Ozdemir Koyu, 2021).

### **Burnout**

Roskam et al. (2017) described parental burnout as a condition of extreme emotional tiredness associated with parental duty, which involves emotional detachment from children and uncertainties about the ability to be a good parent (Roskam et al., 2017). According to the findings of the research, when parenting-related stress becomes chronic, it can result in parental burnout, a severe tiredness that makes parents feel distant from their kids and uncertain about their parenting skills. According to Mikolajczak, Gross, and Roskam (2018), this kind of burnout increases parental harm, thoughts of harming the child, and neglect.

Globally, parental burnout is on the rise, mostly in societies where parents are held to high standards. In contrast with depression, parental burnout may have a special impact on a child's development (Yakupova & Suarez, 2023). Among caregivers of CP children, burnout was linked with higher level of parental stress and lower level of social support (Seo, Lee, & You, 2017). An intense tiredness is connected to parental position, emotional distance from

kids, and a feeling of inadequacy as a parent are the hallmarks of parental burnout (Mikolajczak, Gross, & Roskam, 2019).

### **Psychological distress**

Mirowsky & Ross, (2002) stated that it is a state of emotional pain denoted by the symptoms of depression, anxiety & stress. The broad idea of dysfunctional psychological functioning in the face of stressful life circumstances is known as psychological distress (Abeloff et al., 2000).

A person is psychologically distressed when mental functioning is affecting the functionality of all other domains of life, i.e. social domain, emotional domain, and occupational domain. Depression, anxiety, and stress are manifestations of psychological distress (Cairney, et al., 2007). Psychological distress is mostly caused by stressful events that affect an individual's physical or mental well-being. Adapting, coping, and battling life's challenges in the form of psychological distress are typically observed following significant stressful events. One of the main causes of psychological distress is the incapacity to manage these pressures and emotional issues (Horwits, 2007).

Psychological distress is characterized by feelings of anxiety, melancholy, irritability, self-consciousness, and emotional vulnerability. It is widely associated with physical morbidity, decreased life quality and duration, and higher health care utilization (Lahey, 2009).

The complex coexistence of depression, stress and anxiety is psychological distress. A complicated and multifaceted concept, psychological distress is defined as the existence of internal or external stressors that result in an adverse psychological state and high levels of emotional fatigue. The symptoms of sadness, anxiety, and stress are all considered psychological distress (Varela, Pereira, Pereira, & Santos, 2017). Stress, strain, and discomfort are frequently present in the context of psychological distress, which is rarely characterized as

a separate category. This causes uncertainty for caregivers who are trying to provide care to the patients (Rinder, 2004).

**Sense of Coherence:** Components of sense of coherence (SOC) are understanding, managing, and meaningfulness. It indicates an individual's ability to cope with daily stressors of life (Super et al., 2016). Self-acceptance, personal development, a sense of autonomy in one's thoughts and actions, the capacity to successfully manage activities, and meaningful parts of life are all components of psychological well-being (Ryff & Singer, 2008). Sense of coherence, is strongly correlated with psychological features, including stress and behavioral elements. Sense of coherence scale is only useful predictor for health that is assessed by adding psychological components (Flensburg-Madsen et al., 2005). SOC is highly connected with the psycho-emotional resistance resources (Volanen et al., 2004). The SOC theory is helpful in understanding the psychological adaptation in caregivers of intellectually disabled (Olsson et al., 2002).

The components of the sense of coherence include the capacity to comprehend life's events (Sense of comprehensibility), the sense of manageability, and the sense of meaningfulness. It has been demonstrated that sense of coherence is valid, dependable, and applicable across cultural boundaries (Eriksson & Lindstrom, 2005). Rather than being a fixed personality trait, the sense of coherence is better understood as an ongoing process (Eriksson & Lindstrom, 2005). According to research, the sense of coherence may develop throughout life and become more prevalent as people become aged (Nilsson et al., 2010). Sense of coherence is also generally greater in men than females and inversely correlated with depressive symptoms (Dezutter, Wiesmann, Apers, & Luyckx, 2013). Having a strong sense of coherence helps people gather the tools they need to deal with stress and adapt to change (Mittelmark et al., 2022). The attributes of the sense of coherence are manageability (behavioral element), meaningfulness (motivational element), and comprehensibility (cognitive element) (Griffiths

et al., 2011). The idea of "comprehensibility" relates to the process of making sense of both internal and external components through rationalization, which makes the components predictable or makes it possible to use problem-solving techniques. The sense of whether the difficulties faced are considered worthwhile is known as meaningfulness (Januszewski et al., 2011). Salutogenesis, according to Schnyder et al. (2000) is centered on preserving health in the face of unfavorable stresses. Salutogenesis is concerned with the causes and assets of health.

The Salutogenesis model centers on SOC, which is shaped by an individual's experiences in life. As a result, it addresses the elements and resources that contribute to good health and wellness. General resistance resources (GRR) are tools that people utilize to build their sense of coherence and are strategies they employ to reduce stress during difficult situations (Bhattacharya et al., 2020). GRR include money, knowledge, self-esteem, and social support or support networks (Vaandrager, 2013). Braun-Lewensohn and Mayer (2020) elaborate that sense of coherence is an appraisal of the environment to utilize the available resources and to cope with a stressful event or situation. (Lindstrom et al., 2006). Sense of coherence is an individual's ability of being resilient when facing stressors. The sense of coherence measures the ability to utilize the proper coping strategies. Individuals with high scores in SOC, effectively apply strategies to encounter stressors, while individuals with low sense of coherence show different response (Schnyder et al., 2000).

Sense of coherence worked as a mediator in enhancing wellbeing of the individuals. Mediation analysis indicated that sense of coherence was directly related to the mental health components. Sense of coherence is a process that effect the mental health, which has an impact on wellbeing (Ericksson, 2022). It was concluded from Jiang Qianjin's stress system model that sense of coherence is a potential mediator. Model proposes that there are many mediating variables like sense of coherence, social support, psychological factors between stressors and

stress reactions(Qianjin, 2005).

**Social Support:** The support by the social settings in the surroundings of any person is their social support. The environmental structural measures address social support as basic element for existence. The functional dimensions of support exemplify the stress-buffering concept, while structural support demonstrates a linear relationship with quality of life. (Helgeson, 2003). Parental psychological health is impacted by the social support they receive from the environment. The psychological health of parents are effected by their children's dependence on them, and social support from friends and family (Raina et al., 2005). Receiving support from others in one's immediate vicinity, such as family, friends, and coworkers, is another definition of social support(Schwarzer et al., 2005).

Close and caring relationships, health, and well-being is definitive across all stages of the human life cycle. However, there is a lack of comprehensive understanding on the precise mechanisms by which close relationships contribute to the enhancement of overall well-being (Feeney et al., 2015).

Social support is a multifaceted concept that may be examined from various angles. Recognizing the construct's bi-directional nature and drawing conclusions from a range of disciplines can aid in mapping it. The process of becoming bi-directional necessitates paying attention to moderators like gender, cultural shift, and personal growth in addition to the dynamic between the support provider and the recipient (Sarason et al., 2009). Previous research findings indicate that parents' attitudes about their child's disability have a significant impact on the child's psychological well-being. While some parents view their disabled children favorably, they may choose to nourish differently from other parents. The majority of parents believe that up bringing a child with cerebral palsy can be demanding, stressful, and dependent on social assistance. In CP, severe parental distress and lack of social support are associated with a higher level of disability level. Parental distress and social support have a negative

correlation (Al-Gamal & Long, 2013).

Social support mediated the negative effect of burnout and effect on health of the individual (Ruisoto et al., 2021). Mediation analysis suggested that social support partially mediated the relationship between caregiver burden and quality of life. It revealed that social support is an important factor (Marsack-Topolewski, 2021).

**Stress Buffering Model:** Cohen's (2004) Model states that social support plays a significant role in reducing the negative effects of stress on an individual's health. Social support lowers the harmful impact of stress by assisting people in maintaining or regaining their strengths, especially when they are experiencing difficult life events or are under stress. Literature supported the context that social support mediate between burnout and psychological well-being. Social support helps to reduce life exhaustion and increases mental well-being. Consequently, social support improves people's mental health, including psychological well-being, in addition to assisting in the reduction of life stressors (Rehman et al., 2020).

The Independent Model given by Ensel and Lin (1991) suggested that social support, regardless of the degree of stress experienced, might benefit people by enhancing their well-being or by protecting them against distress. Wheaton (1985) provides evidence that social support functions as a stand-alone stress reducer. On the other hand, feeling alone could lead to discomfort if there is a perception of a lack of social support, perceiving lack of social support may increase the likelihood of distress (Segrin et al., 2003).

Bronfenbrenner's, (1979) socio-ecological model of health asserts that there are several layers that affect an individual's health. Personal basis, inter-personal relationships, social factors, organizational environment, and government-based aspects are important. Using this socio-ecological model it was studied that theoretically, the characteristics of the caregiver, interpersonal relationships, social support, and the supportive environment all have an impact

on the caregiver burden ( Vadivelan et al., 2020).

### **Mental wellbeing**

The capacity for creativity and adaptability in navigating life's ups and downs is a sign of mental well-being. It concerns with our feelings and opinions. Understanding our own emotions and perspectives as well as those of others is necessary for it. Control over emotions and related behaviors are necessary for this. With this knowledge, people manage stress and build wholesome relationships (Peterson, 2018).

**Tripartite Model of subjective wellbeing** describe wellbeing as person's quality of life in terms of three elements, life satisfaction, positive and negative affect (Diener & Ryan 2009).

Positive psychological functioning, positive interpersonal relationships, and self-realization are generally acknowledged as expressing two (a) the subjective experience of happiness (the impact)and enjoyment of life; and b) both of these viewpoints. The second one comprises competence, self-acceptance, autonomy, pleasant interpersonal interactions, and the capacity to grow personally(Greenberg & Seltzer, 2011).

The cultivation of one or more of the five components, positive emotion, engagement, relationships, meaning, and accomplishment, makes up wellbeing (**PERMA Wellbeing Model**). According to Forgeared et al. (2011), these five components represent the exact representation of what people seek out for their own sake. Parents of children with cerebral palsy (CP) have significantly worse psycho-social well-being. They also report poor satisfaction in life and higher anxiety and depression levels (Cheshire et al., 2010). The delivery of rehabilitation services has undergone a paradigm shift in recent decades, with the family-centered approach emerging as the "gold standard" model of care (Kuhlthau et al., 2011).

## **Positive Psychotherapy**

The humanistic and psychodynamic approaches for diagnosis and treatment have influenced the relatively new therapeutic method known as positive psychotherapy (PPT). Its main goal is to help people to shift their attention from what they perceive as "wrong" or their negative traits to their positive and desirable traits. Therapeutic approach that aims to realign the therapeutic approach is positive psychotherapy (Rashid & Seligman, 2018). Its goal is to support individual's in using inner resources to overcome obstacles, comprehend and recognize areas of growth, and work towards resilience and improved wellbeing (Rashid, 2015).

### **Martin Seligman's Positive Psychology**

Martin Seligman was originator in the field of positive psychology. According to Seligman's original theory, people have three essential psychological needs: need of experiencing pleasant emotions, participate in meaningful activities that give their lives meaning and purpose, and maintain healthy interpersonal relationships. Thereafter, two more demands were identified: pursuing and savoring successfulness and accomplishments, and identifying meaning and satisfaction in our work (Seligman, 2011).

### **Theoretical Perspective**

There are five fundamental theories behind positive psychotherapy in enhancing wellbeing. First is **self-determination theory**, which elaborates that growth and development are driven by three fundamental psychological demands that all people have: connectedness, autonomy and competence (Deci & Ryan, 2009). Second is **broaden & build theory**, which describes how happiness emotions increase a person's repertoire of thoughts and actions, which gradually increases their personal resources. Positive emotions broaden thought processes and build personal resources. For disorders like depression or anxiety, fostering positive emotions

can counteract negative thought patterns and improve resilience. (Fredrikson, 2013).

Third is **wellbeing theory**, Seligman's attempts to address these important topics with his PERMA theory of well-being. Positive emotion, engagement, relationships, meaning, and accomplishment are the five building blocks that facilitate flourishing (Seligman, 2011). Fourth is **strengths theory** (Practor et al., 2011) based on the concept of inner strengths an individual have. When combining all the four theories the ultimate result will be the growth of individual's well-being and the chance to prosper a person's life. Focusing on caregiver's strengths and positive emotions heighten sense of purpose and wellbeing (Seligman & Csikzentmihalyi, 2014). Fifth is **mindfulness-based interventions**, based upon cultivating mindfulness that reduce stress and enhance wellbeing (Kobat-Zin, 2003).

Lyubomirsky and Layous (2013) proposed the positive-activity model to explain how and why engaging in positive activities can improve wellbeing. They concluded that engaging in such activities promotes the satisfaction of fundamental psychological needs, including those for autonomy, connectedness, and competence, as well as an increase in positive emotions, thoughts, and behaviors. As per their model, the degree to which well-being is improved will be determined by characteristics of the activity (like social support or dosage) as well as characteristics of the individual (like motivation or efficacy beliefs).

Positive psychology is the study of three domains related to three facets of life. Positive feelings about the past, present, and future are the focus of the first domain, "pleasant life." Contentment, closeness, and mental tranquility are among the positive feelings of the previous life. Hope, optimism, and trustfulness are the positive feelings regarding the future. A "pleasant life" is defined as a life that has a net rise in happy feelings and a net decrease in negative ones. The term "engaged life" relates to the second domain, which emphasizes virtues and strengths that are positive aspects of each human. Strengths are those attributes, like tenderness, common sense, and the ability to love and be loved, people from all backgrounds and countries have

always valued that. "Meaningful life" is the third domain of positive psychology, focusing on the sense of service and belonging to positive organizations and communities. The idea behind this domain is that positive emotions and traits can flourish in these kinds of environments, leading to a meaningful existence (Seligman et al., 2005).

Within positive psychology, positive psychotherapy (PPT) is an attempt to expand the application of conventional psychotherapy. Its fundamental idea is that to treat symptoms & to treat psychopathology and it addresses the positive resources of the client, such as positive emotions, character traits, and meaning. Putting an emphasis on positive resources could be most beneficial for patients during difficult times rather than easy ones. In psychopathology there are more focused towards negatives. It is ingrained in the mind to pay attention to and to react towards positives. (Rashid, 2020). Positive psychotherapy integrates symptoms with strengths, weaknesses with values, and hopes with regrets in a way that is more balanced than other psychotherapy approaches (Rashid, 2015).

In contrast to conventional depression interventions, positive psychotherapy (PPT) enhances positive mood, engagement, and meaning instead of immediately focusing depressive negative symptoms. It is considered life-changing" therapy. When positive psychology based interventions were given, it reduced depressed symptoms for a minimum of six months as opposed to placebo interventions, which had effects that vanished in less than a week. All of these findings has potential benefit of adding exercises that specifically promote positive feeling, engagement, and purpose to depression treatment (Seligman, Rashid & Parks, 2006).

The foundation of positive psychotherapy was the PERMA model. Each component's initial character creates the well-known acronym "PERMA," which also denotes the PERMA model, also known as the flourishing model (Seligman, 2011), a novel theory of psychological health. According to Rashid and Seligman (2013), PPT makes the assumption that a deficiency

or absence of these five components can be viewed as a pathogenic agent that causes depression.

Until now Positive Psychotherapy (PPT) as a standalone cohesive treatment model using the PPT manual (Rashid & Seligman, 2018). Twenty studies have tested it in an effort to gather empirical proof of its efficacy and effectiveness. Research has already been done on a range of clinical conditions. A range of clinical disorders, including depression, anxiety, psychosis, borderline personality disorder, and nicotine dependence, were the focus of the majority of group-based studies (Seligman, Rashid, & Parks, 2006).

Above-mentioned theories support the assumption that positive psychotherapy is effective in promoting wellbeing among caregivers by nurturing positive emotions, enhancing self-reliance and self-determination, building social relationships and reducing psychological problems through mindfulness.

Keeping in mind the all perspective mentioned above, it was assumed that there must be some relationship exist between caregiver burden, burnout, psychological distress, social support, sense of coherence and wellbeing among caregivers of CP's. It was elaborated above that caregivers of cerebral palsy children required some rehabilitation also. Through positive psychotherapy, the psychological issues of the caregivers of CP's can be addressed in a positive way.

## Literature Review

Numerous psychosocial processes are present in each person to modulate the effect of stress on health and well-being. There are endless range of situations exist in which stress can arise and be managed, depending on the attribute of the caregiver, the person receiving care, past experiences, and the economical, community based cultural contexts in which they live. However, the role itself has consequences that contribute to the explanation of some typical patterns of stress and stress outcomes (such as a decline in emotional well-being and a worsening self-concept) in caregivers. People usually have several roles in their lives, like family role and role in offices or at work. Taking the job of a caregiver for a child with a long-term impairment involves rearranging priorities and refocusing energy, as noted by Eisenberg & Scarr (1993). Five themes emerged from research on parents and caregivers of disabled children: (i) the stress of caring; (ii) the detrimental effects on caregiver's health; (iii) sharing the load; (iv) apprehensiveness; and (v) caregiver coping techniques (Liew et al., 2003). From the caregiver's perspective, 41% elaborated that throughout the previous year, their health had gotten worse. Caregiver health may benefit from interventions that address these problems (Murphy, Christian, Caplin & Young, 2007). According to assessments, women and individuals who care for their children for longer periods had worse mental health (Byrne, Hurley, Daly & Cunningham, 2010).

In a research on caregivers of cerebral palsy, it was analyzed that caregivers of CP's experienced moderate to severe psychological and social problems. 42% parents of CP's were considered burdened (Parkes & White et al., 2008). There is an increase in anxiety and depressive symptoms in parents with CP due to child's conditions. The frequency of mental problems in parents are influenced by variables including the socioeconomic status and level of functionality of the disabled child (Barreto et al., 2020). Dahlbeck's (2009) research

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indicates that CP's parents experience higher level of stress. Both mothers and fathers feel stressed, although women' levels were higher than males' (Petersen et al., 2020). Parents of cerebral palsy patients may experience increased stress due to the difficulties posed by their children's limited activities and participation restrictions (Park & Kim, 2020).

The hallmark of cerebral palsy syndrome is decreased motor function; many children with this developmental illness are having intellectual, sensory, and communication deficits, as well as complex limits in self-care duties. Providing care for a young CP child is a difficult aspect for parent, when a child has functional limits and having long-term dependency. Effectively managing child's chronic health issues and at the same time balancing the specific care-giving duty with the demands of daily life is the biggest challenge parents are facing. CP child's behavior and caregiving demands has significant impact on the psychological and physical well-being of caregivers, specifically on mothers. Behavior issues in children is a significant predictor of the psychological problem in parents. Demands of providing care had a direct impact on the caregiver's physical and mental well-being. Parents had difficulties because of the daily-based child's practical demands. There is a need of social support for caregivers. Strategies are needed for maximizing caregiver mental health concerns in families having cerebral palsy include stress management and self-efficacy approaches, as well as supports for behavioral control and everyday functioning activities. There is a need of family-centered bio-psycho-social frameworks for caregivers rather than merely technical, brief rehabilitation interventions that are only child-centered. Giving parents behavioral and cognitive coping mechanisms to control their child's behavior may have a supporting role on caregiver health outcomes in the long run (Raina et al., 2005).

**Caregiver burden in caregiver's of cerebral palsy children:** Caregiver burden (CB) encompasses issues that are social, psychological, emotional, physical, and financial (Kasuya, Polgar-Bailey, Takeuchi, 2000). It was discovered that parents of CP children with low

functional status have greater levels of caregiver burden. According to Kaydok, Solum, and Cinaroglu (2020), mothers of children with cerebral palsy who also has secondary difficulties has much higher caregiver burden than mothers of children without such problems. Social support, which is a significant element in the stress that mothers of CP's face, might be viewed as an intervening variable that can help to lessen that burden (Kim et al., 2009). Parents of intellectually disabled CPs & hearing impaired in Pakistan have reported caregiver burden. Parents of children with intellectual disabilities face greater responsibility and stress because of cognitive deficiencies (Imran & Waqar, 2020). In caregivers of cerebral palsy, the caregiving burden is a major ignored issue. Along with the psychological problems, the parents experience social isolation, stigmatization, and restricted social activities. They become source of conflict within family and society. They experience bodily stressors, body aches, pain in the musculoskeletal system, loss of sleep and high blood pressure. Consequently, it is imperative to comprehend and tackle the often-overlooked issue of caregiver burden (Thrush & Hyder, 2014).

Due to the intense physical demands of providing care, the mothers experience aches and pains. They also experienced guilt due to child's state of illness. They were severely financially burdened because of their inability to balance job and family obligations. They also felt that there was lack of information and awareness regarding their child's treatment alternatives. In terms of interpersonal support, the mother's husbands and relatives did not provide them with the necessary care. In addition, they had to endure the negative consequences of their husbands' drunkenness and domestic abuse. They were forced to make accommodations for their other children who are without cerebral palsy as well as for the other members in the family. The mothers felt alone and unsupported by the people in the community. Due to not attending social-gatherings and isolation they are experiencing discrimination. Environmental stressors, such as the absence of inclusive public setups, limited public transports, and unwelcoming work schedules and surroundings were significant sources of hardship. The mothers believed that there is no program for contacting with some other mothers bearing a comparable burden and the government's assistance for disability benefits was

woefully inadequate. In a middle and low-income countries, caregivers of CP's face particular challenges that must be addressed to ameliorate the quality of life. These challenges include stigmatization, limited finance and non-inclusive public policy (Vadivelan, Sekar et al., 2020). Five themes emerged from research on parents and caregivers of disabled children: (i) the stress of caring; (ii) the detrimental effects on caregiver's health; (iii) sharing the burden; (iv) apprehensions; and (v) caregiver coping techniques. 41% of caregivers reported worse health throughout the previous year. Caregiver health may benefit from interventions that address these problems (Murphy, Christian, Caplin & Young, 2007). According to assessments, women and individuals who care for their children for longer periods had worse mental health (Byrne, Hurley, Daly & Cunningham, 2010).

### **Caregiver burden & Positive Psychotherapy**

It is conceivable that character strengths may also be connected to other reactions to stress, such as caregiver burden, given that some character strengths have been linked to lower stress and fewer psychological issues, such as depression and anxiety. Caregiver burden has a negative correlation with wellbeing and a positive correlation with anxiety and depression. Moreover, it has been proposed (Duan 2016; Li et al. 2017) that character strengths might serve as buffers against stress and mental health issues. Therefore, it's feasible that some character traits could also act as a buffer against caregiver stress, meaning that caregivers who exhibit these traits would be less stressed. Previous studies' findings suggested that hope-based interventions could increase feelings of positivity and lessen perceived negative effects.

**Burnout in caregivers of cerebral palsy children:** Primary caregivers of cerebral palsy patients reported burnout due to child's difficulties as compared to non-parents of challenged children. It has been determined that the following elements contribute to caregiver burnout: children's ambulatory status, speech difficulties, father's' lack of interest, and the existence of chronic disease and suffering. The psychological & physiological well-being of

caregivers has a direct negative impact on the child (Demirhan et al., 2011). The statistical significance of emotional exhaustion and personal accomplishment ratings derived from the burnout questionnaire indicated that caregivers of cerebral palsy (CP) children having high levels of burnout, which ultimately leads to an unavoidable decline in quality of life (Basaran et al., 2013). In Pakistan, previous research reported the connection between burnout, mental health issues, and psychosocial stressors in CP's caregivers. The findings revealed that among CP's mothers, psychosocial stressors like burnout, poor social support, and poor self-regulation was positively correlated with depression, stress, and anxiety (Naeem et al., 2018).

A particular syndrome known as "parental burnout" is seen due to prolonged exposure to ongoing parenting stress. It includes three aspects: a sense of helplessness in parenting duty, an intense tiredness connection to one's own role, and emotionally distant from children. In order to improve preventative and intervention strategies, health care professionals should keep in mind the relevant parental burnout related issues. The association between parental burnout and multiple personality characteristics from five categories (sociodemographic, child particularities, stable parent attributes, parenting, and family functioning) was examined. They first looked at the degree to which these potentially significant risk factors were correlated with burnout in 862 parents. Next, they looked at how much of the overall explained variation and their respective predictive weights were for burnout. According to the findings, parenting a disabled, family functioning, and steady parental qualities are the three key elements that predict parental burnout (Mikolajczak, Raes, Avalosse, & Roskam, 2018).

A population of 69 mothers of disabled were analyzed to examine the association between major factors contributing to parental burnout. Personal resilience was more predictive of helplessness than coherence, as a measure of tiredness. (Kwiatkowski, Piotr; Sekulowicz, Malgorzata, 2017). According to research, parental burnout is a severe fatigue that makes parents feel aloof from their children and doubtfulness of their parenting skills can develop

when the everyday stress of parenting turns chronic. Parental neglect, harm, and thoughts of being escaped can all increase due to this kind of burnout, which can have detrimental effects on both the parent and the child (Mikolajczak, Gross & Roskam, 2019).

In a research on 115 patients, of which 56.5% were boys and 43.5% were girls. Mothers accounted for 96.5 percent of the 111 children's primary caregivers. Disabled child include hemiplegia (20%), tetraplegia (43.5%), and diplegia (27.8%). Burnout inventory sub dimensions measurement scores were as depersonalization: 3.81, emotional exhaustion: 12.21, and decreased personal accomplishment: 23.25. Emotional exhaustion was associated with both chronic illness (31.3%) and pain (69.6%) and the children's ability to walk. Depersonalization and fathers' lack of involvement (27%) was associated. Emotional fatigue and depersonalization was associated with speech disorders. Factors that contributed to caregiver burnout included chronic pain & illness, fathers' negligence, children's walking status, and speech disorders. The child is impacted by the caregiver's physical and psychological well-being (Demirhan et al., 2011).

The study's findings showed that those mothers of children with medical complexity who were actively participating in particular forms of social support were able to lessen their feelings of loneliness and parental stress. The aforementioned results recommend that community-based social support is essential to decrease parental burnout among mothers of mentally disabled children (Yamoah & Brown, 2023).

### **Positive psychotherapy & Burnout**

Empirical research has demonstrated that positive psychology interventions, or PPIs, significantly improve people's mental health and well-being. To help people cope with psychological states like stress, burnout, and anxiety, these techniques can be used to emphasize and amplify positive emotions (Meyers, van Woerkom, and Bakker Citation 2013).

According to earlier studies, positive psychological interventions can improve an individual's wellbeing and reduce burnout (Su-Keene & DeMatthews, 2022).

**Sense of Coherence in caregivers of cerebral palsy children:** Parents of children with cerebral palsy reported lower levels of sense of coherence and pathetic meaningfulness in their lives. Avoidance, wishful thinking, and resignation were more common among parents with low sense of coherence. Additionally, they used distraction as a type of avoidance-oriented approach and the emotion-oriented coping (Dabrowska, 2007). According to earlier studies, parents of disabled children with poor sense of coherence more likely to experience depression (Olsson & Hawang, 2002).

The study found a connection between fathers' sense of coherence and the kind of developmental problem their child had. Fathers with high SOC level were more likely to utilize playful problem solving, positive reappraisal, and confrontation, whereas fathers having low SOC mostly use avoidance tactics. The study's findings suggest that caring for a challenged child may reduce self-esteem, which may make it harder to handle stress (Gugała et al., 2019). Additionally, they used distraction as a form of avoidance-oriented style and the emotion-oriented approach. Findings demonstrated that caring for a CP child is a possible source of chronic burden, which could lead to diminish state of consciousness and low level of sense of coherence (Dabrowska, 2007).

### **Sense of coherence, psychological distress, burnout & wellbeing**

Sense of coherence worked as a mediating role in enhancing wellbeing of the individuals. Mediation analysis indicated that sense of coherence was directly related to the mental health components. It was concluded that sense of coherence is a psychological process that improves mental health, which in turn affects physical health (Ericksson, 2022). Higher sense of coherence level was linked with improved mental health outcomes and lower levels of

subjective caregiver strain. Findings imply that sense of coherence is a critical factor in determining caregiver wellbeing and may shield caregivers from severe psychological distress and massive caregiver burden (Del-Pino-Casado et al., 2019). Higher sense of coherence level is linked with lower risk of a number of health issues and may shield people from stress. (Jaracz et al., 2012). Sense of coherence seems to be a significant reaction in reducing perceived burden, particularly in cases of depression symptoms (Chumbler et al., 2004). The functional limitations of a patient in their everyday activities is a reliable indicator of the caregiver's workload. High coherence appears to provide a buffer against the load. These findings may suggest that, despite caregiving responsibilities, caregivers who find their work fulfilling & controllable were less adversely affected by caregiving (Potier et al., 2018). Previous research reported that sense of coherence worked as a mediating role between psychological burden and burnout (Wilczek-Rużyczka et al., 2019).

### **Positive psychotherapy & Sense of coherence**

An investigation was conducted into the effects of positive psychotherapy on the psychological well-being, resilience, sense of coherence, and self-efficacy of nurses working in social security hospitals. Positive psychotherapy dramatically improved the psychological well-being, sense of coherence, and resilience in nurses (Asl & Parooie, 2021).

**Social Support in caregivers of cerebral palsy children:** Social assistance plays a crucial role in mitigating and preventing the stressful circumstances that families face while caring for CP's. According to the study, most parents of CP's with high stress level also felt that their children received little social assistance. As a result, previous research may offer recommendations to healthcare professionals on how to best support individuals in adjusting to the challenges (Alias & Azzizan, 2020). Nonetheless, it appears that not much work has been done to record primary caregivers' experiences over the course of a diagnosis. The findings of

present research will affect policy in terms of enhancing the welfare of primary caregivers, particularly mothers of cerebral palsy children.

As compared to mothers of bedridden CP children, the mothers of CP's with cognitive deficits and who can walk experienced greater strain. The results make clear that the mother's perception of burden can be significantly decreased by supports like brief stays and home care (Moriwaki et al., 2022). According to Skok et al., (2009), social support was considered to be having mild to moderate role in mediating the effect of stress on mothers of CP's.

Thus, it was determined that informal caregiver's quality of life, social support system, and burden level were all significantly impacted by raising a child with cerebral palsy. In addition, the unpaid caregivers experienced a high degree of life satisfaction, excessive strain, and moderate level of social support, mostly from family and close friends. Therefore, it was suggested that research should focus on assessing the degree of burden, social support, and quality of life between caregivers of healthy children and informal caregivers of patients with cerebral palsy (CP) (Ahanotu et al., 2018). Overall, family caregiver expressed high levels of satisfaction while expressing significant levels of burden on their daily lives. Rural caregiver reported more family support than urban caregivers did, but they also saw a greater negative impact on their income. The study's findings raise concerns about the financial status of older women who provide care as well as about the expectations of traditional family structures in both urban and rural settings (Ehrlich et al., 2015).

The study found that the relationship between parenting stress and life satisfaction was mediated by family and friend support, but not by significant-other support. According to these findings, mothers of CP's may find that their level of life satisfaction increases when they receive more support from friends and family and experience less stress as a parent (Wang, Huang, & Kong, 2020).

Data from 181 mothers of CP children (under the age of 18) were gathered through surveys. Mothers' level of impairment, her health, and her social support system were all highly significant indicators of their parenting stress. Mothers who struggle greatly to care for their children with cerebral palsy must be understood and acknowledged for the psychological and physical suffering they endure. Furthermore, the government must focus on social responsibility for the parenting of its citizens by creating safety net programs and making them widely accessible to support the mental and physical well-being of mothers of children with cerebral palsy (Jeong et al., 2013).

Social support was considered to be the mediating factor in previous researches. Social support is mediating the negative effects of burnout on mental health (Ruisoto et al., 2021). Social support is the basic element in the life of an individual, individual want to be nurtured, valued and respected by those who exist around him, like family, friends, and other community member (Rehman et al., 2020). Stress is the major element of burnout, mediating effects of social support identified that stress has a significant effect on social support. (Jun & Lee, 2017). Burnout was negatively connected with psychological well-being. Social support, as a mediator, make a link between burnout and psychological well-being (Koniarek & Dudek, 1996). Social support is a mediating factor that can help to reduce stress level and help in finding effective coping strategies to overcome the difficult situation (Yasin & Dzulrifli, 2010).

### **Positive psychotherapy & Social Support**

Positive psychotherapy places a strong emphasis on the value of social support for mental health and wellbeing. PPT views social ties as critical to fostering resilience, positive emotions, and overall life satisfaction. PPT and social support are related in this way: the main theory PERMA Good psychotherapy relies heavily on relationships (Rashid & Seligman, 2018). Recent years have seen a rise in interest in positive psychotherapy because of its capacity to promote positive interactions and improve people's capacities. A prior study looked

at the effects of a positive psychotherapy program on resilience, positive affect, interpersonal relationships, and mental health recovery in community-dwelling individuals with schizophrenia. Positive psychotherapy improved social support (Kim & Na, 2017).

### **Psychological distress among caregivers of cerebral palsy children**

Research shows that caregivers experience more psychological distress than individuals who are not caregivers (Forstmeier et al., 2015). Extended periods of caregiving result in higher levels of distress for caregivers, women experiencing higher levels of anguish than men do. The likelihood of experiencing distress gradually rises in proportion to the weekly amount of time spent providing care, as compared to those who do not. Negative impacts on the mental health of highly engaged caregivers are particularly noticeable at the beginning and end of their caregiving episodes. Continuous caring makes them more vulnerable to recurrent distress, and negative health consequences persist after their caregiving episodes conclude. When compared to non-caregivers, a number of caregiver groups have psychological health disparities. These include mothers who are caring for a sick or impaired child (CP) and those who are taking care of a spouse or partner (Hirst, 2005).

Large segments of the population who provide care for others experience negative effects, as evidenced by the prevalence of negative psychological effects among caregivers. For instance, in NSOC (Wolff et al., 2014), 26% of caregivers and 29% of those caring for the most disabled older adults reported significant emotional difficulties. Anxiety and depression symptoms were reported by 13% of all caregivers and 15% of those taking care of the most disabled seniors. Studies that track the effects of caregiving on a person's psychological health over time indicated that there are positive and negative effects at different points in the caregiving process, though there may be vulnerable times when a person is most likely to experience increased psychological distress. According to longitudinal study on caregivers, it

was reported that a decline in mental health has a strong correlation with physical sickness. In additional research, depressed symptoms have also been linked to worse outcomes for individuals with preexisting cardiovascular illness, a higher risk of all-cause death in hospital inpatients, and an increased risk of cardiac issues (Cannuscio et al., 2002). Study reported that primary stressors related to caregiving were associated with depressive symptoms. Taking a caregiver role is associated with an elevated risk of developing depressive symptoms later in life (Dunkle et al., 2014).

Because positive psychological impacts are linked with low level of burden and depression as well as greater general mental health, they may be able to offset the negative effects of caregiving. In contrast to Kim and colleagues (2007), who discovered that caregiver's self-esteem was linked with low level of psychological distress and better mental wellbeing. Van der Lee and colleagues (2014) found that sense of competence or self-efficacy was connected with lesser caregiver burden and greater mental health. Women who spend numerous hours each week providing care to a patient and who exhibits difficult behavioral symptoms from children may be particularly vulnerable. In order to pinpoint the precise range of risk factors that exist for any given caregiver, multidimensional assessment is required. Similarly, interventions must be customized for particular caregiver population (Schulz et al., 2016).

Research reported that severe disability due to cerebral palsy was associated with high mental distress in the caregivers and associated with low social support. Parental stress & depression was negatively correlated with social support among parents of CP's. The most psychologically distressed parents were those who were least well supported (Gamal & Long, 2012).

Taking care of a normal child requires a significant investment of resources, but taking

care of a disabled child frequently puts excessive demands on these resources. The caregiver's psychological and physical well-being is affected by these responsibilities. Findings suggest that parents of children with CP are more likely to experience physical and psychological health issues, even though many families manage well despite the additional challenges of caring for a child with a disability. Caregivers of CP's also have money related problems, which is also a contributing factor of caregiver burden. The significant link between caregiver's health and child impairment should be known to doctors and other medical professionals. The wellbeing of caregiver's and their families is expected to be enhanced through family-centered policies and services that specifically take caregiver health into account (Brehaut et al., 2004). According to research, parents who care for a child with cerebral palsy experiencing miserable psychosocial well-being. So, to enhance parental well-being there is an immediate need for psycho-social based interventions (Cheshire et al. 2010).

### **Psychological Distress & positive psychotherapy:**

Positive psychotherapy aims to reduce psychological discomfort by helping individuals to recognize and capitalize on their inherent strengths. While happiness, fulfillment, and a sense of purpose in life are prioritized, it also acknowledges the significance of negative experiences. PPT is an effective tool for managing issues like stress, anxiety, and depression because it fosters resilience and emotional well-being. According to studies, PPT can lessen psychological suffering by encouraging happiness, life involvement, and a sense of achievement. Shifting the focus from merely treating symptoms to thriving and flourishing is the aim of the therapy (Rashid & Seligman, 2018). Following positive psychotherapy, patients with acquired brain injuries reported less psychological distress.

Patients with acquired brain injuries experienced less psychological distress after receiving positive psychotherapy. The outcomes showed that participants found this therapy to be

acceptable and that it was feasible to administer with high fidelity. (Cullen et al., 2018)

### **Mental wellbeing**

According to the previous study's findings, it was seen that mothers of children with cerebral palsy have poor cardiovascular and musculoskeletal fitness and are frequently to eventually acquire chronic illnesses. Psychological wellbeing of the caregivers is also poor. Clinical care must to be given to mothers' psychological well-being as well. Additionally, it is determined that raising a disabled child necessitates the highest standards of endurance, organization, and general wellbeing for the caregivers. Better care for the CP child and better treatment adherence would result from improved physical and mental health of the carers (Shaik,2023).

### **Positive psychotherapy & mental wellbeing**

Positive psychotherapy is based upon the PERMA theory, which emphasis on mental wellbeing. So the basis aim of the therapy is to enhance mental wellbeing of the patients. Previous research reported that positive psychotherapy enhance mental wellbeing of psychosis patients (Schrank et al., 2015). Positive therapies have also been repeatedly demonstrated to be successful in raising quality of life, optimism, hope, and happiness in individuals with breast cancer (Casellas-Grau et al. 2014), as well as in enhancing well-being and lowering distress in those with clinical illnesses (Chakhssi et al. 2018).

### **Caregiver's rehabilitation**

Corey and McCurry (2018) concluded that providing care has long-term,lasting implications on the carers' health. Previous studies have shown that in a typical low- and middle-income setting, caregivers of children with cerebral palsy confront unique obstacles. Thesedifficulties include norms, gender, stigmatization, poverty and discriminatory public policies. Toimprove carers' mental health, these problems must be addressed (Vadivelan et al.,

2020). Previous research reported that for caregivers of cerebral palsy, systems theory and the strengths perspective were the two theories are the most relevant. The study was guided by systemstheory to comprehend how a child with cerebral palsy functions on a daily basis. The strengthstheory also examined the family's coping strategies and strengths for accepting and managing thechild's impairment, strategies and coping mechanisms utilized by the family to maintain the family's strength and functionality when the child has cerebral palsy (Keforilwe & Smit, 2021).

### **Status of Caregivers of disabled in Pakistan**

Frequent observations of childbearing practices in Pakistan suggest that a child with a disability is more vulnerable due to stress generatedby the child. It is postulated that this spiral of rising tensions may start long before the child is officially diagnosed with a handicap. According to research, parents who abuse their disabled childmay be responding more to the social exclusion and stigma they experience from neighbors, family, and other acquaintances than to the child's illness. When friends and relatives distant themselves from parents of disabled children, they may find it difficult to find a school that will accept their child or reside in an area with limited social services available to assist with their child's requirements. As a result, parents of disabled children frequently lack social supports (Qidwai, 2018). It's probable that social isolation and pressures created by children combine tocreate stress in a home raising a disabled child. It's also true that not all Pakistani households withdisabled children experience stress, and that some families in the same communities have coping techniques that keep their children from acting out, while other households' children with similar problems have to deal with the burden placed on them. The primary source required is affectionatesupport for the caregivers and other is conventional family support. The family caregivers are heavily burdened by this caregiving burden (Shaji, 2009).

In most households, the impaired child might get less food, medical attention, or other

amenities. This can take many subtle forms. For instance, parents or caregivers might wait a few more days before investing limited funds on medication, or the child might eat less or less healthy than their sibling. The family's low socioeconomic standing and the nation's current inflation rate could make things even worse. Neglect of this kind can result in more impairments, creating a vicious cycle of developmental regression where the impaired child get developmentally worse day by day (Qidwai, 2018). Gender may make this kind of neglect even more worse. For instance, in Pakistan, parents tend to spend far more on the rehab of their disabled sons than disabled daughters, even if the prevalence of disabilities is the same for both gender. The obvious cause of these deaths is neglect, which manifests itself as a lack of access to relevant resources, inadequate medical care, or less nutrient-dense diet. Typically, parents in Pakistan keep their children at home to protect them from harm, such as being hit by a cart or mistreated by someone in the neighborhood (Omiegbe, 2023).

However, in a great deal of other cases, even in well-educated and/or porch homes, a child is kept apart because the family is afraid of what other community members will think. According to the treatment described by the locals (non professional), children in certain villages are held in windowless storerooms, have their hands and feet bound with iron chains, spend the night in scorching courtyards of homes, or spend the night in dark floors, frequently with little to no interaction from family members. It is possible that the neighbors next door are unaware of the child's existence. Parents must be made aware of the need for special schools for their impaired children. For impoverished disabled children in Pakistan, particularly in rural regions, as well as in most developing and underdeveloped nations, begging may be the most common type of employment outside the home. Children with disabilities are frequently utilized as begging machines. Some of them are abandoned by their families to beg on the streets, while others are sold by them to people who maintain stables for deformed kids within formal networks of beggars. In any case, accounts and testimonies from numerous nations

suggest that these children are frequently the targets of violence, both from those trying to keep them off the streets and from ordinary people who regard them as easy pickings. However, in more recent times, a discourse centered on rights has evolved to understand "disability" as a socio-political construct. (UKessays,2018).

According to the study, women reported higher levels of stress, especially if they worked outside the home. It is hypothesized that the primary caregiver viewed all forms of support from extended family as a tangible way to reduce stress. The results suggested that in the absence of help, the social and financial toll that dementia takes on Pakistani caregiver families may worsen. This suggests the necessity for multifaceted involvement from the community, government, and nongovernmental organizations in order to create programs for carers that are embedded in Pakistan's filial piety culture. In addition, these tactics ought to be gender-sensitive and prioritize particularly vulnerable populations (Qadir et al., 2013).

In Pakistan, there are few and culturally unacceptably trained caregivers. A study evaluated the stress levels of senior caregivers and found correlations between the burden of providing care and several attributes of the elderly. The perceived burden of being a caregiver was measured in 350 participants. Women made up the majority of caregivers (68.9%). A perceived care burden scale yielded a positive result for half (50.3%) of the caregivers. The perceived burden of being a caregiver was strongly correlated with financial impact. Higher levels of physical and cognitive dependency put more strain on those providing care. Elderly behavioral problems like and trouble in sleeping were associated with higher caregiver burden (Sabzwari et al., 2016).

Between July and September 2015, a teaching hospital in Karachi, Pakistan, carried out a study. The study was open to those over the age of eighteen and who were providing care to family member, either currently or previously. Due to the high demands and scarce resources

of caregiving, caregivers have reported negative effects from their role. Consequently, it is critical that health care professionals investigate, recognize, and assist carers in order to help them better manage the demanding responsibility of providing care (Irfan et al., 2017). Parents with disabled children whether they are mentally challenged or have hearing impairments bear a heavy responsibility of their child. It was also determined that, because of cognitive deficiencies, parents of intellectually disabled bear greater hardship than hearing impaired parents. Analytical research is advised to determine the connection between caregiver burden, children's numerous disabilities, gender variations among caregivers, and caregivers' quality of life. Parents of children with intellectual disabilities have increased stress and hardship because of cognitive deficiencies that result in atypical behavior (Syed, Awan, & Syeda, 2020).

Family caregivers are considered the foundation of the healthcare system in Pakistan. Majority of the time, the primary caregivers are the patient's spouse, parents, or closest relatives. Their job is to give the patients long-term, month-to-year-long emotional and physical assistance. The mental, physical, and overall well-being of the primary caregiver may be impacted by this responsibility. Additionally, it may result in both objective and subjective burdens for the entire family, including psychological, physical, and economic effects as well as emotional ones (shame, embarrassment, guilt, and self-blame). Stigmatizing attitudes of society against psychiatric patients and their families can also lead to burden (Imran et al., 2013).

Lluch (2008) created a multi factor model of positive mental health (PMH). According to it, PMH is characterized as a condition in which an individual strives to feel and remain positive as possible as he can in the circumstances in every situation. The six variables that collectively make up the positive mental health concept are personal satisfaction, prosocial attitude, self-control, autonomy, problem solving and self-actualization, and interpersonal connection skills.

## **Positive Psychotherapy**

One of the pioneers in the subject of positive psychology was Martin Seligman. Positive psychology encourages psychologists to view people's skills, talents, and capabilities with acceptance. In other words, it is a scientific investigation into optimal human behavior. The study of three domains pertaining to three aspects of life is known as positive psychology. The first domain, "pleasant life," is centered on positive sentiments regarding the past, present, and future. Among the good memories of the past life are contentment, intimacy, and mental tranquility. The positive emotions with reference to the future are hope, optimism, and trust. Overall, living a "pleasant life" raises positive feelings while lowering negative ones. The second is called the "engaged life," and it emphasizes an individual's good traits, such as their virtues and strengths. Strengths are defined as those qualities—like tenderness, common sense, and the ability to love and be loved—that have always been valued by people from all backgrounds and countries. The third is "meaningful life," which focuses on having a sense of purpose and contributing to virtuous organizations and communities. It is the belief that these environments are the ideal places for the development of positive traits and feelings, which in turn leads to a meaningful existence. Together, these are thought to be three paths that lead to happiness (Duckworth, Steen, & Seligman, 2005).

Basic emphasis of psychology is on enhancing human strengths and virtues and creates the possibilities for individuals to succeed (Seligman & Csikszentmihalyi, 2000). This domain directed towards positive aspects and individual's abilities and recommend the professionals to consider the positive aspects of their patients that mostly seldom happened in their lives (Seligman, Rashid, & Parks, 2006). Positive Psychotherapy is conceptualized by positive psychology. Two major theories of Seligman are the basic of Positive Psychotherapy, first is PERMA conceptualization of wellbeing (Seligman, 2002a, 2012) and the other is character

strengths (Peterson & Seligman, 2004). PERMA is a model that sorts wellbeing into five scientifically measurable components, (a) positive emotions (b) engagement (c) relationships (d) meaning and (e) accomplishment (Seligman, 2012). Gratitude is one of the basic of positive psychotherapy, which create positive emotions by involving the thankfulness of anything we have in our life (Emmons, McCullough & Tsang, 2003). Gratitude can be directed towards specific event or towards set of circumstances (Wood et al., 2010). Research has reported that gratitude based interventions may be beneficial for parental wellbeing (Timmons et al., 2017; Timmons, 2015).

The major focus of the psychotherapy is towards identification of the strengths as well as the weakness. Therapist created such kind of psychotherapy, which explicitly builds positive emotions, strengths, and meaning in clients' lives to promote happiness. This approach is called positive psychotherapy (PPT). Previous therapies primarily attended to negative emotions and characteristics of clients. Therapy needs to go beyond negatives and should explicitly focus on the positive emotions and strengths of a client. It was believed that PPT is may be an effective treatment for many disorders. Results from previous study, concluded that PPT is effective for depressive patients (Rashid & Anjum, 2008).

### **Positive Psychotherapy Interventions**

In a variety of clinical settings, positive psychotherapy has shown promise in treating a wide range of mental health issues. PPT uses a variety of interventions, many of which are based on the patient's statements during therapy sessions. The way PPT interventions use creativity and intuition to aid in the healing process is one of their unique features. Another important way PPT helps people connect with their therapeutic journey is through storytelling, and the concept of including the self into the narrative facilitates people's ability to express their experiences, goals, obstacles, and adventures. By using this method, PPT therapists can start making changes or going further into delicate subjects without coming

across as "attacking" the patient (Rashid & Seligman, 2018).

Additionally, therapists can assist their clients in finding better balance by reframing their symptoms and experiences in a positive light. People typically stop repeating bad experiences after they learn to accept every part of who they are and start to see the positive side of things (Tugade & Fredrickson, 2004). The particular therapies employed in this process are centered on giving the person the power and means to confront unpleasant or traumatic events, build resilience, and improve their emotional functioning. These include being grateful, forgiving, fostering optimism and hope, being altruistic, concentrating on relationships with improved communication skills, and many more (Rashid & Seligman 2018).

### **Positive Psychotherapy and mental disorders**

A wide range of mental health conditions, such as psychosis (Schrank et al., 2016), suicidal ideation (Johnson et al., 2010), depression (Seligman et al., 2006; Carver, Scheier, & Segerstrom, 2010), and borderline personality disorder (Uliaszek, Rashid, Williams, & Gulamani, 2016), have been shown to benefit greatly from positive psychotherapy (PPT). PPT's emphasis on strengths and cultivating life's positive aspects is effective for many mental disorders. Positive psychotherapy aims to promote well-being by increasing feelings of pleasure, involvement, and meaning in life. Previous research analyze acceptability and viability of brief positive psychotherapy for persons with emotional distress and acquired brain damage patients. Participants were randomized to two groups, one was given positive psychotherapy and the other was given only usual treatment. Brief individual based eight positive psychotherapy sessions were given to each participants. It was possible to implement the intervention with high fidelity, and the participants found it acceptable. The overall retention rate at 20 weeks was 63%. (Karagiorgou et al., 2018).

### **Positive Psychotherapy and caregivers of cerebral palsy children**

CP is the prevailing neuro-developmental disorders in children and it is linked with lifetime impairment. Long-term caregiving leads to negative effect on the health and wellbeing of the caregiver. Research has demonstrated that the most effective approach to enhance the CP child's health requirements is to involve their family. The study comprised 32 caregivers of cerebral palsy kids. The findings indicated that caregiver's education has a beneficial impact on the caregivers' burden and their quality of life. The idea behind the caregiver education could potentially enhance the well-being and lessen the mental strain experienced by guardians of the CP's (Chippala et al., 2019).

A strength focused mutual group based interventions were administered on caregivers of CP children. The social support was significantly enhanced during the interventions. The implementation of this group intervention program has the potential to significantly alleviate parenting stress among caregivers and promote a greater sense of hopefulness. Implementing an expanded program featuring additional sessions and consistent follow-up sessions could potentially facilitate the preservation of favorable outcomes and foster the development of a robust social support network (Fung et al., 2011).

Previous research on positive psychotherapy show significant differences in happiness and lowering mental distress. Study reported that positive psychotherapy is more effective than cognitive-behavioral therapy in increasing happiness (Asgharipour et al., 2012). The positive psychotherapy based intervention was feasible for caregivers of stroke survivors. The efficacy of the positive psychotherapy based intervention regarding enhancing psychological well-being and the daily functioning was studied in community-based stroke survivors and their caregivers, it shown fruitful results for enhancing well-being in both (McMakin, 2016). Previous research in Pakistan on positive psychotherapy demonstrated that Positive psychotherapy based sessions were found to be effective in diminishing depressive symptoms

among females with depression (Mazhar& Riaz, 2020).

Psychological welfare of the caregivers of CP children is affected due to child's prolong treatment. Present study was planned to give psychological rehabilitation to the caregivers of CP children through positive psychotherapy based interventions after translation and adaptation of positive psychotherapy manual. It is relatively new therapeutic approach, its core focus is to divert client attention from negatives of life and focus them towards the positives of life. The present study was based upon two groups' i.e, treatment group and control group. It was based on assessing the depression, anxiety, stress, caregiver burden and burnout among caregivers of CP children and how sense of coherence and social support have impact on the mental wellbeing of caregivers of CP children. In case of the positive psychotherapy, treatment is effective as compared to other treatment approach it will reduce caregiver psychological issues and help to improve their mental wellbeing. Previously positive psychotherapy based therapeutic techniques were not used on caregivers of CP's in Pakistan.

## **Rationale of the study**

A neuro-developmental disorder affecting posture, balance, muscular control, coordination, and body movement is known as cerebral palsy. In addition to their physical handicap, people with cerebral palsy (CP) may also suffer from related disorders such as social isolation, emotional and behavioral difficulties, feeding and swallowing difficulties, growth and developmental delays, seizures, and speech difficulty. A multidisciplinary strategy encompassing physical therapy, occupational therapy, speech therapy, medicinal therapies, limitations in daily living activities, and social support is necessary to address these challenges (Rosenbaum, Paneth et al., 2007).

Effectively managing child's chronic health issues and balancing this job with the demands of daily life is one of the biggest challenges which have been facing by the caregivers of children suffering from cerebral palsy. Mostly the task of providing home based care for a child with multiple disabilities may be somewhat tough for caregivers. Another challenge for the parents is to handle their child's requirements of everyday living. Consequently, the caregiver suffer from mental health issues. Caregiver of disabled children were more accessible to health related problems as compared to caregivers of healthy children, and empirical facilities are required for caregivers (Brehaut et al., 2009).

The main content of present research is to identify and address the mental health problems& wellbeing of the caregivers of CP's with specific reference to Pakistani culture. CP is the most neglected neurodevelopmental disorder due to multiple health related concerns, CP's experience problems that have a negative and direct impact on their families (Keforilwe & Smit, 2021). The primary aim of the present study was to evaluate the psychological issues of caregivers of cerebral palsy children and to rehabilitate the caregivers. Previous research on the parents of CP has shown that the depression and anxiety are more prevalent in parents of children with cerebral palsy than parents of normally developing children. The major risk

factor of increased parental mental health issues is severity of the child's disability and impairment. It was studied that mothers spent more time on child's care, so they have higher risk of mental health problems (Barreto et al., 2019). Research reported that the health and well-being of caregivers is related to the health and well-being of their CP children (Murphy, et al., 2007). Caregivers are stressed and burdened due to prolonged care. Caregivers' burden is the major predictor of negative outcomes in caregivers of CP (Omole et al., 2019). Caring for a child with CP had significant impact on the level of burden, social support and quality of life of caregivers (Ahanotu, et al., 2018). So in the present study it was planned to translate, adapt and validate a scale specifically measuring the caregiver burden among caregivers of cerebral palsy children. Caregiver difficulties scale was selected as it was purely developed for measuring the caregiver burden among caregivers of CP (Wijesinghe, Fonseka, & Hewage, 2013).

Previous study reported that poor psycho-social well-being of caregivers who are caring for a CP child may have an impact on the CP child's health also (Williams et.al, 2002). Previous researches in Pakistan mainly focused on assessment & identification of mental health issues of caregivers of CP's. On CP's caregivers a lot of work has been done on clinical topics like assessing anxiety, depression, parental acceptance and rejection in Pakistan (Yazdani, 1994; Verda, 2005; Rauf, 2006) but the domain, enhancing caregiver's psychological wellbeing have been neglected. In Pakistan previous study reported that majority of the caregivers of CP's required rehabilitation based services to manage their own caregivers' burden (Kiani et al., 2021). A study concluded that most of the parents of CP's undergo moderate level of depression, which shows that how much a CP child's health status affects their caregiver's mental health. It was concluded in the study that there is a need of screening of mental health problem as well as counseling sessions are required for the caregivers of CP children (Malik et al., 2019). Previous research reported that parents of children with cerebral

palsy in Pakistan face significant psychological challenges including emotional distress, social isolation, physical health issues, and financial strain. Policymakers and healthcare providers must collaborate to create interventions that address the unique needs of parents caring for children with CP in Pakistan (Ullah & Ahmed, 2024). Previously as a treatment model of psychological disorders the major focus was on cognitive behavioral therapy which focus on irrational beliefs and negative thoughts. The goal of cognitive-behavioral therapy, or CBT, is to recognize and modify the harmful thought patterns (also known as maladaptive behaviors) and behaviors that lead to emotional distress. It functions on the tenet that thoughts, feelings, and behaviors are intertwined and that people can modify their emotional reactions and behavior by correcting erroneous thinking.

In Pakistan, there is a need to address psychological issues of parents of disabled children with positive psychological interventions (Bodla & Khalily, 2018). There is no effective treatment intervention for the parents/care givers available in Pakistan and current study will help in designing the effective psychological treatment for such parents. This therapy is closer to our day-to-day life challenges. Positive Psychotherapy was selected as a therapeutic tool in the present study because it is relatively new therapeutic approach, its central focus is on positive aspects of an individual instead of focusing towards negatives. Positive psychotherapy is such a therapeutic framework which aimed to reorient the therapeutic approach by supporting clients in using their inner resources, to overcome obstacles, comprehend and identify areas of growth, and concentrating on achieving resilience and greater sense of well-being (Rashid & Seligman, 2018). Positive psychology emerged during the late twentieth century as a branch of psychology concerned with the scientific study of wellbeing and the 'good life'. Previously main focus of the Psychology was towards disease model. So Martin Seligman in 1998 coined the term of positive psychology. It is a well-being promoting approach, and a paradigm shift from disease or illness model to wellness model (Sin and

Lyubomirsky 2009).

The major goal of positive psychology was to focus positive emotions and wellness as compared to psychopathology (Seligman & Csikszentmihalyi, 2000). Unlike conventional deficit-oriented treatment paradigms, positive psychotherapy aims to concentrate on the satisfaction and well-being of people. This approach's main tenet is that positive emotions, self-awareness, and a sense of purpose are especially helpful in treating mental diseases since people are prone to the so-called negativity bias, especially in stressful life situations. The negativity bias is the belief that negative experiences, emotions, and thoughts have a greater psychological impact than neutral or positive ones (Baumeister et al., 2001).

The positive psychotherapy based interventions instead of concentrating only on treating mental health issues, it aims to improve well-being, inner strengths, and happy feelings. Conventional therapies, such as psychodynamic approaches or cognitive-behavioral therapy (CBT), frequently focus on addressing particular psychological disorders or resolving past conflicts. PPT, on the other hand, refocuses attention on building resilience, optimism, and happiness elements that, according to research, can both lessen the symptoms of mental health issues and enhance long-term wellbeing. Seligman, Rashid, and Parks (2006) claim that PPT helps people develop positive resources that can fend off future misfortune. Through assisting individuals in recognizing and leveraging their unique strengths, PPT leverages human potential for development, contentment, and direction. This strategy is especially helpful in addressing life satisfaction (Sin & Lyubomirsky, 2009). PPT is applicable in a variety of contexts, from clinical settings to wellness programs, and it promotes holistic mental health because of its strength-based, future-focused design.

Former research on effectiveness of positive psychotherapy & CBT on happiness has reported that positive psychotherapy show significantly better results in increasing happiness

then cognitive behavioral therapy (Asgharipoor et al., 2012). In comparison with CBT, positive psychotherapy showed better outcomes, such as life satisfaction and subjective well-being. Additionally, PPT lead to significant effects in the treatment of borderline (Rashid et al., 2103) and depression (Laireiter, & Furchtlehner 2018).

Cerebral palsy is a lifelong disability and due to struggling efforts with the CP children caregivers become depressed and exhausted and stop working on their children's treatment. Prognosis of the CP child is very slow, child's adaptive skills functioning suffers a lot due to multiple disabilities. Child's dependency on the care givers effect their mental health so the positive psychotherapy based intervention will be helpful for them and directly affect their psychological issues which indirectly target their child's rehabilitation. Properly designed positivepsychotherapy have been administered session vise to help the caregivers to resolve their own mental issues. However, almost no research study investigated the effects of positive psychotherapy based interventions on increasing the wellbeingof caregivers of children with cerebral palsy. In this regard, the present study aimed to evaluate the effectiveness of positive psychotherapy interventions in increasing the wellbeing and coherence of caregivers of children with CP. For the management of burnout, caregiver burden, psychological distress and enhancement of social support, mental wellbeing & sense of coherence,interventions based on the manual of positive psychotherapy was used. Previous research reportedthat strength focused intervention program could effectively help the caregivers to reduce their parenting stress and enhance their hopefulness. Beginning a similar program with more sessions and regular follow-up sessions might help to maintain positive effects and establish a social support network (Fung et al., 2011). Previous international research also showed that positive psychotherapy is effective for improving quality of life of caregivers (mothers) of physically handicapped (Barzi &.Jafari, 2016). Research reported that the positive psychotherapy is effective for mental health, social relationships, emotional reactions and the attraction of

children's support in mothers who have physical-motor handicapped children. Positive psychotherapy-based interventions were given to mothers of children with autism to enhance psychological well-being, hope and quality of life. 11 participants were in experimental group. Results revealed that positive psychotherapy was effective for mothers of autism. (Yanik & Arsalan, 2024).

In Pakistan, there is scarcity of scientific studies conducted on caregivers of cerebral palsy children, by using interventions based on knowledge of positive psychology. The current study will help the professionals to understand the caregiver's issues and addressing the issues in a befitting manner. Standard plan of interventions will help in reducing the caregiver's burden and help the professional to choose a treatment option, which is evidence, based in local culture. Previous research in Pakistan showed that community-based rehabilitation strategies should consider the care-giving environment of children with disabilities and shift the para-dime from a child only to family focused management (Yousafzai et al., 2011).

In Pakistan, caring for children with special needs is challenging due to a shortage of mental health facilities for caregivers of disabled. A study was conducted on to adapt a family peer Support Buddy Respite Program from a developed country to support caregivers of mentally challenged children in Pakistan. Culturally adapted interventions were beneficial for caregivers of intellectually disabled (Waqar, et al., 2024). Many interventional studies have been done in Pakistan based on therapeutic interventions like cultural specific CBT, Acceptance and commitment therapy, and many other interventional studies based on enhancing mental wellbeing. Previous research in Pakistan on positive Psychotherapy showed that Positive psychotherapy sessions were found to be effective in decreasing depression among depressed females (Mazhar & Riaz, 2020). Another earlier study mentioned that Asian patients prefer a more structured and directive approach (Hays & Iwamasa, 2006). Positive psychotherapy is an evidence based structured approach. It was selected to translate in the present research as there

are some aspects of the PPT, which might be helpful while giving positive psychotherapy based therapy to Pakistani population. For example, in positive psychotherapy many sessions are related to Pakistani culture & religion so it was prefer to use this therapy for translation and adaptation like gratitude, forgiveness, hope and optimism, altruism and positive relationships. Previously, in Pakistan Cognitive Behavioral Therapy was translated and culturally adapted (Naeem, 2015). Translation and Adaptation of Simplifying Mental Illness plus Life Enhancement Skills (SMILES) Program was translated and adapted in Pakistan and used for the depressed parents of behavioral problem children (Khan & Batool, 2013).

In the present study the Positive psychotherapy was used as it has many dimensions relevant to the nature of the sample as its major focus on enhancing strengths of the individuals and caregivers need strengths to overcome their psychological issue while dealing with their disabled children. Secondly, the focus of the prior researches were based on illness model depicting mostly on the medical aspects of parents of CP children, in the present study the main focus was on rehabilitation model focusing positive interventions to enhance the wellbeing of the caregivers of CP. That should be based upon family centered approach. Thirdly, many concepts in the therapy like analyzing signature strengths, practicing gratitude, forgiveness, hope and optimism, altruism, posttraumatic growth, improving relationships with communication skills and meaning in life were the key concepts, which help, in enhancing wellbeing of caregivers of CP. Previous researches also showed that positive psychotherapy is effective for caregivers.

During the present research, above-mentioned research gaps have been identified and effort has been made to fill these gaps. This research study provide an Urdu language based standardized positive psycho therapeutic based intervention for mental health practitioners for treating mental health issues of caregivers of cerebral palsy children in Pakistan. Present research not only assess the sample regarding their mental health issues, but in addition, it also

contributed in the provision of psycho-metrically sound Urdu translated positive psychotherapy. For the Pakistani society, this will be a novel plan for caregivers of cerebral palsy children in identification of their mental health issues and treatment of their mental health issues by employing standardized Urdu language based positive psychotherapeutic intervention. Present research will provide complete information for mental health practitioners all over Pakistan, regarding implementation of Urdu language based positive psychotherapy along with all its specifications, session wise for enhancing mental wellbeing of caregivers of cerebral palsy children.

Keeping in view the specific concerns and considering its effectiveness for the present study it was planned to select positive psychotherapy for the population of caregivers in Pakistan. Positive psychotherapy manual was translated, adapted and validated in the present study and used for the first time for the caregivers of cerebral palsy children. In Pakistan Urdu positive psychotherapy was used first time on the caregivers. Due to multiple disabilities of the child there are parents who have given up, overwhelmed by their child's needs and the constant battle to get help. By supporting the caregivers, one is indirectly supporting the child to feel positive about their abilities and differences. Through positive psychotherapy, a ray of hope and optimism can be inculcated in the caregivers so they can work effectively with the CP child with gratitude.

### **Over all Objectives**

1. To examine the relationship of caregiver burden, burnout, sense of coherence, social support, psychological distress (Depression, Anxiety & Stress) and mental wellbeing among caregivers of cerebral palsy children.
2. To translate, adapt and validate the Caregiver Difficulties Scale into Urdu language for measuring caregiver burden among caregivers of cerebral palsy children.
3. To assess the psychometric properties of the Caregiver Difficulties Scale among caregivers of cerebral palsy children.
4. To translate positive psychotherapy manual into urdu language for the treatment of psychological and social issues of caregivers of cerebral palsy children.
5. At pretest level assessment of caregiver burden, burnout, psychological distress, mental well-being, social support and sense of coherence among caregivers of cerebral palsy children
6. At pretest level screening & randomly assigning the participants into two groups i.e treatment group & control group on the basis of moderate to high levels of scores on caregiver burden, burnout, and psychological distress (depression, anxiety & Stress).
7. At pretest level screening & randomly assigning the participants into two groups i.e treatment group & control group, based on low scores on sense of coherence, mental well-being & social support among caregivers of cerebral palsy children.
8. To find out the efficacy of positive psychotherapy urdu manual for the treatment of caregiver burden, burnout, psychological distress, mental well-being, social support and sense of coherence among caregivers of cerebral palsy children.
9. At posttest level assessment of caregiver burden, burnout, psychological distress, mental well-being, social support and sense of coherence among caregivers of cerebral palsy children.

10. To explore the differences of demographic variables including, age of the caregivers, gender of the caregiver, education level, marital status, the total number of children, family system and income levels, cerebral palsy type of the child, additional problems (Speech Impairment, Intellectual deficit), family system and income levels of caregivers of cerebral palsy children on scales of measurement, i.e., caregiver burden, parental burnout, psychological distress(depression, anxiety & stress), sense of coherence, mental well-being and social support.

## Hypotheses

Following hypotheses have been formulated for the present research:

1. There will be positive relationship of caregiver burden and burnout with psychological distress (depression, anxiety and stress) among caregivers of cerebral palsy children.
2. There will be negative relationship of caregiver burden with sense of coherence, social support & mental wellbeing among caregivers of cerebral palsy children.
3. There will be negative relationship of burnout with sense of coherence, social support & mental wellbeing among caregivers of cerebral palsy children.
4. There will be negative relationship of sense of coherence and social support with psychological distress among caregivers of cerebral palsy children.
5. There will be positive relationship of sense of coherence and social support with mental wellbeing among caregivers of cerebral palsy children.
6. There will be positive relationship of sense of coherence with social support among caregivers of cerebral palsy children.
7. There will be negative relationship of psychological distress with mental wellbeing among caregivers of cerebral palsy children.
8. At pretest level caregivers of cerebral palsy children in both treatment and control group will score high on caregiver burden, burnout, psychological distress (depression, anxiety & stress).
9. At pretest level, caregivers of cerebral palsy children in both treatment and control group will score low on sense of coherence, social support and mental wellbeing.
10. At post-test level after getting the positive psychotherapy intervention there will be a significant decrease in the level of caregiver burden, burnout, depression, anxiety & stress in treatment group as compared to control group among caregivers of cerebral palsy children.

11. At post-test level after getting, the positive psychotherapy intervention there will be a significant increase in the level of sense of coherence, social support and mental wellbeing in treatment group as compared to control group among caregivers of cerebral palsy children.
12. Sense of coherence will mediate the relationship between burnout and psychological distress among caregivers of cerebral palsy children.
13. Social support will mediate the relationship between burnout and psychological distress among caregivers of cerebral palsy children.
14. Sense of coherence will mediate the relationship between caregiver's burden and mental wellbeing among caregivers of cerebral Palsy children.
15. Social Support will mediate the relationship between caregiver burden and mental wellbeing among caregivers of cerebral Palsy children.
16. Female caregivers of cerebral palsy children will score high on caregiver burden, burnout, depression, anxiety & stress as compared to male caregivers of cerebral palsy children.

Figure 1

Conceptual Framework

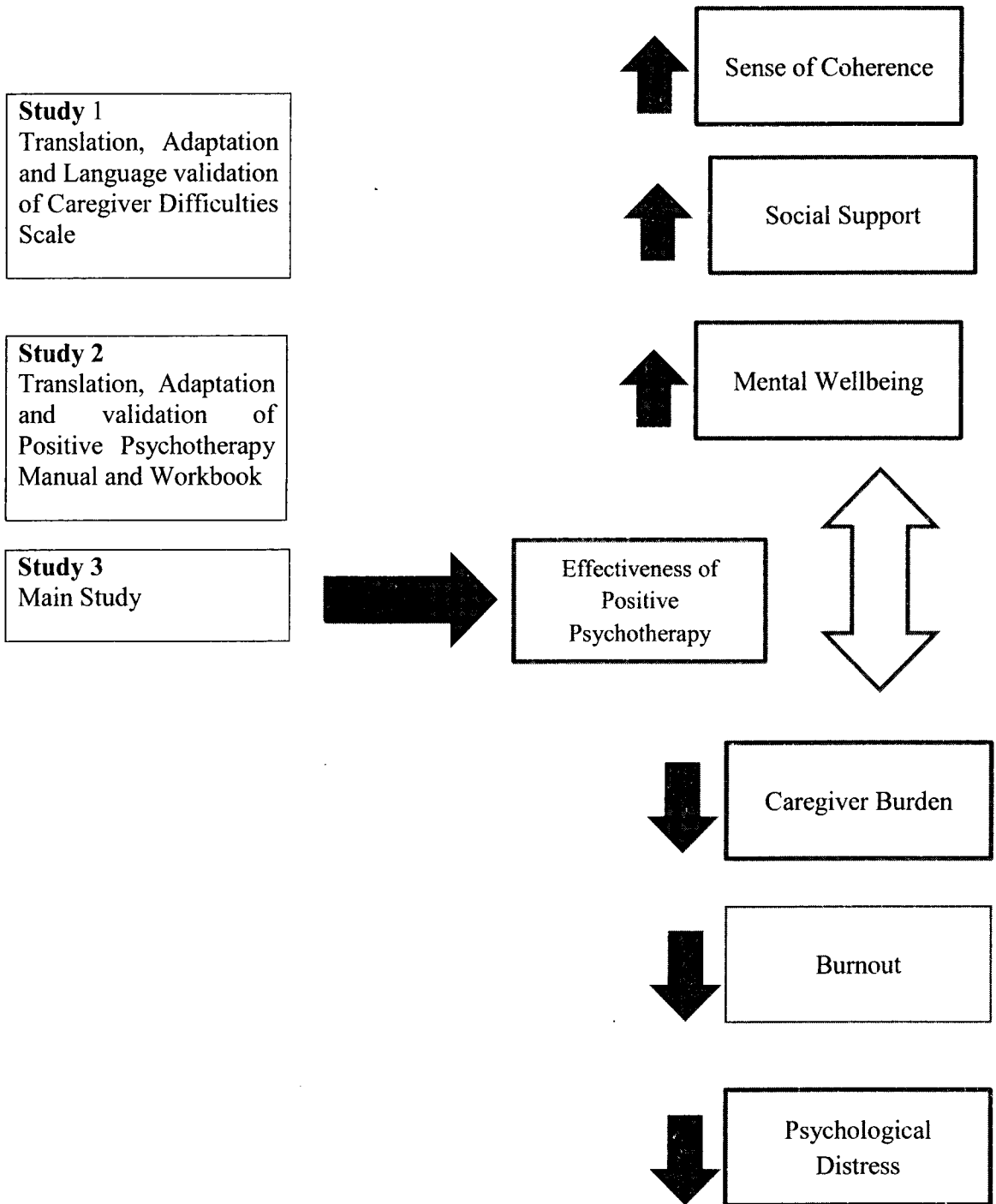
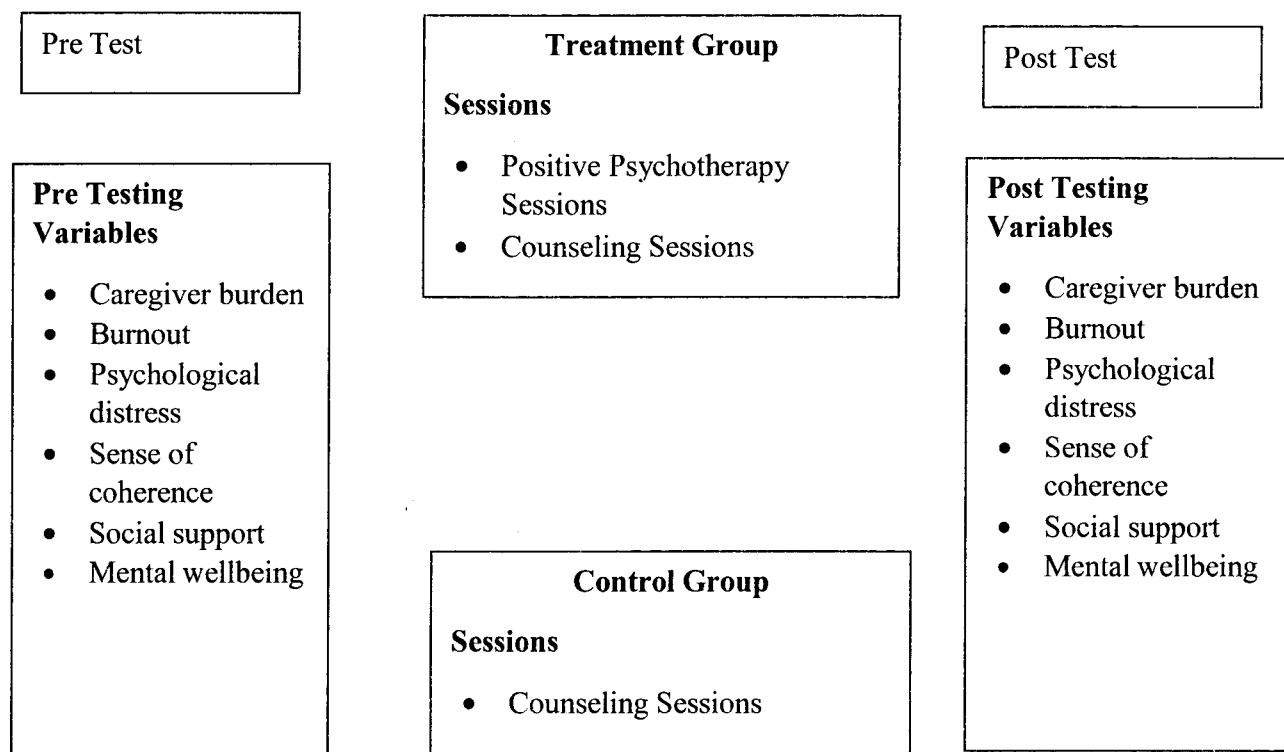


Figure 2

## Research Design



## **METHOD**

## Method

The major aim of the present study was to see the effectiveness of positive psychotherapybased interventions for treating the psychosocial problems of caregivers of cerebral palsy children. It was intended to give burdened caregivers proper interventions based on positive psychotherapy and evaluate its effectiveness on the well-being of the caregivers. In the present study translation, adaptation and cross language validation of caregiver difficulties scale and positive psychotherapy worksheets & manual was done. It was also aimed to assess & analyze the relationship between caregiver burden, burnout, psychological distress, depression, anxiety & stress, social support, sense of coherence & mental wellbeing among caregivers of cerebral palsy children. 20 caregivers of cerebral palsy children having moderate to high scores on study variables, caregiver burden, burnout, psychological distress (depression, anxiety & stress) and lower scores on mental well-being, sense of coherence & social support were randomly assigned into two groups' i.e, treatment group (positive psychotherapy group) and control group (counseling group). The present research was accomplished in three phases (studies). Study I, was based upon translation, adaptation and cross language validation of caregiver difficulties scale, study II was translation adaptation and cross language validation of positive psychotherapy worksheets and manual. Study III included the main study aimed at hypotheses testing and measuring effectiveness of positive psychotherapy intervention.

### Research design

The research design was randomized control trail & employing a quantitative approach. The trail registry no is NCT05613595.

## Sample

The research was carried out on the caregivers of children with cerebral palsy having cognitive & physical impairments and are taking rehabilitation services regarding their child medical issues. Purposive convenient sampling technique was used for taking initial sample (N=100) of caregivers of cerebral palsy children. On the basis of required scores on study variables participants were further selected from main study data and participants (n=30) were randomly assigned into two groups, treatment group (positive psychotherapy treatment group)(n=15) and control group (n=15). But due to drop out rates only 20 participants were given therapies i.e, 10 participants in treatment group and 10 participants in control group. Ethical approval was obtained from the ethics committee of department of Psychology, International Islamic University and ethical review Board of International Islamic University, Islamabad Pakistan before starting the study. Written consent was also acquired from the caregivers who were agreed to participate. Caregivers without any chronic physical or psychiatric problems were included in the study. Demographic data related to caregivers of CP was collected in terms of their, age (25-55), gender, educational status (matric and above), occupation status, marital status, marriage type (family out of family), total number of children, and previous history of disability, family system and income levels. Demographic data related to cerebral palsy child of the caregivers (participants) was collected in terms of gender, child age, CP type and additional problems (physical, Speech impairment & intellectual deficit).

**Inclusion and Exclusion Criteria of Sample.** Caregiver was someone who takes the primary responsibility for providing care to a child with cerebral palsy.

### Inclusion Criteria

- Only caregivers of diagnosed CP child
- Caregivers having only 1 CP child in the family

- For main study only those participants were included who would have moderate to high score on caregiver burden, burnout, psychological distress (depression, anxiety & stress) and lower score on mental wellbeing, social support & sense of coherence.
- Interventions were given to the caregivers having moderate to high level of caregiver burden, burnout, psychological distress (depression, anxiety & stress) and lower level of mental wellbeing, social support & sense of coherence.
- Age of CP child under 13 years
- Educational status of the caregiver was matric and above.

### **Exclusion Criteria**

- Caregivers with any severe diagnosed psychiatric illness were not added in the present study.
- More than 1 CP child in the family of caregivers were not included.
- Illiterate caregivers of CP were not included in the present study.

### **Operational Definition**

#### ***Cerebral Palsy***

Cerebral palsy is a persistent disorder of movement and posture affecting movement, muscle tone and coordination caused by damage to the developing brain typically before birth or in early childhood (Rosenbaum et al., 2006). Diagnosed cases of Cerebral palsy were taken from pediatric and physiotherapy department of NIRM. They were diagnosed on the basis of medical history, birth history, developmental milestone history Assessing motor skills, muscle tone, reflexes, and coordination. Using MRI or CT scans to identify brain abnormalities. Gross Motor Function Classification System (GMFCS) is used to categorize the severity of motor impairment in individuals with cerebral palsy. In the present study the CP's with cognitive impairment were assessed by developmental history, adaptive skills functioning and

neuro-imaging.

### ***Caregiver***

A person who provides direct care, as for children, elderly people, or the chronically ill or disabled is caregiver (Merriam Webster Dictionary, 2010).

### ***Caregiver Burden***

Caregiver's burden is defined as the physical, emotional, social, and financial problems that can be experienced by family caregivers. Caregiver burden is operationalized in terms of score on Caregiver Difficulties Scale (CDS) (Wijesinghe, Fonseka, & Hewage, 2013).

### ***Parental Burnout***

Parental burnout is defined as a state of intense exhaustion related to one's parental role, in which one becomes emotionally detached from one's children and doubtful of one's capacity to be a good parent (Roskam, Raes, & Mikolajczak, 2017). For the present study, burnout is operationalized in terms of scores on Parental Burnout Assessment (PBA) (Roskam, Brianda & Mikolajczak, 2018).

### ***Sense of Coherence***

Sense of coherence (SOC) reflects a coping capacity of people to deal with everyday life stressors and consists of three elements: comprehensibility, manageability and meaningfulness (Antonovsky, 1987). Sense of Coherence was operationally defined in terms of scores on The Orientation of Life scale. A higher score indicates a better sense of coherence (Jibeen & Khalid, 2010).

### ***Social Support***

Social support refers to the psychological and material resources provided by a social

network to help individuals cope with stress (Zimet, Dahlem, Zimet, & Farley, 1988). Social support was operationalized in terms of scores on Multidimensional Scale of Perceived Social Support (MSPSS) (Akhtar et al., 2010).

### ***Psychological Distress (Depression Anxiety & Stress)***

Psychological distress (PD) is broadly defined as a state of emotional suffering characterized by symptoms of depression (e.g., loss of interest; unhappiness; desperateness) and anxiety (e.g., restlessness; feeling tense) and stress. Psychological distress is cognitive, emotional and behavioral response to a critical problematic sudden event perceived as intimidating and manifested by anxiety and depression (Potter, 2007). Higher scores on DASS indicates higher level of depression, anxiety & stress. DASS is a self-report questionnaire designed to measure depression, anxiety and stress and is available in two forms, DASS-42 and short form DASS-21. (Lovibond & Lovibond, 1995b; Lovibond & Lovibond, 1995a). In the present study, DASS-21 was used to assess the psychological distress (depression, anxiety & stress). Urdu translated scale by Aslam and Tariq (2010) was used in the present study. It is important to note that this questionnaire cannot clinically diagnose depression, anxiety, or stress. Instead, it provides an indication of whether these problems influence a person's quality of life. The questionnaire is used urdu and it took 5–10 min to complete. (Kouther et al., 2022).

### ***Mental Wellbeing***

According to positive psychotherapy, mental well-being is defined in terms of positive emotions, engagement, relationships, meaning, and accomplishment (Rashid, 2018). Mental wellbeing was operationally defined in terms of scores on Positive Psychotherapy Inventory (Rashid, 2018).

### ***Positive Psychotherapy***

Positive psychotherapy (PPT) is a contemporary approach to therapy that draws upon the principles of positive emotions, engagement, relationships, meaning, and accomplishment (Rashid, 2018). Its techniques are based upon both humanistic and psychodynamic approaches in the realm of diagnosis and treatment. In the present study, positive psychotherapy is operationalized in terms of therapy based on positive psychotherapy by Rashid, (2018) in the present study positive psychotherapy has been defined in terms of treating symptoms of caregiver burden, burnout and psychological distress and to enhance mental wellbeing. Positive psychotherapy manual was translated adopted and validated in Urdu and applied on caregiver of cerebral palsy children in the present study.

### **Instruments**

#### ***Demographic Sheet***

Demographic details of the caregivers were measured in terms of caregiver age, gender, caregiver's educational level, and marital status, the total number of children, family system and income level. Demographic details regarding cerebral palsy child included child's gender, age, type of cerebral palsy, additional current problems of the cerebral palsy child (Motor, speech & intellectual disability).

#### ***Caregiver Difficulties Scale (CDS)***

Caregiver difficulties scale (CDS) (Wijesinghe, Fonseka & Hewage, 2013) is a self-administered questionnaire designed to be completed by the principal caregiver of the child with cerebral palsy. For the present study, Urdu translated version of caregivers difficulties scale was used. Above the cutoff scores indicating a higher level of burden. There are four subscales

of CDS. Concern for child (1-8), Impact on self (9-15), Support for caregiving (16-20) and social & economic strains (21-25). A score assigned for each item (except items 11, 12, 16, 17, 18 & 20) based on the response alternative selected by the respondent, in the following manner. Always = 4, often = 3, sometimes = 2, rarely = 1, never = 0 Completely = 0, to a greater extent = 1, to some extent = 2, to a lesser extent = 3, not at all = 4 . The items 11, 12, 16, 17, 18 & 20 require reverse scoring as follows. Always = 0, often = 1, sometimes = 2, rarely = 3, never = 4 . There is no definite cut off threshold for CDS; the total CDS score can be used to get an idea about the level of burden experienced by the caregivers, CDS scores ranged from 0 to 100 (1-125) a higher score above cut off indicating a higher level of caregiver burden (Wijesinghe, Fonseka, & Hewage, 2013).

#### ***Parental Burnout Assessment (PBA)***

Parental burnout assessment was used to assess the burnout and it is developed by Roskam et al, in 2018. It is a 23- item self-report questionnaire. The PBA encompasses 23 items forming four factors: exhaustion (being emotionally and physically exhausted by one's parental role), emotional distancing (affective distancing from the children), saturation (being fed up with one's parental role) and contrast (not being the parent you used to be and wanted to be, and being guilty and ashamed of the parent you have become). Items are rated on 7-point Likert scales: never(0), a few times a year or less (1), once a month or less (2), a few times a month (3), once a week(4), a few times a week (5), every day (6). PBA ranged from 0 to 138. Higher scores indicate higher levels of parental burnout. Urdu translated version was used in the present study (Roskam, Brianda & Mikolajczak, 2018).

#### ***Orientation of Life Scale (Sense of Coherence) (OLS)(SOC)***

Sense of coherence is measured by the orientation of life scale developed by Antonovsky in 1987. Urdu translated version was used in the present study (Jibeen & Khalid,

2010). A higher score indicates a better Sense of coherence. It contains 13 items, of which 4 items are reverse scale. Participants were required to circle a number from 1- 7 to indicate the strength of their feelings toward each item; a higher score indicated a stronger Sense of coherence and viceversa.

### ***Multidimensional Scale of Perceived Social Support (MSPSS)***

Multidimensional Scale of Perceived Social Support was developed by Zimet et.al, 1988. This scale measures social support across three domains; friends, family and significant others. The responses reflect participant's perception of support from each of these three sources. For ease of understanding, the Urdu version of the scale, translated by Akhtar et al., (Akhtar et al., 2010) was used. It has a total of 12 items divided in three sub-scales; friends, family and significant others. A 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree) is used to mark responses. A score can be obtained for the total scale to assess the social support.

### ***Positive Psychotherapy Inventory (PPTI)***

Positive Psychotherapy Inventory is developed by Tayyab & Seligman in 2018. Positive psychotherapy inventory is self-report inventory having 25 items. The positive psychotherapy inventory has five dimensions positive emotions, engagement, relationships, meaning, and accomplishment. Items are rated on 5-point Likert scales: not at all like me (1), not like me (2), neutral (3), like me (4) and very much like me. Urdu translated version was used in the present study. Lower scores on positive psychotherapy inventory indicates lower level of mental wellbeing, whereas higher scores indicate higher mental wellbeing.

### ***Depression Anxiety Stress Scale (DASS-21)***

Depression Anxiety Stress Scale (DASS), is a self-report questionnaire designed to measure depression, anxiety and stress and is available in two forms, DASS-42 and short form DASS-21. (Lovibond & Lovibond, 1995b; Lovibond & Lovibond, 1995a). In the present study urdu translated version of DASS 21 have been (Aslam & Tariq, 2010). Score on each item range from 0-3 with following response categories: (0= Not at all 1=Rare,2=Sometimes, 3=Often). Items of Depression are (3, 5, 10, 13, 16, 17, and 21), Items of anxiety are (2,4,7,9,15,19,20), and items of stress are (1,6,8,11,12, 14,18).

### **Positive Psychotherapy**

Positive Psychotherapy (PPT) is a structured therapeutic approach. Positive psychotherapy offers mental health practitioners of many orientations a compelling alternative to symptom- focused techniques. This therapeutic approach aims to empower clients by fostering a feeling of purpose and meaning, which is often perceived as lacking in conventional therapeutic modalities (Rashid & Seligman, 2018). It is based upon a series of 15 positive psychotherapy sessions, each comprising fundamental principles, techniques, and exercises aimed at reinforcing the abilities acquired during the sessions. The manual comprises of worksheets and clinician part. Every session is based upon positive strength based therapeutic interventions.

### **Ethical Consideration**

Ethical approval was obtained from the ethics committee of department of Psychology International Islamic University and ethical review Board of International Islamic University, Islamabad Pakistan before starting the study. Ethical approval was also attained from ethical review board of National institute of Rehabilitation Medicine. Permission was taken from the National Institute of Rehabilitation Medicine, Islamabad to collect the data. After getting

permission letter by the administration department of NIRM present research was conducted on the caregivers of cerebral palsy children. As CP is chronic and prolonged disability, so caregivers, suffer a lot while taking care of their children. In the present study ethical consideration was taken into account as caregivers were not to be forcefully involved in this study. Consent form was taken to confirm the participation of the caregivers. Their data remained confidential. Study was conducted on two groups, control group and treatment group, it was unethical to not provide any remedial strategies to control group, so both groups were given interventions.

### **Procedure**

The present research was conducted in to three studies.

**Study I** was based upon translation, adaptation and cross language validation of the Caregiver Difficulties scale (CDS). Translation was carried out into four steps. For cross language validation and test retest reliability of the scale, it was re-administered on two groups (Group 1 (n=10) & Group 2 (n=10)). Group 1 was given the scale's original english version, whereas group 2 was given the scale's translated urdu version. After a week, the same subjects were given the scale again, but in a different way. Groups 1 a (n=10) and 1 b (n=10) were further separated. In the same manner, Group 2 split into 2a (n=10) and 2b (n=10). The original english version scale was given to groups 1a and 2a, while the urdu version scale was given to groups 1b and 2b. After the translation of the scale, pilot study was carried out. The purpose of the pilot study was to check the reliability and further psychometric properties of the instrument for the present research. The urdu translated scale was administered on 80 caregivers of cerebral palsy children. Age ranges of the participants was between 25 to 50 and pilot testing done. Sample was taken from OPD of National Institute of Rehabilitation Medicine (NIRM). Correlation between the two groups was analyzed through SPSS. Correlation between english

and urdu-based data was performed for crosslanguage validation. Alpha coefficient reliability of the scale was assessed. CFA was done through SMART(PLS).

### **Study II**

Study II of the present study was aimed at translation, adaptation and validation of positive psychotherapy intervention based manual into urdu language. In this phase forward translation, committee approach, backward approach, committee approach (Brislin, 1980) and in adaptation & validation steps expert committee approach, clinical expert reviews and tryout testing was done (Hambilton et al ., 2005).

### **Study III**

Study III was the main study of the present research. Main Study was carried out on the caregivers of cerebral palsy children. The primary goal of the main study phase was to acquire data and analyze it statistically in order to measure the effectiveness of positive psychotherapy. Pretest questionnaires were given to a sizable sample of participants in the primary trial in order to conduct screening. The present research was carried out on caregiver's of CP children (N=100) with purposive convenient sampling from outpatient & in patient department of NIRM. The age range of the sample was between 25 to 55 years. The entire sample was comprised of the caregivers of CP children.

Study III was the interventional part of the study, where the targeted sample was selected from main study sample and participants were randomly assigned into two groups. Treatment group (positive psychotherapy intervention group) and control group (counseling group).

**Chapter 3****Study I: Translation, Adaptation and Cross Language Validation of the Caregivers****Difficulties Scale**

Study I of the present study was further divided in to three parts which included part I urdu translation of the Caregiver difficulties Scale, part II adaptation and cross validation of the Caregiver difficulties Scale and part III pilot study of the urdu translated version of Caregiver Difficulties scale.

**Part I**

Translation of Caregiver Difficulties Scale

**Part II**

Adaptation and cross validation of the Caregiver Difficulties Scale,

**Part III**

Pilot study of the urdu translated version of Caregiver Difficulties scale

**Objectives of the Phase I of the Study**

1. To translate & adapt the Caregiver Difficulties scale (CDS) (Wijesinghe, Fonseka, & Hewage, 2013) into urdu language.
2. To determine the cross language validation of the Caregiver Difficulty scale
3. To determine the psychometric characteristics of Caregiver Difficulty Scale

## **Instrument**

The following scale was translated into urdu language for the present research.

### **Caregiver Difficulties Scale (CDS-25)**

Caregiver Difficulties Scale (CDS) (Wijesinghe, Fonseka & Hewage, 2013) is a self-administered questionnaire designed to be completed by the caregiver of the child with cerebral palsy. There is no definite cut off threshold for CDS; the total CDS score can be used to get an idea about the level of burden experienced by the caregivers, a higher score indicating a higher level of burden. There are four sub scales of CDS. Concern for child (1-8), Impact on self (9-15), Support for caregiving (16-20) and social & economic strains (21-25). It's a five point likert scale, score was assigned for each item (except items 2, 11, 12, 16, 17, 18 & 20) based on the response alternative selected by the respondent, in the following manner. Always = 5, often = 4, sometimes = 3, rarely = 2, never = 1. The items 2, 11, 12, 16, 17, 18 & 20 require reverse scoring as follows. Always = 1, often = 2, sometimes = 3, rarely = 4, never = 5. Caregiver difficulties scale was translated into Urdu in the present study.

### **Translation of CDS into urdu language Part I**

Translation of the Caregiver Difficulties scale was carried out, to determine the caregiver burden. Translation of the scale was completed in four steps. 1. Forward Translation 2. Committee Approach 3. Backward translation 4. Committee Approach (Breslin, 1986).

### **Forward Translation**

For the translation of Caregiver Difficulties Scale committee of five bilingual experts (proficient in both english and urdu language) were approached for the translation of the scale. Expert were briefed about the scale and also about the rationale of the research. Five professionals were selected from International Islamic University. Among them three experts

were professional psychologists, two experts were graduates from International Islamic University. Experts were requested to emphasize conceptual rather than literal translation and to use brief and simple language.

### **Committee Approach**

As experts translated the scale, a committee constituting of five members (n=5) was constituted to select the best urdu translation for each item. This committee was consisted of the supervisor of the study, clinical psychologists (n=2) counselors (n=2) from International Islamic University, Islamabad, and the researcher herself. All committee members carefully reviewed the each item of the translated scale in terms of language and relevance to the original content. The most appropriate final urdu translation for each item of the scale was selected by the committee members.

### **Backward Translation**

To ensure the accuracy of translated scale, five specialists (n = 5) were requested, from which two were from, departments of english at International Islamic University Islamabad (n =2) and Riphah International University (n = 1), and three were from National University of Modern Languages (n=3). All the experts were requested to translate the scale items into english language. These experts were masters of english language and were not included in the translation of this scale earlier, therefore; they were not acquainted with the language and words used in original english version scale.

### **Committee Approach**

A group of expert comprising six bilingual experts (n=5) were requested to critically examine the back translation of the items and to select the most suitable English translation. The committee was comprised of the supervisor of the study, lecturers in Psychology (n=2) Assistants professors in Psychology (n=2) from International Islamic university, Islamabad, and the researcher herself. All the members of the committee confirmed that translated items conveyed the same meaning and the meaning closer to the original items. However considering cultural relevance of all items of the scale, committee members agreed that adaptation of any item was not required.

### **Part II Cross language Validation of Caregiver Difficulties Scale Sample &**

#### **Procedure**

For Cross language validation of the Caregiver Difficulty Scale a sample (n=40) of caregivers of CP were selected. The sample was divided into two equal parts (Group 1 (n=20) & Group 2 (n=20)). Original English version scale was administered on group 1 and translated Urdu version scale was administered on group 2. The scale was re-administered in a different manner to the same participants after a gap of 01 week. During re-administration of the scale, group 1 of the participants were further divided into groups 1a (n=10) and 1b (n=10). In the same way Group 2 was formed 2a (n=10) 2b (n=10). Original English version scale was given to group 1a and 2a while Urdu version scale was given to group 1b and 2b. For cross validation correlation was measured between first and second administration of the scale (English and Urdu based Caregiver Difficulties Scale) (Brislin, 1986).

**Figure 3**

The distribution of the sample for Cross language validation

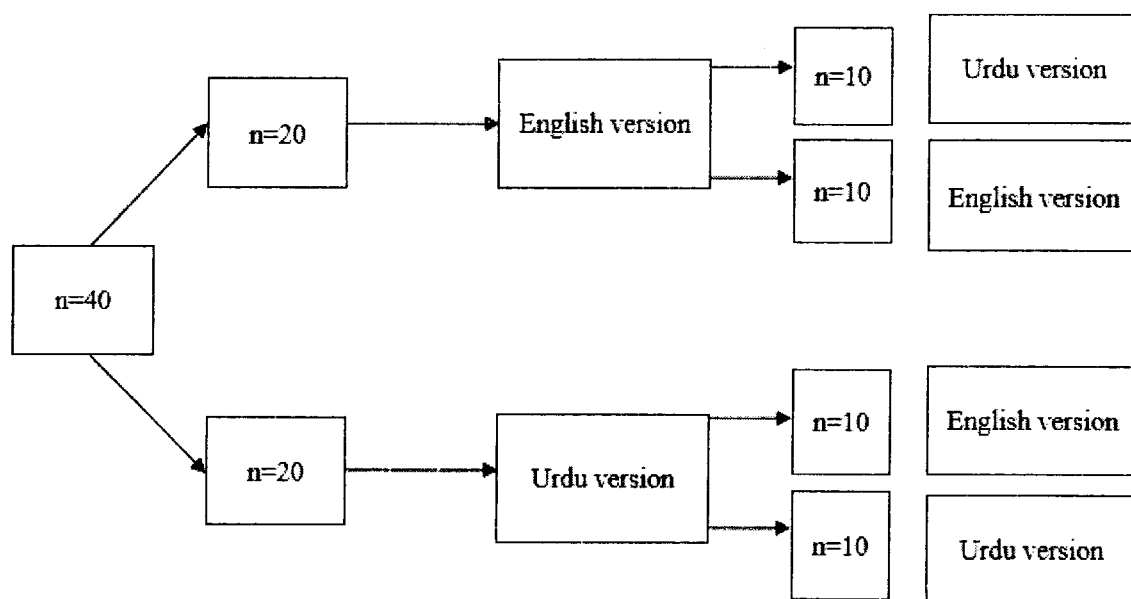
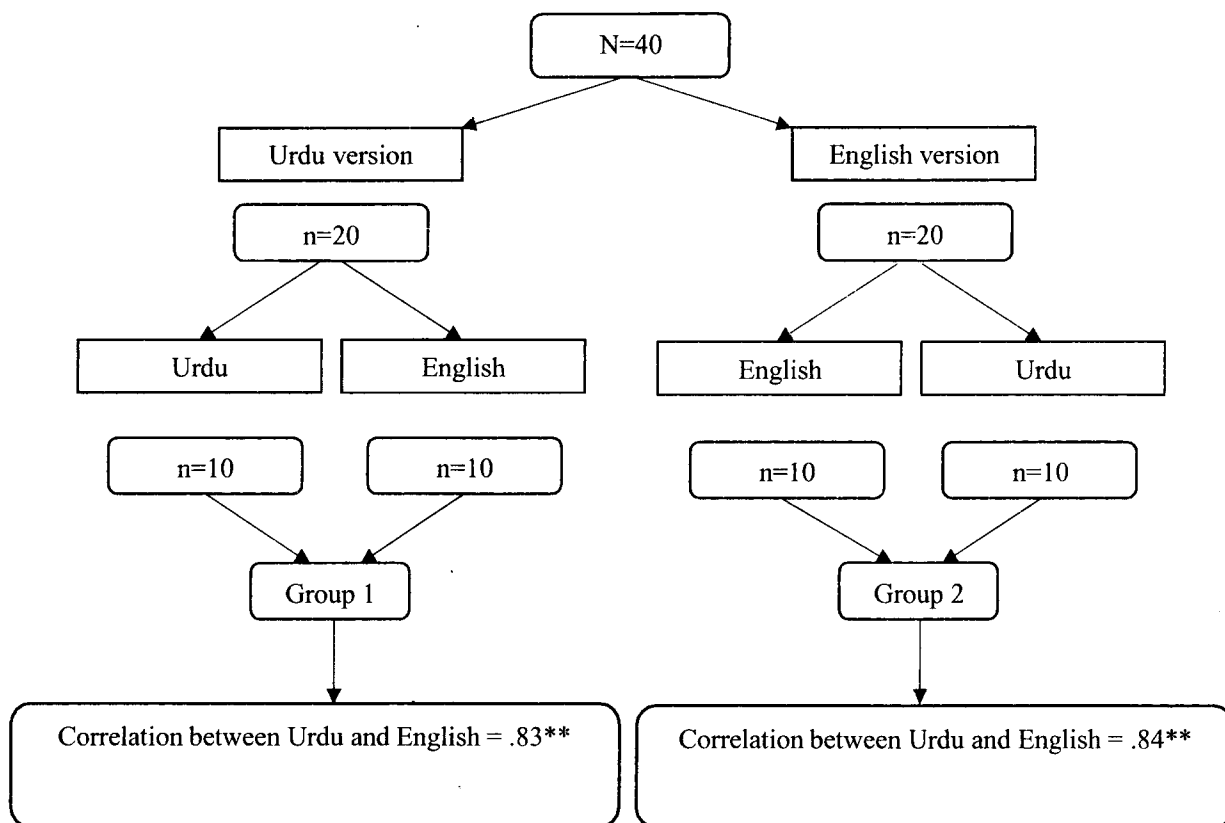


Figure 4

Cross Language Validity of the Caregiver  
Difficulty Scale

## Results

**Table 1**

*Cross language validation and Test-Retest Reliability of Caregiver Difficulties Scale (N=40)*

<i>Groups</i>	<i>N</i>	<i>1<sup>st</sup></i>	<i>2<sup>nd</sup></i>	<i>R</i>
		<i>Administration</i>	<i>Administration</i>	
<i>I</i>	<i>10</i>	<i>English</i>	<i>English</i>	<i>.83**</i>
<i>II</i>	<i>10</i>	<i>English</i>	<i>Urdu</i>	<i>.83**</i>
<i>III</i>	<i>10</i>	<i>Urdu</i>	<i>Urdu</i>	<i>.88**</i>
<i>IV</i>	<i>10</i>	<i>Urdu</i>	<i>English</i>	<i>.84**</i>

**\*\* $p < .01$**

Table 1 shows that correlation between Caregiver Difficulties Scale (CDS) Urdu and Caregiver Difficulties Scale (CDS) English versions are significant ( $p < .01$ ). The correlation value ranges from .88\*\* (Urdu to Urdu) to .83\*\* (English to English). This reveals that scores on Urdu and English have significant positive correlation for both the groups. It indicates that original English and translated Urdu version of the Caregiver Difficulties Scale has significant high conceptual equivalence and cross language validity.

### **Part III Pilot Study for Reliability Analysis and Validation of the Caregivers**

#### **Difficulties Scale**

Part III comprised of pilot testing in which scale of the study was administered on (n=80)caregivers of cerebral palsy children for determining reliability of the scale.

#### **Objective**

1. To determine the reliability & validity of urdu translated version of the Caregiver Difficulties Scale (CDS).

#### **Sample**

In this part of the study caregivers of the cerebral palsy children were the sample of the study. Sample comprised of (n=80) caregivers of cerebral palsy children. Participants were selected from out patient department of National Institute of Rehabilitation medicine (NIRM). It was assured that the information they provided would be kept private and used exclusively for the present study. The participants filled out the urdu version of the scale. Following the collection of data from the caregivers, SPSS and SmartPLS was used to process the findings further.

## Results

**Table 2**

*Frequency and Percentage of Demographic variables of Caregivers of Cerebral Palsy children(n = 80).*

Demographics	Groups	<i>f</i>	%
Caregiver Gender	Male	54	67.5
	Female	26	32.5
Relationship with child	Father	54	67.5
	Mother	26	32.5
	Others	00	00
Caregivers Age	30-40	44	55
	41-50	34	42.5
	51-60	2	2.5
Child Age	5-10	65	81.3
	11-15	15	18.08

The above table 2 shows the frequency and percentage of each demographic variable of the study. From 80 caregiver 54 were males (67.5 %) and 26 were females (32.5%). Both the caregivers were mother and fathers only. (The age of respondents varies from 30 years to 60 years,44 out of 80 respondents age is 30-40 years (55%), 34 respondent has 41-50 years (42.5%) and 2 out of 80 respondents were aged between 51-60 (2%). Ages of the child is between 5 to 15 years.65 children were between age 5 to 10 (81.3 %) and 15 are between 11 to 15 years (18.08 %).

**Table 3**

*Descriptive statistics and Alpha Reliability Coefficient of the translated version of the CaregiverDifficulties Scale (CDS) (n=80)*

variables	k	M(SD)	a	Range		Skewness	Kurtosis
				Actual	Potential		
CDS(Urdu)	25	93.2(14.9)	.91	42-119	5-125	-.6	1.67
CFC	8	32.1(5.22)	.84	16-40	5-40	-.49	.32
IoS	7	26.6(5.15)	.81	7-35	7-35	-1.4	2.9
SfCg	5	15.83(5.06)	.91	5-25	5-25	-.20	-.27
SES	5	18.69(4.09)	.67	5-25	5-25	-1.4	1.2

*CFS= Care for caregivers, IoS= Impact on Self, SfCg= Support for Child, SES= Social & economic Stains*

Note k= No. of Items, M (SD) =Mean (Standard Deviation), a=Cronbach's Alpha

Table 3 shows the descriptive statistics of study variable. In the table each variable along with number of items (k). Mean value and standard deviation of each variable is also presented in the above table. Reliability is also calculated using ( $\alpha$ ) Reliability test in the SPSS, the reliability of each variable is  $>0.9$ . Skewness and kurtosis of each variable was calculated to check the normality of data, the Skewness and kurtosis results show that data is normal and parametric test can be used for further analysis.

**Table 4***Correlation between Caregiver Difficulties Scale and its sub scales (n=80)*

Variables	M	SD	1	2	3	4	5
CDS	93.24	14.96	-	.81**	.86**	.74**	.62**
CfC	32.08	5.22		-	.68**	.37**	.37**
IoS	26.65	5.15			-	.56**	.35**
SfCg	15.83	5.06				-	.31**
SES	18.69	4.08					-

\*\* $p < .01$ , \* $p < .05$  Note: CDS =Caregiver Difficulties Scale, CFS= Care for Child, IoS= Impact on Self, SfCg= Support for Caregivers, SES= social & economic Strains

Table 4 indicated that the relationship between the Caregiver Difficulties Scale (CDS) and its sub scales. All the variables are positively correlated with each other's. Concern for the child is positively correlated with the Impact on Self (IoS) (.68\*\*), support for caregivers (.37\*\*) and social & economic strains (.37\*\*). Impact on Self (IoS) is positively correlated with support for caregivers (.56\*\*) and social & economic strains (.37\*\*). Support for caregivers is positively correlated with Social and economic strains (.31\*\*).

### CFA Measurement Model

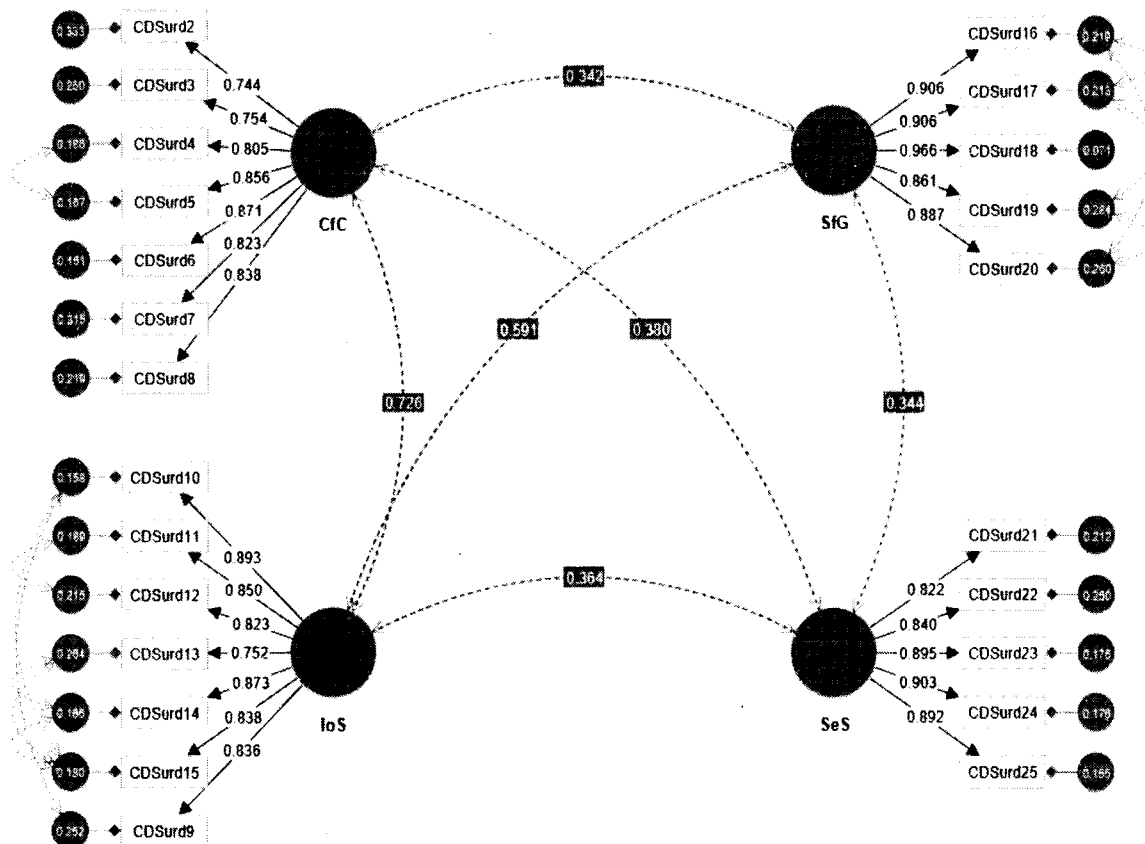


Figure 4. Confirmatory Factor Analysis Model

Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains,

**Table 5***Factor Loadings of Caregiver Difficulties Scale (CDS) (n=80)*

Items	CfC	IoS	SES	SfCg
CDSurd10		.89		
CDSurd11		.85		
CDSurd12		.82		
CDSurd13		.75		
CDSurd14		.87		
CDSurd15		.84		
CDSurd9		.84		
CDSurd16				.91
CDSurd17				.91
CDSurd18				.97
CDSurd19				.86
CDSurd20				.88
CDSurd21			.82	
CDSurd22			.84	
CDSurd23			.89	
CDSurd24			.90	
CDSurd25			.89	
CDSurd2	.74			
CDSurd3	.75			
CDSurd4	.80			
CDSurd5	.86			
CDSurd6	.87			
CDSurd7	.82			
CDSurd8	.84			
CDSurd10	.74			

*Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self,SfCg= Support for Caregiver, SES= Social & Economic Strains,*

The above table 5 shows the factor loading (estimated value) of each dimension. Concern for the Child (CfC) was measured by eight items; Impact on Self (IoS) was measured by seven items, Support for Caregivers (SfCg) was measured by five items and Social and Economic Strains (SeS) was measured by five items. If any item having factor loading  $\geq 0.40$  (Cua et al., 2001), it was included for further analysis. No item has factor loading of less than 0.40 so for further analysis no item of the scale was excluded.

**Table 6***Model fit Indices for the Caregiver Difficulties Scale (n=80)*

Fit Indices	$\chi^2$	df	XMIN/df	RMSEA	GFI	NFI	CFI	TLI
Model 1	369.19	235	1.57	0.084	.74	.85	.94	.93
Benchmark	--	< 3	< 0.08	$\geq 0.90$	$\geq 0.90$	$\geq 0.90$	$\geq 0.90$	$\geq 0.90$

Note. \*p=RMSEA <.01, \*p= CMIN<3.0;

The above table 6 shows the model fit indices of caregiver Difficulties Scale (CDS), the results show that all indicators are within the range and best fit for analysis.

## Discussion

In the first study of the present research the major aim was to translate adapt and validate the Caregiver Difficulties Scale (CDS) in Urdu. The major purpose of selecting this instrument was that it's purely made for the caregivers of cerebral palsy children. Previous Research reported that the Caregiver difficulties Scale (CDS) is an instrument that demonstrates both valid and reliable in evaluating the level of caregiver burden experienced by caregivers of children diagnosed with cerebral palsy in the context of Sri Lanka (Wijesinghe, Fonseka, & Hewage, 2013).

The translation into urdu language was undertaken with the aim of making the instrument comprehensible for caregivers of the cerebral palsy children in Pakistan. The researcher should considered administering this instrument to the Pakistani people in order to enhance their understanding of the urdu language and ensure their comfort in providing accurate responses in urdu. The instrument underwent translation process by following the sequential procedures. The process of scale translation encompassed many steps. Firstly, bilingual experts conducted a forward translation, followed by a committee method to ensure accuracy and consensus. Subsequently, a separate group of bilingual experts, distinct from those engaged in the initial forward translation, performed a backward translation. Finally, the same experts who conducted the forward translation employed a committee approach to review and refine the backward translation. The implementation of parallel translation methods necessitated the involvement of many multilingual specialists who separately translated the identical questionnaire. The final stage of the study involved convening a consensus meeting to determine the most optimal reconciled version of the translated scale, with the aim of achieving the objectives of the present study (Brislin, 1986).

An essential component of the translation phase involves assessing the cross-language validity of the translated scale through a comprehensive analysis of the translated urdu version in comparison to the original english language version of the scale. To ensure the validity of the measure, a sample of 40 caregivers of cerebral palsy children were selected and both the English and urdu versions of the scale were administered. Two groups of participants were subjected to two rounds of testing, one with a sequence of Urdu-English and the other with a sequence of Urdu-Urdu. Subsequently, these two groups were further separated into four subgroups, each consisting of 10 individual caregivers. The study examined the test-retest reliabilities and correlations among four language groups: urdu-english, urdu-urdu, english-english, and english-urdu. The findings revealed a statistically significant positive association between the two versions of the scale. The link between urdu and urdu is strongly favorable, and the scale measuring caregiver difficulties/burden is also considered. The urdu translation version was found to be more comprehensible for caregivers of CP (Figure 1 & table 1).

In Table 2, demographic information of caregivers were obtained. In the current study translation of Caregivers Difficulties Scale (CDS) in Urdu language was the main objective. The subsequent aim was to ascertain the alpha reliability coefficients of the urdu version. The original scales in the english edition have been widely employed and subsequently translated into several languages. The table 2 shows the frequency and percentage of each demographic variable of the study. From 80 Caregiver 54 were males (67.5 %) and 26 were females (32.5%). Both the caregivers were mother and fathers only. (The age of respondents varies from 30 years to 60 years, 44 out of 80 respondents age is 30-40 years (55%), 34 respondent has 41-50 years (42.5%) and 2 out of 80 respondents were aged between 51-60 (2%). Ages of the child is between 5 to 15 years. 65 children were between age 5 to 10 (81.3 %) and 15 are between 11 to 15 years (18.08 %).

Table 3 shows the descriptive statistics of study variables. In the table each variable along with number of items (k). Mean value and standard deviation of each variable is also presented in the table. Reliability is also calculated using  $\alpha$ -Reliability test in the SPSS, the reliability of each variable is between .91. to .96. Reliability of the scale is CDS is .91 and scale has four sub scales. First subscale is Care for caregivers (CFC), and its reliability is .84, second subscale is Impact on Self (IoS) and its reliability is .81, third subscale is Support for Caregivers (SfCg), its reliability is .91 and reliability of the fourth subscale Social & Economic Stains, is .67.

Previous research reported that the reliability of original scale of CDS is between .69 to .91 (Wijesinghe, et.al, 2013). Previous research reported that CDS was also translated into Persian language for Iranian population. The psychometric features of the Caregiver Difficulties Scale (CDS) among Iranian caregivers of children diagnosed with cerebral palsy (CP) was evaluated. The fit indices indicate that the initial model of CDS demonstrated a reasonable level of adequacy ( $\chi^2/df = 2.03$ , CFI = .90, TLI = .88, and RMSEA = .08). The reliability criterion for all domains of the P-CDS were met, as indicated by Cronbach's alpha and ICC values over 0.7 (Farajzadeh et.al, 2018). CDS is also translated into Turkish language for the caregivers of Cerebral Palsy children and the Cronbach alpha coefficients were found as .88 for the test and .85. The Turkish iteration of the Caregiver Burden Scale (CDS) demonstrates sound validity and reliability as an assessment tool for evaluating the burden experienced by family caregivers of children diagnosed with cerebral palsy (CP). Park et al. (2021) conducted a translation of the CDS into the Korean language and afterwards assessed the reliability and validity of the Korean version, referred to as K-CDS. The reliability of the scale and its dimensions were between .71 to .91 respectively.

Table 5 indicated that the relationship between the variables of the study. All the variables are positively correlated with each other's. Previous research reported that CDS is a

valid measure of caregiver burden among caregivers of CP children. In Sri Lanka, raising a kid with cerebral palsy is likely to result in caregiver overload, especially if the child has multiple siblings or a severe degree of disability. It's critical to track caregiver load as part of regular cerebral palsy care since this enables families who most require psycho-social support to receive it (Hewawitharana et al., 2023). The Caregiver Difficulties Scale (CDS), created especially for this purpose, as it was used to quantify caregiver burden, which was described as "caregiver's response to various stressors associated with caregiving." In order to determine if coping lessens the impact of stressors on caregiver burden, multivariate linear regression was utilized to analyze relationships between caregiver burden, sociodemographic, stressors, and coping characteristics. Spousal support was connected with lower caregiver burden, while poor income, living in a remote area, being male, and the amount of functional deficits the impaired kid has all strongly correlated with higher caregiver burden. By seeking out social assistance, the increasing load that comes with more severe functional limitations was lessened. Families at high risk of caregiver distress may benefit from psycho social interventions centered on assessing and enhancing social support for caregivers of CP's in order to reduce unfavorable outcomes (Wijesinghe et al., 2015).

In a previous research in Pakistan, caregiver burden was assessed through caregiver burden inventory. The findings of the study indicate a heightened demand for respite and additional support services for caregivers of children diagnosed with cerebral palsy. Among the participants involved in the study, it was found that 54.33% (n = 163) reported occasional need for relief and other services, while 36.67% (n = 116) reported regular need for such support. Additionally, a minority of parents, namely 6.33% (n = 19), indicated rare need for relief and other services. The findings indicate that a significant proportion of caregivers responsible for children with cerebral palsy require assistance and additional support in order to effectively manage the burden associated

with their caregiving responsibilities. This burden encompasses various aspects, including hindrances to personal growth, negative impacts on physical and emotional well-being, and challenges in maintaining social relationships (Kiani et al., 2021).

In Pakistan to assess the caregiver burden, Zarit Burden Inventory (Zarit et al., 1980) is mostly used. Understanding and mitigating the negative impact of caregiver stress on families is a crucial result that warrants careful examination. The comprehension of such concepts has the potential to positively impact the overall welfare of both caregiver and children with disabilities. Through an examination of the effects of caregiving burden on the mental well-being of caregivers who are responsible for children with varying disabilities, it was determined that the burden of caregiving exerts a noteworthy influence on the mental health of these caregivers (Arif & Ammara & Saleem, 2018).

The results display good psychometric qualities. The construct validity was assessed using confirmatory factor analysis. Validity of the scale was also good. Previous results reported that Face validity, content validity and consensual validity of CDS was established through the process of item generation. Moderate to high correlations ( $r \geq 0.3$ ) with scores of CDS, confirming construct validity among caregivers of CP children in Sri-lanka (Wijesinghe et al, 2013). Another research reported that the fit indices showed that the original model of CDS was relatively adequate ( $\chi^2/df = 2.03$ , CFI = 0.90, TLI = 0.88 and RMSEA = 0.08) in Persian version of Caregiver Difficulties Scale (CDS) (Farajzadeh et al., 2018).

## **Conclusion**

Based on the findings of the present study during study I, translation, adaptation and validation of Caregiver Difficulties Scale (CDS) , it can be inferred that both languages of the Caregiver Difficulties Scale (CDS) exhibit consistency in terms of their conceptual interpretation within the Pakistani population. Additionally, the study demonstrated that the Urdu vocabulary terms employed in the scale is straightforward, comprehensible, and effectively express the intended meaning of the sentence, effectively communicating the notion to the individual in Pakistan. The concept of cross-language validity suggests that the urdu version of the Scale (CDS) may exhibit indications of validity, reliability, and cultural fairness specific to the Pakistani context. In the present study, urdu translated Caregiver difficulties Scale was used to assess the caregiver burden first time. From the reliability and psychometric properties of urdu version it is concluded that it is the most accurate scale to assess caregiver burden. The utilization of this urdu version scale can be beneficial in the diagnosis process, particularly when employed in conjunction with other assessment instruments. This approach enables the caregivers of children with cerebral palsy to accurately evaluate and develop an effective management & rehabilitative plan that meets their specific needs.

## Chapter 4

### **Study II: Translation & Adaptation of Positive Psychotherapy Manual & Worksheets**

Study II was based on translation of Positive Psychotherapy (PPT) manual into Urdu language, establishing its validity and assessment of its effectiveness by administering on caregivers of cerebral palsy children. This study was divided into following steps.

Step I: Translation of the Positive Psychotherapy (PPT) worksheets & manual into Urdu language

Step II: Adaptation and cross language validation of the Positive Psychotherapy

(PPT) manual **Step I: Translation of the PPT worksheet & manual into Urdu language**

#### **Objective**

1. Translation, adaptation and validation of Positive Psychotherapy worksheets.
2. Translation & adaptation & validation of Positive Psychotherapy clinician manual.

#### **Instrument**

The following positive psychotherapy manual was used for the present research.

#### ***Positive Psychotherapy***

Out of many therapeutic approaches, one therapeutic approach is positive psychotherapy. It is based on positive psychology. It focuses on helping clients to develop resilience and a stronger feeling of wellness by assisting them in using their inner resources to overcome obstacles, comprehending and identify areas for progress (Seligman, 2012). Positive psychotherapy (PPT) is a contemporary approach to therapy that draws upon the principles and techniques of both humanistic and psychodynamic approaches in the realm of diagnosis and treatment. The primary emphasis lies in shifting the attention from identifying an individual's shortcomings to highlighting their strengths and positive attributes (Rashid, 2015). According to Seligman, Rashid, and Parks (2006), Positive Psychotherapy (PPT) differs from conventional therapies for depression in such a way that it primarily focuses on enhancing

positive mood, engagement, and meaning, rather than immediately addressing depressive symptoms.

There exists a wide array of psychotherapeutic approaches that can be utilized to ameliorate symptoms and mitigate psychological distress. Positive psychotherapy (PPT) basic emphasis is on positive aspects of a client in their lives without focusing on symptoms, negative life stories, past negative memories, or abruptly substituting them with negatives. This approach recognizes that despite the widespread presence, strength, and influence of negative emotions, the majority of clients seek treatment to alleviate feelings of sadness, anxiety, anger, or ambivalence. Positive emotions (P), engagement (E), relationships (R), meaning in life (M), accomplishment (A). The process of PPT can be segmented into three distinct parts: beginning, middle, and final. Specific sequence of exercises within these phases can be customized to effectively address the specific presenting problems experienced by clients. A validated outcome measure, known as the Positive Psychotherapy Inventory (PPTI), has been developed to evaluate the wellbeing a distinct component of Positive Psychotherapy (PPT) (Rashid & Howes, 2016).

Positive psychotherapy (PPT) differs from conventional therapies for depression as it focuses on enhancing positive mood, engagement, and meaning instead of immediately addressing depressive symptoms (Seligman, Rashid, & Parks, 2006). Positive psychotherapy (PPT) is an intervention in the field of positive psychology that aims to expand the range of traditional psychotherapy. The primary focus of this approach is to attend to the constructive assets of individuals, including positive emotions, character qualities, and a sense of purpose, alongside the treatment of symptoms associated with psychopathology.

Positive psychotherapy (PPT) is derived from the positive psychology movement and is a comprehensive approach that facilitates therapeutic transformation via the cultivation of involvement, pleasure, and meaning. There exists empirical data supporting the efficacy of this

intervention in the treatment of depression. The utilization of PPT is suggested as a versatile framework that can be implemented with various patient cohorts in conjunction with alternative treatment methodologies (Walsh, Cassidy, & Priebe, 2017).

### **Positive Psychotherapy Manual (Worksheets & clinician manual)**

Positive Psychotherapy (PPT) offers therapists a structured therapeutic approach that is derived from positive psychology. Positive psychology is a rapidly growing field of research that investigates the factors and mechanisms that contribute to the well-being and success of individuals, communities, and institutions. The initial section of this clinician's manual provides a comprehensive introduction to the theoretical underpinnings of positive psychotherapy. It delves into the examination of character strengths and the application of positive psychology practices, while also discussing the various processes and mechanisms via which positive change can be achieved. The last portion of the book encompasses a series of 15 positive psychotherapy sessions, each comprising fundamental principles, recommendations, techniques, and exercises aimed at reinforcing the abilities acquired during the sessions. Every session also incorporates a minimum of one vignette, along with an examination of the cross-cultural implications. Positive psychotherapy offers mental health practitioners of many orientations a compelling alternative to symptom-focused techniques. This therapeutic approach aims to empower clients by fostering a feeling of purpose and meaning, which is often perceived as lacking in conventional therapeutic modalities (Rashid & Seligman, 2018). The manual comprises of worksheets and clinician part. Every session is based upon positive strength based therapeutic interventions.

In this step translation of the PPT worksheets & manual was carried out, to determine the effectiveness of therapy on caregiver's of cerebral palsy children. Translation method of the worksheet and manual was completed in four steps.

## **Step I: Translation & Adaptation of Positive Psychotherapy**

### **Objective**

4. To translate & adapt the positive psychotherapy (PPT) (Clinician manual and worksheets) as an interventional tool into urdu language.

### **Procedure**

In Step I, translation & adaptation of the Positive Psychotherapy manual was carried out, all sessions in the manual was translated and adapted into urdu language. Translation of the worksheets & manual was completed in four steps. 1. Forward translation 2. Committee Approach

3. Backward translation 4. Committee Approach (Breslin, 1980).

### **Steps of translation, adaptation & validation of Positive Psychotherapy**

#### ***Forward Translation***

Positive Psychotherapy manual has two parts one is for the clients and one is for the clinician. Both parts were translated in the present study. Five bilingual experts (Proficient in both english and urdu language) were approached for the translation of worksheets and manual. Expert were given detailed about the positive psychotherapy sessions and also about the rationale of the research. Five bilingual professionals were selected having proficiency in english to urdu language for the translation of worksheets & manual. Three experts were from international Islamic University, two were from the NUML university. Worksheets & manual were given to the literature experts to translate into urdu. Both manual and worksheets were translated side by side. Experts were requested to emphasize conceptual rather than literal translation and to use brief and simple language.

### ***Committee Approach***

As all the experts completed the translations, for the selection of most appropriate translation committee approach was carried out. A committee constituting five members (n=5) was constituted to select the best translation for each item. The committee was consisted of the supervisor of the study, Assistant Professor (n=2) lectures (n=2) from International Islamic University, Islamabad, and the researcher herself. All committee members carefully reviewed the each items of the translated manual & worksheet in terms of language and relevance to the original content. The translated PPT manual was thoroughly examined by all committee members for both language use and consistency with the original content. Best Urdu translation was selected by the experts for backward translation.

### ***Backward Translation***

To ensure the accuracy of translated manual, five experts (n=5) from English literature were requested to translate the manual in english. Three specialists in languages (n = 3), and one from the Department of English of International Islamic University Islamabad (n = 1) and one from Punjab university (n = 1) translated these Urdu translation of the PPT manual into english. These experts were literature experts and were not included in the translation of this manual earlier, therefore; were not acquainted with the language and words used in original english version scale.

### ***Committee Approach***

A group of expert comprising 3 bilingual experts (n=3) was held to critically examine the back translation items and to select the final manual. The committee was made up of the study's supervisor, assistant professors of the department of Psychology (n = 2) International Islamic University Islamabad and the researcher herself. All the member of the committee confirmed that translated items conveyed the same meaning or the meaning close to the

original items.

## **Step II Adaptation and cross language validation of the Positive Psychotherapy Manual & worksheets**

### **Objective**

1. To determine the adaptation & cross language validation of urdu translated positive psychotherapy manual & worksheets

### **Adaptation of Positive Psychotherapy (Hambilton et al., 2005)**

#### **Adaptation Committee Approach**

Adaptation of Positive Psychotherapy led to the replacement and modification of its content according to the cultural values. A three-member adaptation committee was formulated for this purpose. Two committee members were practicing clinical psychologists having their doctoral degrees in psychology and the remaining one member was professor in Psychology. The worksheets and therapy (clinician part) was given to the committee to see its cultural appropriateness. In the adaptation, process the committee discussed in group form, the content of positive psychotherapy and its cultural relevance. Committee reviewed the worksheets & clinician part. Committee members recommended some minor changes including cultural and familiarity adaptation, which eventually resulted in replacement of some words/items like in worksheet 7.2, ten ways to increase Satisficing, in item 10, it was mentioned that “never drink more than two glasses of wine in evening”, that is not cultural specific, so committee suggested that to change it with tea’ instead of using wine. In session 12, worksheet 12.1, in worksheet of tree of positive relationships, name of the persons were replaced by just initials like ( Jackson was replaced by Mr.J). In the same worksheet for currency, dollar was used which was replaced by rupees.

#### **Expert Consultation (Hambilton et al., 2005)**

For the present study for cross language validation of the positive psychotherapy, the

manual and worksheets were given to the two experts practicing clinical psychologists. Both of them were from National Institute of Rehabilitation Medicine and practicing clinical psychologists. According to the experts the positive psychotherapy can be administered and most of the concept are easy to understand in urdu language.

### **Sample & procedure of tryout**

After getting permission from the Psychology department of NIRM, caregivers of CP (parents) were contacted from Outpatient department (OPD) and in patient department. In first step Depression Anxiety Stress Scale (DASS-21), caregiver Difficulties Scale (CDS), Parental Burnout Assessment (PBA), OLS (sense of coherence), MSPSS (social support) & positive psychotherapy inventory (mental wellbeing) along with the informed consent form were administered on caregivers of cerebral palsy children, to assess their mental well-being. Caregivers were briefed about the sessions. For tryout (feasibility testing) of the positive psychotherapy manual & worksheets a sample of caregivers of CP children (n=02) were selected who scored high on study variables. Original English version worksheets and manual was administered on 1 participant (female) and newly urdu translated was administered on 1(female) participant separately. For language validation post testing was done and the results showed that both manual & worksheets were easy to comprehend and participants easily understood the therapy sessions. Positive Psychotherapy was provided in 15 sessions.

### ***Positive Psychotherapy***

The goal of positive psychotherapy (PPT) is to extend the application of traditional Psychotherapy through therapeutic positive psychology. Its main idea is that, in addition to treat psychopathology's symptoms, therapy should also focus on a client's positive resources, such as their character traits, positive emotions, and purpose in life, Positive psychotherapy Sessions were mainly divided into 3 phases. Phase I is the Narrative of Resilience (Positive Introduction). It has included first 4 sessions. Phase II is the Hope of

Cultivating a Better version of the self, including 4 sessions (Session 5 to 8). Phase III is the Aspiration of Leaving Positive Legacy having 7 sessions (Session 9 to 15). Details of sessions were discussed in table 7.

### Sessions Format (Positive Psychotherapy)

**Table 7: Positive Psychotherapy Sessions Description**

Sr. No.	Session Number & Title	Content	Main practices
Phase One			
1	Positive Introduction and Gratitude Journal	In this session client, learn how to think about positive events in life. This session also teaches how to start the ongoing practice of cultivating gratitude through journaling positive experiences and appreciating the impact of gratitude.	1. Positive Introduction (Positive Story of Life) 2. Gratitude Journal writing 3 good (big or small) things that happened in whole day)
2	Character Strengths and Signature Strengths	Identification of Character Strengths & signature Strengths (positive traits that can be developed through practice and can contribute to personal growth & wellbeing	Assessment of Character Strengths & signature strengths

- |   |  |  |  |
|---|--|--|--|
| 3 | Session Three:<br>Practical<br>Wisdom                      | This session presents the skills of practical wisdom. These skills teach us how to adaptively apply the signature strength in a balanced way to solve the problems | Know-how of strengths (learning application of 4 wisdom strategies, specificity, relevance, conflict reflection, reflection & calibration) t resolve three specific scenarios. |
| 4 | Session Four: A<br>Better Version of<br>Me<br><br>PHASE II | Written plan based on positive, pragmatic & persistent self development  | A better version of me: writing self development Plan  |
| 5 | Session Five:<br>Open and Closed<br>Memories               | <ul style="list-style-type: none"> <li>● Client recall, write &amp; process memories</li> <li>● Developing skills of dealing open and closed memories</li> </ul>   | <ul style="list-style-type: none"> <li>□ Relaxation</li> <li>□ Memorizing bitter memories and explore for ways to deal adaptively.</li> </ul>                                  |
| 6 | Session Six:<br>Forgiveness                                | Clarifying the concept of forgiveness, as it's a process of change, rather than an event.  | □ REACH process  |
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			□ Letter of forgiveness
7	Session Seven: Maximizing versus Satisficing	Focus on the concept of Maximizing (aiming to make the best possible choice) and Satisficing (making a good enough choices)	□ Focusing on satisficing as compared to maximizing
8	Session Eight: Gratitude	Thanking a person in life who helped the client in past but at that time client didn't say thanks.	1. Gratitude letter 2. Gratitude Visit
	PHASE III		
9	Session Nine: Hope and Optimism	Learn to see the best possible realistic outcomes. They learn that challenges are temporary & to develop sense of hope	One Door closes, another door open
10	Session Ten: Post-traumatic Growth	Exploring deep feelings about any traumatic event that are bothering them.	Expressive writing of traumatic event in life
11	Session Eleven: Slowness and Savoring	Client learn that how to slow down oneself in different tasks in life and how to savor oneself. Mindfully focusing on positives	Slowing & savoring practices in life
12	Session Twelve: Positive Relationships	Identification & recognizing the strengths of their family members	Tree of Positive Relationship

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13	Session Thirteen:	Client learn how for style of responding a	Active constructive
	Positive	good news and which of these predicts	Responding
	Communication	relationship prediction	
14	Session Fourteen:	Client learn that how being Altruistic help	Gift of Time
	Altruism	both themselves and others	
15	Session Fifteen:	The focus of this session is to search and	Positive Legacy
	Meaning and	pursuit of meaningful endeavors for the	
	Purpose	greater good.	

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## **Discussion**

The aim of this study of the present research was to translate the positive psychotherapy manual into urdu language. The major purpose of translating this therapeutic manual into urdu was as the participants cannot understand the english language. The translation into urdu language was undertaken with the aim of making the positive psychotherapy manual understandable for caregivers of the cerebral palsy with specific reference to Pakistani population. The manual underwent translation in accordance with the sequential procedures. The process of manual translation encompassed many steps. Firstly, bilingual experts conducted a forward translation, followed by a committee method to ensure accuracy and consensus. Subsequently, a separate group of bilingual experts, distinct from those engaged in the initial forward translation, performed a backward translation. Finally, the same experts who conducted the forward translation employed a committee approach to review and refine the backward translation. The implementation of parallel translation methods necessitated the involvement of many multilingual specialists who separately translated the identical questionnaire. The final stage of the study involved convening a consensus meeting to determine the most optimal reconciled version of the translated manual, with the aim of achieving the objectives of the present study (Brislin, 1986).

Presently Brislin model (1980) & Hambleton et al., (2005) was used to translate and adapt and validate the positive psychotherapy manual. Used following steps: Forward translation, committee Approach, Backward translation and committee approach, Adaptation committee approach, expert reviews and tryout for feasibility testing. Positive psychotherapy was adapted for Pakistani families by adaptation guidelines and translation techniques provided by Hambleton & Lee, 2013. Brislin (1980) suggests the steps of translation as forward translation, back translation and committee approach should be utilized to preserve equivalence between

one language and culture and another language and culture. These guidelines (e.g., forward translation, committee approach, backward translation, committee approach, and pilot study) have been utilized in most researches for cultural adaptation of interventions. Parents and fellow professional's feedback was also incorporated during adaptation process. For adaptation mostly 5 steps were followed (1) instrument translation from source language into target language (2) synthesis of the translated version (3) analysis of the synthesized version by expert judges. (4) back translation, and (5) a pilot study (Hambelton, 2005) For cultural adaptation of interventions Barrera & Castro (2006) was also followed based on cultural adaptation of interventions. In present study PPT therapy was translated by using the following steps keeping in mind the contextual adaptation and content adaptation (1) forward translation (2) committee approach (3) backward translation (4) committee approach (5) cultural Adaptation by experts (6) evaluation by experts (6) instrument evaluation by target population (tryout ).

The positive psychological interventions are using more frequently and replacing the old psychotherapy based intervention. The effectiveness of very broadly defined positive psychological interventions or therapies that improve well-being through pathways congruent with positive psychology theory. The concept includes a broad spectrum of positive psychological interventions, such as mindfulness, mind-body, and physical exercise-based therapies (Carr et al., 2023).

Positive psychotherapy (PPT) is a well-researched psychological practice that was first shown to be effective with those exhibiting signs of depression. Positive psychology intervention, or PPT, is an academic field that evolved relatively apart from psychotherapy that prioritizes enhancing well-being above reducing deficit. Traditional psychotherapy methods to psychosis do not place as much emphasis on the processes that PPT targets, such as strengths, forgiveness, gratitude, and savoring. Creating a new treatment strategy to assist individuals

going through psychosis is the aim of the PPT modification process. In a previous research, a manual based intervention termed wellfocus PPT—a 14-session standard PPT modified using an evidence-based theoretical framework—was created with the goal of enhancing the well-being of individuals suffering from psychosis (Riches et.al, 2016). The analysis of the previous findings demonstrated the beneficial effects of positive psychotherapy on infertile women's resilience, self-compassion, and mental fortitude. As a result, it has helped infertile women's perseverance, self-compassion, and mental fortitude (Mohammadi et.al, 2019). Previous research has reported that PPT can effectively treat symptoms of depression in individuals suffering from psychosis (Schrack et al., 2015). Positive Psychotherapy was not translated earlier, this is the first time it is translated into urdu language in Pakistan for the convenience of the caregivers of CP children.

### **Conclusion**

Based on the findings of the present study, it can be inferred that the positive psychological interventions are using more frequently and replacing the old psychotherapy based intervention. The effectiveness of positive psychological interventions can improve well-being of the individuals. Additionally, the study demonstrated that the urdu vocabulary terms employed in the therapy are straightforward, comprehensible, and effectively express the intended meaning of the sentence, effectively communicating the notion to the populace in Pakistan. In the present study urdu translated Positive Psychotherapy was used as an interventional tool for the first time for caregivers of CP children. Positive Psychotherapy (urdu) can be used as an effective empirical evidence in clinical settings, rehabilitation & counseling practice by mental health professionals in Pakistan.

## Chapter 5

### Study III Main Study

The aim of the main study was to assess the caregiver burden, burnout, psychological distress (Depression, Anxiety & stress), social support, sense of coherence & mental wellbeing among care givers of cerebral palsy children and to provide therapeutic interventions to the caregivers of cerebral palsy children. The major goal of this study was also the selection & allocation of caregivers into two groups i.e., treatment group and control group for therapy. After screening data from the main study, the random allocation was done. It was intended to give the participants of the data proper interventions, based on positive psychotherapy and counseling. For this purpose, participants were divided into two groups, positive psychotherapy treatment group & counseling group. The aim was to evaluate the effectiveness of positive psychotherapy on mental being of the caregivers of cerebral palsy children.

#### Objectives

1. To examine the relationship of caregiver burden, burnout, sense of coherence, social support, psychological distress (Depression, Anxiety & Stress) and mental wellbeing among caregivers of cerebral palsy children.
2. At pretest level assessment of caregiver burden, burnout, psychological distress, mental well-being, social support and sense of coherence among caregivers of cerebral palsy children
3. At pretest level screening & randomly assigning the participants into two groups i.e treatment group & control group on the basis of moderate to high levels of scores on caregiver burden, burnout, and psychological distress (depression, anxiety & Stress) and low scores on sense of coherence, mental well-being & social support among caregivers of cerebral palsy children.
4. To find out the efficacy of positive psychotherapy urdu manual for the treatment of

caregiverburden, burnout, psychological distress, mental well-being, social support and sense of coherence among caregivers of cerebral palsy children.

5. At posttest level assessment of caregiver burden, burnout, psychological distress, mental well-being, social support and sense of coherence among caregivers of cerebral palsy children.

6. To explore the differences of demographic variables including, age of the caregivers, gender of the caregiver, education level, marital status, the total number of children, family system and income levels, cerebral palsy type of the child, additional problems (Speech Impairment, Intellectual deficit), family system and income levels of caregivers of cerebral palsy children on scales of measurement, i.e, caregiver burden, parental burnout, psychological distress (depression, anxiety & stress), sense of coherence, mental well-being and social support.

### **Hypotheses**

Following hypotheses have been formulated for the present research:

1. There will be positive relationship of caregiver burden and burnout with psychological distress (depression, anxiety and stress) among caregivers of cerebral palsy children.
2. There will be negative relationship of caregiver burden with sense of coherence, social support & mental wellbeing among caregivers of cerebral palsy children.
3. There will be negative relationship of burnout with sense of coherence, social support & mental wellbeing among caregivers of cerebral palsy children.
4. There will be negative relationship of sense of coherence and social support with psychological distress among caregivers of cerebral palsy children.
5. There will be positive relationship of sense of coherence and social support with mental wellbeing among caregivers of cerebral palsy children.
6. There will be positive relationship of sense of coherence with social support among

caregivers of cerebral palsy children.

7. There will be negative relationship of psychological distress with mental well being among caregivers of cerebral palsy children.

8. At pretest level caregivers of cerebral palsy children in both treatment and control group will score high on caregiver burden, burnout, psychological distress (depression, anxiety & stress).

9. At pretest level caregivers of cerebral palsy children in both treatment and control group will score low on sense of coherence, social support and mental well being .

10. At post-test level after getting the positive psychotherapy intervention there will be a significant decrease in the level of caregiver burden, burnout, depression, anxiety & stress in treatment group as compared to control group among caregivers of cerebral palsy children.

11. At post-test level after getting the positive psychotherapy intervention there will be a significant increase in the level of sense of coherence, social support and mental well being in treatment group as compared to control group among caregivers of cerebral palsy children.

12. Sense of coherence will mediate the relationship between burnout and psychological distress among caregivers of cerebral palsy children

13. Social support will mediate the relationship between burnout and psychological distress among caregivers of cerebral palsy children.

14. Sense of coherence will mediate the relationship between caregivers burden and mental wellbeing among caregivers of cerebral Palsy children

15. Social Support will mediate the relationship between caregiver burden and mental wellbeing among caregivers of cerebral Palsy children.

16. Female caregivers of cerebral palsy children will score high on caregiver burden, burnout, depression, anxiety & stress as compared to male caregivers of cerebral palsy children.

## **Operational Definitions**

### **Cerebral palsy**

Cerebral palsy is a persistent disorder of movement and posture affecting movement, muscle tone and coordination caused by damage to the developing brain typically before birth or in early childhood (Rosenbaum et al., 2006).

### ***Caregiver Burden***

Caregivers' burden is defined as the physical, emotional, social, and financial problems that can be experienced by family caregivers. Caregiver burden is operationalized in terms of score on caregiver difficulties scale (Wijesinghe, Fonseka, & Hewage, 2013).

### ***Burnout***

Burnout is state of intense weariness related to one's parental role, in which one become emotionally detached from one's child and doubtful about one's capacity to be a good parent (Roskam, et.al, 2017). For the present study parental burnout is operationalized in terms of scores on Parental Burnout Assessment (PBA) (Roskam, Brianda & Mikołajczak, 2018).

### ***Sense of Coherence***

Sense of coherence (SOC) is a coping capacity to deal with everyday life stressors. (Antonovsky, 1987). Sense of coherence was operationalized in terms of scores on the Orientation of Life scale. A higher score indicates a better sense of coherence (Jibeen & Khalid, 2010).

### ***Social Support***

Social support is defined as psychological and material support provided by a social

network to help the person's to cope with stress (Zimet, Dahlem, Zimet, & Farley, 1988). Social support was operationalized in terms of scores on Multidimensional Scale of Perceived Social Support (MSPSS) (Akhtar et al., 2010).

### **Psychological Distress (Depression Anxiety & Stress)**

Psychological distress is broadly defined as a state of emotional suffering characterized by symptoms of depression (e.g., loss of interest; unhappiness; desperateness) and anxiety (e.g., restlessness; feeling tense) and stress. Psychological distress is operationalized in terms of the scores of DASS (Depression, anxiety & stress) scale (Lovibond & Lovibond, 1995b; Lovibond & Lovibond, 1995a). DASS 21 was used in Urdu to assess the psychological distress. Urdu translated scale by Aslam and Tariq (2010) was used in the present study. It is important to note that this questionnaire cannot diagnose depression, anxiety, or stress. It provides an indication of whether these problems influence a person's quality of life. The questionnaire is used Urdu and it took 5–10 min to complete. (Kouther et al., 2022).

### ***Mental Wellbeing***

According to positive psychotherapy well-being is defined in terms of positive emotions, engagement, relationships, meaning, and accomplishment (Rashid, 2018). Wellbeing was operationalized in terms of scores on Positive Psychotherapy Inventory (Rashid, 2018).

### **Instruments**

#### ***Demographic Sheet***

Demographic details of the caregivers were measured in terms of caregiver age, gender, caregiver's educational level, marital status, the total number of children, family system and income level. Demographic details regarding cerebral palsy child included child's gender, age, type of cerebral palsy, additional current problems (Motor, speech & intellectual disability).

### ***Caregiver Difficulties Scale (CDS)***

Caregiver difficulties scale (CDS) (Wijesinghe, Fonseka & Hewage, 2013) is a self-administered questionnaire designed to be completed by the principal caregiver of the child with cerebral palsy. For the present study Urdu translated version of caregivers difficulties scale was used. Above the cutoff scores indicating a higher level of burden. There are four subscales of CDS. Concern for child (1-8), Impact on self (9-15), Support for caregiving (16-20) and social & economic strains (21-25). A score will be assigned for each item (except items 11, 12, 16, 17, 18 & 20) based on the response alternative selected by the respondent, in the following manner. Always = 4, often = 3, sometimes = 2, rarely = 1, never = 0 Completely = 0, to a greater extent = 1, to some extent = 2, to a lesser extent = 3, not at all = 4. The items 11, 12, 16, 17, 18 & 20 require reverse scoring as follows. Always = 0, often = 1, sometimes = 2, rarely = 3, never = 4. There is no definite cut off threshold for CDS; the total CDS score can be used to get an idea about the level of burden experienced by the caregivers, CDS scores ranged from 0 to 100 a higher score above cut off indicating a higher level of caregiver burden (Wijesinghe, Fonseka, & Hewage, 2013). In the main study Urdu translated version of Caregivers Difficulties Scale was used (Waqar & Mushtaq, 2023).

### ***Parental Burnout Assessment (PBA)***

Parental Burnout Assessment was used to assess the burnout and it is developed by Roskam et al, in 2018. It is a 23- item self-report questionnaire. The PBA encompasses 23 items. Items are rated on 7-point Likert scales: never (0), a few times a year or less (1), once a month or less (2), a few times a month (3), once a week (4), a few times a week (5), every day (6). PBA ranged from 0 to 138. Higher scores indicate higher levels of parental burnout. Urdu translated version was used in the present study (Roskam, Brianda & Mikolajczak, 2018).

### ***Orientation of Life Scale (Sense of Coherence)(OLS)(SOC)***

Sense of coherence is measured by the orientation of life scale developed by Antonovsky in 1987. Urdu translated version was used in the present study (Jibeen & Khalid, 2010). A higher score indicates a better Sense of coherence. It contains 13 items, of which 4 items are reverse scale. Participants were required to circle a number from 1- 7 to indicate the strength of their feelings toward each item; a higher score indicated a stronger Sense of coherence and viceversa.

### ***Multidimensional Scale of Perceived Social Support (MSPSS)***

Multidimensional Scale of Perceived Social Support was developed by Zimet et.al, 1988. This scale measures social support across three domains; friends, family and significant others. The responses reflect participant's perception of support from each of these three sources. For ease of understanding, the Urdu version of the scale, translated by Akhtar et al., (Akhtar et al., 2010) was used. It has a total of 12 items divided in three sub-scales; friends, family and significant others. A 7-point Likert-scale ranging from 1 (very strongly disagree) to 7 (very strongly agree) is used to mark responses. A score can be obtained for the total scale to assess the social support.

### ***Depression Anxiety and Stress Scale (DASS-21)***

Depression anxiety & stress scale is a self-report questionnaire designed to measure depression, anxiety and stress and is available in two forms, DASS-42 and short form DASS-21. (Lovibond & Lovibond, 1995b; Lovibond & Lovibond, 1995a). In the present study Urdu translated version of DASS 21 have been (Aslam & Tariq, 2010). Score on each item range from 0-3 with following response categories: (0= Not at all 1=Rare, 2=Sometimes, 3=Often).  
Items of

Depression are (3, 5, 10, 13, 16, 17, and 21), Items of anxiety are (2,4,7,9,15,19,20), and items of stress are (1,6,8,11,12, 14,18).

### ***Positive Psychotherapy Inventory (PPTI-25)***

Positive Psychotherapy Inventory is developed by Tayyab & Seligman in 2018. Positive psychotherapy inventory is self-report inventory having 25 items. The positive psychotherapy inventory has five dimensions positive emotions, engagement, relationships, meaning, and accomplishment. Items are rated on 5-point Likert scales: not at all like me (1), not like me (2), neutral (3), like me (4) and very much like me. Urdu translated version was used in the present study. Lower scores on positive psychotherapy inventory indicates lower level of wellbeing, whereas higher scores indicate higher wellbeing.

### **Sample**

#### ***Sample of main study***

Sample of the main study comprised of caregivers of cerebral palsy children. At first stage, screening was done by administering the questionnaires on a large sample (n=100) of caregivers of cerebral palsy children. Sample was taken from Psychology department of National Institute of Rehabilitation Medicine (NIRM) with the permission of ethical board of NIRM. Age range of the sample was between 25 to 55 years old. Both males and females caregivers were included in the study. Educational status of the participants were matric and above. In the present study caregivers were those who take the primary responsibility for providing care to a child with cerebral palsy. In the current study only the caregivers of cerebral palsy children were included.

#### ***Inclusion Criteria***

Caregiver was someone who takes the primary responsibility for providing care to a child with cerebral palsy. Only caregivers of diagnosed cerebral palsy child were included in the study. Diagnosed cases of cerebral palsy were referred to psychology department from

Pediatric Medicine/surgery and physiotherapy department of National Institute of Rehabilitation Medicine.

### ***Exclusion Criteria***

Caregivers having any severe diagnosed psychiatric illness & severe medical illness were not included in to the present study. Caregivers who were taking any psychiatric medication were not included in the present study.

### **Sample for intervention**

For selection of the sample for intervention simple randomization was applied. Coin method was used to divide the sample into treatment group and control group. The research sample for intervention was comprised of caregivers (n=20) of cerebral palsy children, who scored moderate to high on burnout, caregiver burden, psychological distress and lower score on mental wellbeing, social support & sense of coherence. Their age range was from 25-55 years. All those caregivers were included who were taking care of the CP child and coming to NIRM for rehabilitation of their CP child. Educational status of the caregiver was matric and above.

### **Randomization:**

For selection of the sample simple randomization was applied. Coin method was used to divide the sample into treatment group and control group.

### **Procedure**

After translation, adaptation and validation of Caregiver Difficulty Scale (CDS). All scales were organized in a booklet form comprised of consent form, demographic sheet, Caregiver Difficulties Scale, Parental Burnout Assessment, Depression Anxiety Stress Scale, Orientation of life Scale and Multidimensional Scale of Perceived Social Support & Positive psychotherapy Inventory. All the scales were administered on sample of caregivers of cerebral palsy children (n=100). Demographic details included age, gender, educational status, marital

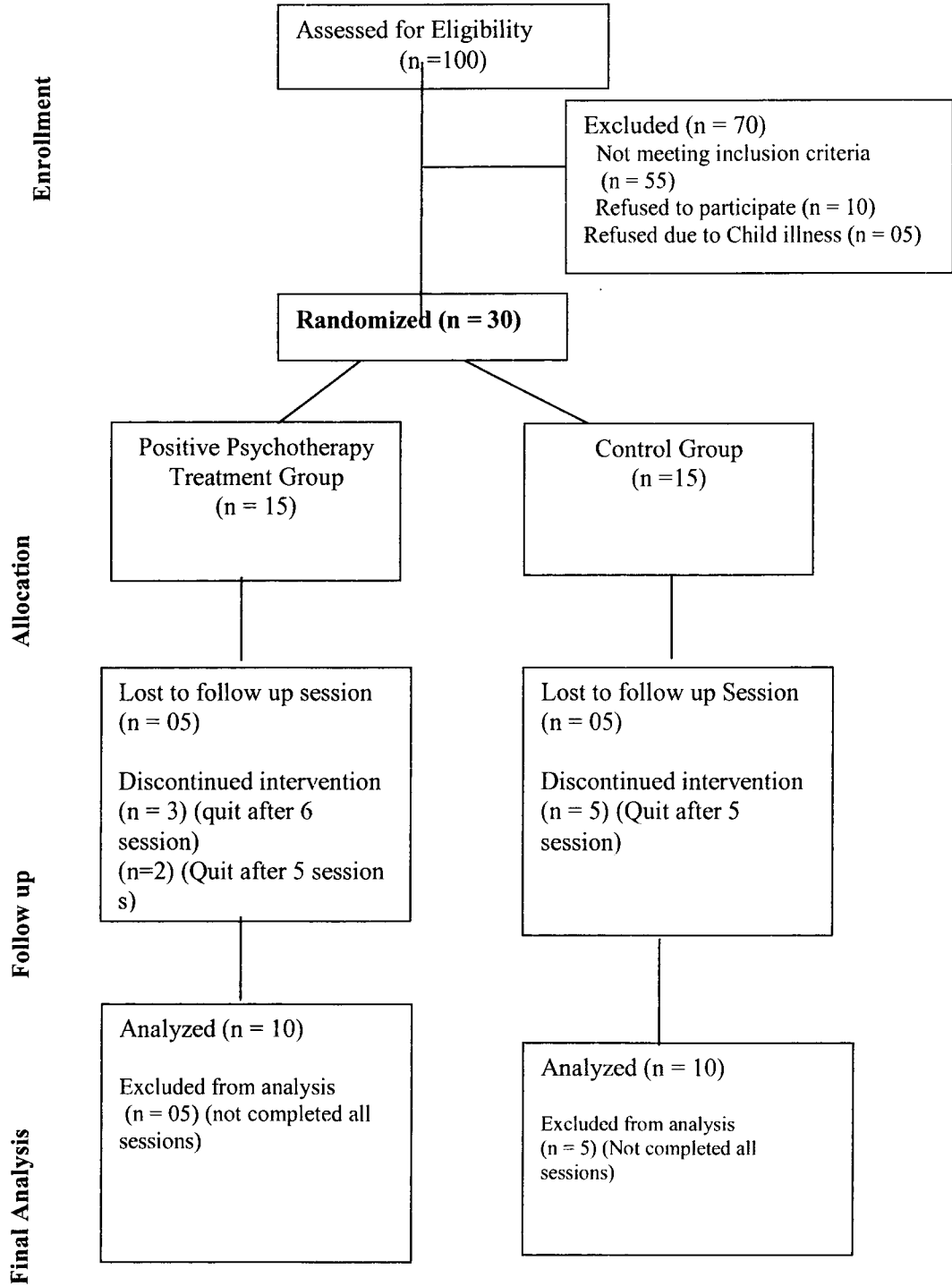
status, marriage type, family system, previous history of disability, total no of children, family system and incomestatus. Demographic of CP child included CP child gender, age, birth order, CP type and current problems or functional status of children with cerebral palsy.

Instructions about each scale was printed on the respective questionnaires. Caregivers werealso given assurance that their identity would be kept confidential. They were asked to respond toall the scales items according to the given instructions. CP diagnosis was confirmed from the Pediatric/Surgery and physiotherapy department of NIRM. CP children referral for rehabilitation was mandatory inclusion of caregivers as sample into the present study. All the caregivers were taken with the permission of competent authority of NIRM.

At first stage, screening was done by administering the questionnaires on a large sample (N=100) of caregivers of cerebral palsy children. The study's clinical trial registration number is NCT05613595. Sample was taken from Psychology Department of National Institute of Rehabilitation Medicine (NIRM) with the permission of ethical board of NIRM. The manual of positive Psychotherapy was translated, adapted and validated with the permission of principal author and with the permission of Oxford press. Author provided the detailed therapy manualto the researcher & workbook having detailed of therapy and video links, all the sufficient knowledge, its principles and methods were mentioned in detail in the manual.Researcher read the manual thoroughly with supervisor and clinical experts experts in psychotherapy. Through email and online sessions, principal author permit the researcher to used it with the discussion of relevant supervisor. Emails are attached in the Annexure section. Sample of twenty caregivers of CP children ( $N = 20$ ) was selected for present study from National Institute of Rehabilitation Medicines, Islamabad on the basis of moderate to high scores on mental health issues. 20 caregivers of CP were randomly assigned into two groups' treatment and control group(10 participants in each group). Participants of the treatment group were given positive psychotherapy based interventional sessions along with

regular counseling sessions. Whereas for caregivers in control group only regular counseling sessions were provided (psycho education). Age range of the caregivers of cerebral palsy children were from 25-55 years old. Detailed information was provided to the participants about the study, and their consent was obtained for the present study. The respondents were instructed regarding the interventions. They were requested to follow and take proper time for the sessions. Each session was based upon individual session and duration of the session was 45 minutes. Feedback was taken in the start of the every session about the previous session and home based assignments were discussed. After completion of positive psycho therapeutic intervention & counseling group interventions, post assessment of study variables was done for both treatment and control group at posttest level for measuring the effectiveness of positive psychotherapy.

**Figure 5 CONSORT Diagram**



(Schulz et al., 2010)

## **Positive Psychotherapy**

### **Treatment Group (Positive Psychotherapy Treatment Group)**

Positive Psychotherapy (PPT) treatment is based upon 15 session's interventional plan which aims to improve the psychological wellbeing of the caregivers of cerebral palsy children. All the sessions are adapted and translated into urdu language from PPT manual. All the sessions were completed in 6-8 months approximately. Caregivers were taken from indoor as well as outdoor departments of NIRM.

### **Brief Summary of Positive Psychotherapy Intervention Sessions (n=10)**

Positive psychotherapy manual & worksheets (Urdu Version) were administrated on caregivers of cerebral palsy children in rehabilitation department of Islamabad with regular counseling sessions. There is no evidence of previous research, assessing the effectiveness of PPT with caregivers in rehabilitation settings in Pakistan. All the sessions were individual based weekly sessions. Following are the session details of treatment group.

### **Psychological Intake Session**

The focus of the first session was history taking & rapport building with the clients (CP's caregivers). After rapport building the objective of the study was discussed with the caregivers of CP children. Detailed history related to the CP child was taken and relevant issues were discussed regarding child rehabilitation. It was made clear to the caregivers that the major focus of these sessions would be on them (caregivers). Major mental health concerns of the caregivers due to long lasting physical activities with the CP child were discussed with the clients. History taking and assessment revealed that most of the caregivers scored high on caregiver difficulties scale, burnout, psychological distress, depression, anxiety & stress and scored low on sense of coherence, social support and mental wellbeing. Major stressors identified in the intake session was as under.

**Table 8***Stressors of caregivers*

	Individual stressors	Family stressors	Social stressors	Environmental stressors	Health system and policy stressors
Physical	Burden of house hold work, lack of rest Physical aches and muscular pains	Poor interpersonal Relationship , lack of physical support, Failure to give good care to other children	No physical support from family & community members	Physical accessibility barriers Difficulty in public transport facilities	No concerns & facility in health care system to cater caregiver physical health
Emotional	Excessive worries, Self-blaming Guilt, worries regarding the future of the child as a disabled	Emotional abuse by spouse, sadness & guilt of not being able to care for other children	Sense of isolation in society, Avoid social gatherings	Worried about how to get around with the child throughout life	Health related Self-negligence (Ignorance)
Social	Social stigma, Blame by society on the parents, Social restriction	Not caring for the family, Avoid visiting social places	Discrimination by the society	Non-inclusive spaces	Lack of social support
Financial Concerns	Expensive medical & rehab treatment Unable to	Neglect other expenses due to limited resources, limit other	Avoid social gatherings/ shopping due to financial issues	Lack of job opportunities	Disability welfare support insufficient

	Individual stressors	Family stressors	Social stressors	Environmental stressors	Health system and policy stressors
	work, financial burden	children expenses			
Informational & Awareness	Lack of knowledge about the child disability, Lack of knowledge about caregiving		Societal mis-guidance (myths related to child's treatment) False hope from society		Lack of support groups and information

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The above table show the stressors of the caregivers of cerebral palsy

children. These stressors were identified after taking intake session with the caregivers of cerebral palsy children.

**Table 9**

*Gender , type of CP & current Issues, major concern of the caregivers of CP children (n=10)*

Participant Allocated no	Gender	Child's Type of CP & Current issues	Issues/Concerns of caregivers
Caregivers 1, 7, 9	Female	Spastic CP Physical, Intellectual & speech Impairment	Excessive sadness, feeling of helplessness, Lack of social support, Stressors due to child dependency, Apprehensive, anger, change in sleep pattern,
Caregivers 3,5, 6	Female	Athetoid CP Physical, Intellectual & speech Impairment	Guilt feelings, fatigued , easily agitated, hopelessness, Lack of social support
caregivers 2,8	Female	Hemiplegic CP Physical, Intellectual & speech Impairment	Worried about future, fearful, fatigued, restriction of going other places due to social stigma
Caregivers 4,10	Female	Diaplegic CP Physical Impairment	Headaches, change in sleep patterns, Loss of interest in recreational activities, negative thoughts related to future

Above table show the age , gender , type of CP & current Issues, major concern of the eachcaregivers of CP children in treatment group.

### **Positive Psychotherapy Sessions Details**

#### **Session One: Positive Introduction and Gratitude JournalGoals**

1. Positive Introduction
2. Gratitude Journal

The session was started with relaxation exercise (given in PPT manual). The first session was about introductory regarding Positive Psychotherapy. The major two aspects covered in this session was positive introduction and gratitude journaling. In the first part of the session “the positive introduction’ encourages clients to recall a significant event or experience that ended verywell. This therapy was about revision of positive aspects of life, so the start of the session was about positive story of life. The reason behind focusing positive aspect of life was to allow caregivers to be aware of their past efficacy. Positive introduction can act as a guiding principle for caregivers to focus about their narratives from past to present and then peruse future goals accordingly.

Start of the session Relaxation:

Session was started with a brief relaxation exercise & mindfulness practice.

- a. In-session Practice: Positive Introduction

In this opening session caregivers introduce themselves through a real life story. The instructions for caregivers were to close their eyes, sit comfortably, and take slow breaths before giving themselves three to four minutes to recollect a tale. It was made clear to consider an actualinstance in which they responded positively to a difficult circumstance. It shouldn't be a major event; instead, a modest occasion that brought out the best in the client might come

to mind. Worksheet 1.1 was given to the caregivers and ask them to write down the event after opening their eyes. After they completed the story caregivers were asked to reflect and discussed about the story they mentioned. Discussion points of the story was how the story impacted the Self-concept

of the caregivers? What helped caregiver's to deal with the situation such as personal attributes (persistence, optimism & faith), environmental attributes (such as support from close friends, family members or professional relationships). It was also discussed, that is there any significant person in caregiver's life who were aware of this story in the same spirits or way as the caregivers recalled it.

b. Gratitude Journal

The second part of this session was gratitude journaling. Before turning in for the day, clients were required to write down three blessings, or positive things that occurred that day. Write at least one line explaining why the positive thing occurred on that day next to each blessing they have listed. For the client, what does that mean? After taking the time to identify that blessing or positive item, what has the client learned? How did other people help bring that blessing or wonderful thing about? The customer was asked to discuss the following aspects after finishing the task: did they have any trouble remembering certain positive experiences? Were the blessings linked with family, friends, work or nature? Did they find new ways of looking at situation and people? Have they shared with others or did they find it difficult to write them down.

**Phase I [The Narrative of Resilience (Positive Introduction)]**

This part of Positive Psychotherapy having three (session two to four) consecutive sessions of assessment, identification and implementation of character strengths and signature strengths of the client. Sessions included in this phase were firstly identification of character

strengths and signature strengths, secondly learning about how to adaptively apply their strengths in a proportionate way to solve the problems and thirdly a journey towards 'A better version of me'. Details of the sessions were mentioned below.

### **Session Two: Character Strengths and Signature Strengths**

The second of three sessions, which centre on character and signature strengths—positive attributes that may be cultivated by practice and support wellbeing and personal development. Together, sessions two to four address how to evaluate strengths, comprehend how to use them in context and in different situations, and how to use certain strengths to become a better or desirable version of oneself.

#### Session Goal

Start of session was relaxation & mindfulness exercises (based on manual) Character

Strengths Assessment

Signature strengths Assessment In-session practice

In this session, eight steps were focused to assess the signature strengths which are the heart of PPT. In step one by using a video clip having some pictures with strengths mentioned (for brief period of time) was shown to the clients, and work sheet 2.1 was given (What are your Heart Strengths) and client was asked to record five strengths that best represent the client through images. The video was about strengths, in the video there is some pictures and with every picture some description is given, client was asked to focus on the written strengths without focusing either this strength representing the picture or not. Try to focus on choosing just five strengths that best represent the client. After completing the worksheet 2.1, transfer the identified strengths to column 2 of the worksheet 2.6 (Signature Strength profile).

In Step two client was given worksheet 2.2 (What are your "Head" Strengths) having

description of 24 strengths asked to select five statements that best represent you. As the client completed the task client was asked to transfer the identified strengths to column 3 of the worksheet 2.6 (Signature Strength profile).

In Step three worksheet 2.3 was given to client to write down the both head and heart based selected strengths. Heart strengths are based upon our rapid audio visual based selection and head strengths are based on our thinking. This step is necessary to just assess the overlapping between two strengths.

In Step four two work sheets 2.4 and 2.5 were given to the client to assess five character strengths by close friends and family members. Which they think the best representation of client's personality. After section it was ask to shift it in column 4 and 5 respectively.

These sessions were completed in 90 minutes (two sessions), and with a 10 minute break in the middle, it was mostly based upon assessments in the present scenario due to sample non availability only those family members added who were coming with the client, 8 worksheets are completed in in session with the client. The tasks of session 3 & 4 are merged in 1 session (45 Minutes session).

In Step five Signature Strength Questionnaire (SSQ-72) was given to the client through which five of six top score strengths were identified, after identification shift it to column 6 of the Signature Strength profile. In step six, complete the column 7 of the Signature Strength profile. By adding all the strengths (from work sheet 2.1 to worksheet 2.6) from each row. In Step seven go to the column 8 of the worksheet 2.6 and identify strengths client underused (U) and over use (O). In step eight client was asked to fill the column 9 of worksheet 2.7, by keeping in mind the reason of coming in the therapy session. The desired strengths, i.e, the signature strengths client want in themselves that can help to solve their problems or to be the person they always wanted to be. After completing all these steps clients was asked to discuss

and reflect on multiple related questions. Worksheet 2.7 were given to the client based upon “markers of your signature Strengths”, through which client identified strengths are truly their own signature strengths. Reflection and discussion question was discussed with the client. After completing it ask client to continue with worksheet 2.8. in the discussion it was discussed with the client that our negative thinking about others can be due to under and over use of strengths,. At the end of the session relaxation practice was done.

### **Session Three: Practical Wisdom**

In Session three, clients learn about the Aristotelian concept of practical wisdom, that is, the adaptive use of strengths to be used to live a good, meaningful, and virtuous life. These skills teach us how to adaptively apply signature strengths in a balanced way to solve problems. The central positive psychotherapy practice covered in this session is Know-How of Strengths.

#### **Session Goal**

#### **Start of Session Relaxation & Mindfulness exercise In Session Practice**

Client was given worksheet 3.1, illustrating clients under and over use of strengths. The major reason is that we use our signature strengths to manage our negatives. After that three scenarios were given to the client and elicit their responses in terms of over and under use of strengths. From scenario client learn the know-how of strengths. The major goal of this session was towards developing practical wisdom skills. In work sheet 3.2 five strategies were given to the client for building practical wisdom or know how of strengths. Through different approaches mentioned in the PPT therapy tasks “building your strengths” client is able to develop practical wisdom skills through signature strengths. After completing this worksheet client was asked to start worksheet 3.3. The challenge” in which client has to write about the

current challenge that need to be resolve. When did it start? How long it lasted? What were its effect and it was due to over use of the strengths? Which ones? How? Which aspect of challenge would the client want to change? Which specific practical wisdom strategy can the client use to make adaptive changes?. All these questions were discussed in detailed with the client and focus them to use the proper practical wisdom skills in the client.

At the end of the session relaxation practice was done.

#### **Session Four: A Better Version of Me**

The fourth and final session (phase I) of the program, session four, concentrates on character strengths and examines how to formulate and carry out a documented plan for persistent, practical, and positive self-development. The central positive psychotherapy practice covered in this session is A Better Version of Me.

The main goal of this session is self-improvement. Client was counsel with relevant material to focus on their future self, the best possible self. The aim is to redirect client's strengths, skills and abilities to achieve their goals. Clinician have to make an effort to assess the content and structure of client's goal. Client was given worksheet 4.1 : A better version of me, and counsel them to visualize a better version of themselves and set appropriate realistic goals. Different examples of goals for a better version of Me, including emotional resilience, social resilience, physical resilience and workplace resilience were discussed to make the process easy to address. After completing this worksheet reflection and discussion was done with the client. The ultimate goal of this session is to give the client practical goals, which remind them that they are the ultimate judge of their better version. As long as they are putting their best effort, A Better version of themselves will take shape.

Session four was about better version of oneself after getting know how about the strengths. Detailed about the better version of self was discussed with the care givers. The main focus of

these sessions were inculcating practical wisdom skills in the caregiver's life. Home based assignments and tasks was also given.

At the end of the session relaxation practice was done.

## **Phase II (The Hope of Cultivating a Better version of the Self) Session Five: Open and Closed Memories**

### **Goal: Practice Positive Appraisal**

Session five was about open and closed memories and it was 45 minute's session. Session five is the start of the phase two of the positive Psychotherapy session. In Session Five, clients recall, write, and process their open and closed memories. Positive Appraisal. Client write about bitter memories and explore four ways to deal with the adaptively. In this session an introductory session was given about the concept of open and closed memories to the client. Memories that are not fully understood and those that triggers negative emotional responses are called open memory, whereas memories that ended somewhat conclusively with a positive outcome even consisted on past challenges or difficulties are referred to as closed memories. Session was done in different steps with comprehensive relaxation exercise in step one client was asked to recall negative memory of life and recall only such feelings like sadness, loss, rejection and frustration linked with that memory. In step 2 client was asked to recall a closed memory of a difficult experience, any memorizing incident whom you are thankful for and having positive consequences which at the time was tough to go through, but as the client look it back client feel satisfied. Reflection and discussion was done with the client related to the memory. According to the PPT when the open memories are not addressed actively they often evolved into resentment, revenge and hostility. So through four skills of Positive Appraisal PPT can help the client to deal with the open memories. Positive Appraisal is a meaning based coping approach that reinterprets event or situation in a positive manner. Worksheet 5.1 was

given to the client having four steps based on how to handle a situation or coping ability. First is 'create psychological space, in which client was given task to analyze personal negative memories from third person perspective. Practice was given to the client with specific situation. Second is 'Reconsolidation', while focusing only negative aspects of life try to pay attention on meager positive aspect of the memory that may have been missed. Third is 'Mindful self-focus' which means that try to unfold that memories by watching it like a film is going through and try to be like an observer. Fourth is divert your attention from negative memories through different other hands on and complex tasks. After this reflection and discussion was done. At the end of the session relaxation practice was done.

### **Session Six: Forgiveness**

#### **Goal: 1. Practice steps of forgiveness Writing a forgiveness letter**

Session Six teaches clients that forgiveness is a process for change rather than an event. In this session client was counseled about to willingly decide not to seek revenge and instead offer the offending person their kindness.

Start of the session Relaxation and Mindfulness practice done In-session Practice

This concept of forgiveness was explained in this session. The central positive psychotherapy (PPT) practices covered in this session are writing a Forgiveness Letter and REACH, which is an approach to forgiveness, as follows: Step One: R = Recall an event; Step Two: E = Empathize from the perpetrator's point of view; Step Three: A = Altruistic gift of forgiveness; Step Four: C = Commit yourself to forgive publicly; and Step Five: H = Hold onto forgiveness. After these all practical steps client was counseled and reflection and discussion was done. Second practice of the session was writing a forgiveness letter who have wronged you in the past and you have never explicitly forgive. Write down a letter of forgiveness for a person but this is just practice, client do not need to deliver or email that person. Reflection and discussion was done after the session. Session 6 Forgiveness, in-

session 45 minutes worksheet based session done with the client.

At the end of the session relaxation practice was done.

### **Session Seven: Maximizing versus Satisficing**

Goal: Assessing for being Maximizer or Satisficer

Practice ten ways to increase Satisficing

Session Seven presents clients with the concepts of maximizing, which involves aiming to make the best possible choice, and satisficing, which involves making a “good enough” choice.

Therapist identify whether clients are maximizers or satisficers. The central positive psychotherapy practice covered in this session is toward Satisficing. Session Seven was Maximizing versus Satisficing techniques, assessment and practice done in 90 Minutes session with 10 minutes break.

Start of the session Relaxation and Mindfulness practice done In-session Practice.

Client was given worksheet 7.1 to assess as they are maximizer or Satisficer. 13 items based work sheet was given to the client to rate on seven point likert type scale. After they have completed computation of the scale was done independently. As the assessment completed reflection and discussion was done with the client. Discuss both aspects separately because the major goal of this session is towards Satisficing. Worksheet 7.2 was given to the client about 10 ways to increase Satisficing. First strategy is be a chooser, not a picker, in which two options were given to the client to become a satisficers, second is satisfice more and maximize less, in this three options were given to the client, third is think about the opportunity cost, having four options to try. Fourth strategy is make your decision non reversible, (listing reversible and non-reversible decisions in life), fifth is practice an attitude of gratitude (less

disappointment), sixth is regret less(three options given), seventh is anticipate adaptation (three options given), eighth is control expectations (three options given), ninth is curtail social comparison (two option given) and tenth is learn to love constraints. Detail reflection and discussion was done with the client.

At the end of the session relaxation practice was done.

### **Session Eight: Gratitude**

Goal: Writing Gratitude Letter & Gratitude Visit

Start of the session Relaxation and Mindfulness practice done

Session Eight is based upon the concept of gratitude journaling. Clients have to recall and write for someone who is alive now and who did something positive but the client has never fully thanked them. Practices covered in this session are the Gratitude Letter and Gratitude Visit. Session eight was about gratitude journaling, it was 45 minutes session.

In-session Practice:

After relaxation exercise it was asked to client to write a letter to express their thanks by saying in a concrete way whatever the person did that helped the client. If it is possible for client to visit that person then arrange a visit with the client.

At the end of the session relaxation practice was done.

## **Phase III (The Aspiration of Leaving Positive Legacy)**

### **Session Nine: Hope and Optimism**

In Session nine, clients learn to see the best possible, realistic outcomes. They learn that challenges are temporary and how to develop a sense of hope. The central positive psychotherapy practice covered in this session is One Door Closes, Another Door Opens.

Session 9 was about hope & optimism and it was 45 minutes in session practice.

Goal: Concept of One Door closes another door opens Start of the session Relaxation and Mindfulness practice done In-session Practice

This session was start with the saying of Winston Churchill, "A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty". Worksheet 9.1 was given to the client having two steps. In step one client was asked to write down about the door that closed and door that open immediately. In step two client explore the reasoning behind why the door closed. The main goal is to focus the positive aspect of life. Like most of the client take this concept like this islamically as Allah as the door opener. May the doors He opens and close for us, always best for us .

Reflection and discussion was done with the client.

At the end of the session relaxation practice was done.

### **Session Ten: Post-traumatic Growth**

Session Ten is about to explore deep feelings and thoughts about a traumatic experience that continues to bother the caregivers. The practice covered in this session is expressive writing. Session 10 was about art of writing the traumatic event it was 45 minute session.

Start of the session Relaxation and Mindfulness practice done In-session Practice

This session is about art of writing the traumatic event (writing therapy). Ask the client to write in detail about a trauma in life for 15 to 20 minutes in consecutive four days. The basic goal is to link the trauma with the character strengths. Discussion and reflection was done with client related to the trauma. Concept of Post traumatic growth (PTG) was explained to the client that is to develop a deeper and satisfying philosophy of life. PTG help the client to understand the relationships by discovering who pass the test and who fail in difficult situation. PTG is

facilitated by positive reinterpretation, positive focused coping and positive religious coping. Most of the client take this practice as a healing one, as significant external stressors can overwhelm most of us, performing the writing practice will heal the incident's bad thoughts. Reflection and discussion was done with the client.

At the end of the session relaxation practice was done.

### **Session Eleven: Slowness and Savoring**

Goal: Strategies to slow down

Savoring Experiences & techniques

It was reported by the client that despite speeding up almost everything, including human maturation, we are not happier or healthier. Naturally as a human being we are addicted to speed. So the major practice of the session is practicing slowness in life attentively & intentionally. In Session Eleven, clients learn how to intentionally slow down and develop an awareness of how to savor.

In start of session relaxation and mindfulness practice done.

#### **In-session Practice**

This session is based upon the concept of slowing down in life. This helps the clients to grasp the concept of slowing down with concrete suggestions. Worksheet 11.1 is given to the client having 6 suggestions of slowing down for the client to select one that they can easily opt like in a whole day working from some of the task start slowing down activities. Ask clients to start with a small decrease and gradually decelerate. Initially pick from two areas of life you usually hurry through and gradually slow those areas down ( example eating at least 2, or 1 meal slowly in a week or twice a week, or having a media technology free time in a day or twice week). Another task given in the session was getting involved in nature like watching the

sunset, feeling the breeze, enjoying the weather the surroundings peacefully etc). To educate others (family & friends) on hazardous effect of speeding is also part of this worksheet. Creating gadget free zone (no cell phones after 8pm or no TV in the living room. These all above mentioned tasks were discuss in the session one by one and client has to choose any one from these all to practice slowing down. Reflection and discussion was done with the client related to that chosen specific strategy. Another concept discussed in this session was Savoring. Savoring is a process of acknowledging the positive events. Worksheet 11.2 was given to the client having kinds of savoring experiences (basking, thanksgiving, luxuriating, Mindfulness) and savoring techniques (sharing with others, memory building, self- praise, Sharpening perceptions). Discussion was done to address each one in detail.

#### In session Activity II

Prior to the start of the session show something from the natural environment to the client like flowers, stones, feathers, Pictures & Post cards of natural beauty, souvenir etc.) Place these items to the next of the client and discuss about different savoring techniques with the help of worksheet 11.2. Client has to select one item from these and savor the object using one or more savoring technique. Through discussion and reflection client address the moment of savor with the therapist. Homework practice was also given to the client, which is to plan a savoring date with your family members or friends. Different options of enjoyment was given to the client. Reflection and discussion was done based on the view regarding during the savoring date did the client think about other things that were hanging on them, like problems difficulties and worries that they are facing or have to face.

At the end of the session relaxation practice followed by the manual was shown to the client.

#### **Session Twelve: Positive Relationships**

Goal: How to make Tree of positive Relationships Reflecting on your Tree of Positive

## Relationships

Positive relationships are the major theme of this sessions, involving the family. Biological family members were discussed specially. In this session clients identify the importance of acknowledging the strengths of their family members. The positive psychotherapy practice covered in this session is creating a Tree of Positive Relationships.

The main goal of this session is focusing on positive relationship, the quality of time spent with others also matters, and evidence showed that positive interaction act as a buffer against number of psychological problems, especially against depression and other mental illness.

Start of the session Relaxation and Mindfulness practice was done. In-session Practice

All of the previous sessions till yet has broaden the client's mind set, from this session PPT sessions focus primarily on interpersonal relationships and social & communal resourcefulness. Work sheet 12.1 was given to the client base on tree of positive relationships. Through making tree of positive relationship client not only identify the closed loved ones in the family but also identify their strengths. Like most clients start tree from their parents, then husband or wife, then siblings and children with their specific strengths. In the present sample many clients identify their parents as the most caring, loving and kind and supportive towards them while taking care of their CP child and helping them positively.

Signature Strengths Questionnaire- 72 client was asked to identify signature strengths of the family members and mention in the family tree with appropriate name. Work sheet 12.2 was given to the client based on "reflecting on your tree of Positive Relationships". like in reflecting tree of positive relationship while addressing her CP child one of the client elaborated that ' I know that my CP child will remain with this diagnosis forever, instead of seeing his symptoms of CP and behavioral issues, I have seen many strengths like lots of zest, vitality and energy. As I looked back for the most time he has used his zest in a productive way. He can't study but I

have tried to teach many positive behaviours in him through his strength of love of learning through constant trial and error (like partial toilet training, self eating simple apple etc, one on one balloon play etc). through identification of others strengths it can only be possible to work on that specific parameters.

At the end of the session relaxation & mindfulness exercise based practice was done with the client.

**Session Thirteen: Positive Communication Goal: Practice of Active Constructive**

responding

**Identifying Partner's Strengths**

In Session Thirteen, clients learn about four styles of responding towards new great achievement. These include active constructive, active destructive, passive constructive, and passive destructive responding. Of these styles, only Active Constructive Responding (ACR)— the central practice covered in this session was satisfaction in relationships. This session is about relationship satisfaction, focusing towards style of responding towards good news through four responding style. Active constructive responding style was practiced in the session. Core concept of this session is based upon Swedish Proverbs "Shared joy is double joy; Shared sorrow is half sorrow. Social support is beneficial for coping. Self-disclosure is covered in this session of PPT. Self-disclosure is done in a constructive and positive manner. Capitalization is the process of sharing positive news with another person. When people tell others about positive events, they experience more positive emotions and feel greater life satisfaction than they cannot or choose not to tell others about these positive events.

Start of the session Relaxation and Mindfulness practice done In-session Practice

Worksheet 13.1 was given to the client with examples of four responding styles followed by

in-session exercise. Worksheet was based upon example of four responding style to communicate with the client's partner. The goal of doing exercises of this worksheet was to adapt a constructive responding style focusing on positive communication skills. Like one of the client shared about the negative destructive communication due to hectic routine with the child with her husband & other children all the time. After practicing positive psychotherapy session practices in this exercise she elaborated that now in the same circumstances I tried my level best to communicate in a positive way. I tried to be kinder towards other children and husband too by using strengths of kindness and love. After completion this practice reflection and discussion was done. Worksheet 13.2 is about identification of Partner's strengths. It was based to identifying signature strengths of the partners at home. Both the parents took part in up bring a child. Same is the case with CP child, it is the responsibility of the both partners so from this exercise of positive relationship role of all family members also identified by understanding each other's role as a caregiver.

At the end of the session relaxation practice was done.

#### **Session Fourteen: Altruism**

Goal: The Gift of time

After taking feedback of the previous session tasks, client was asked to discuss about the relaxation and mindfulness based exercise. This session was revolving around helping others and feeling the pain of the others. Simple discussion about meaning of altruism is discussed with the client. Altruism is defined as helping others without being asked for it and without any financial reimbursement. In this session clients learn altruism and concept of "Gift of Time". session was about watching a video that captures the concept of altruism and illustrate the Gift of time practice, it was 45 minutes session

Start of the session Relaxation and Mindfulness practice done In-session Practice

## Video practice on “Gift of Time”

This is an in-session practice focuses on watching a video that captures the concept of Altruism and illustrate the Gift of time practice. After watching the video client was asked to discuss and reflect on the questions related to the video. Concept of Altruism was cleared to the client through this video. Worksheet 14.1 was given to the client to have an exercise on the Gift of Time. Client watch a video based upon altruism, the theme of the video was about helping others unconditionally, without focusing on the benefits in return. Helping others shift the attentional focus from indulging in one’s own thoughts (like all the time having depressing thought about child’ future, child’s dependency etc) towards healthy thoughts. Helping other is a healthy endeavor, so it is a shifting of oneself towards healthier behavior endeavor. Gift of time was also known as environmental volunteerism. In our community altruism is also practiced like one of the client decided to teach the students who cannot afford any single penny in return (home tuition). One of the client decided to learn the physio CP based exercises from physiotherapist and to help the needy family having CP child who cannot come to rehabilitation unit for child’s rehabilitation due to limited financial resources.

At the end of the session relaxation practice was done.

## **Session Fifteen: Meaning and Purpose**

### **Goal: A story from your Past and envisioning a future Goal**

This was the final session which integrates the all above sessions of positive psychotherapy (PPT). Session Fifteen focuses on the finding of the meaningful endeavors for the greater good, and the central PPT practice in this session is positive legacy.

Meaning refers to a logical understanding of the world that promotes the pursuit of long term goals that provide a sense of purpose and fulfillment. As per Seligman's saying this session is based upon God, nation and family. This session was start with the first session’s story, client

was asked to recall that story which was written in the first session.

After previous session feed back, at the start of the session Relaxation and Mindfulness practice was done.

#### In-session Practice

This session was start with the first session's story, client was asked to recall that specific life story which was written in the first session. Then worksheet 15.1 was given to the client. In the practice, resilience in life was discussed by keeping in mind the character strengths and goals in life. Core concept discussed in this session was leading a life towards meaningful life. Meaning in life help us to create ways to justify actions. In the session client was asked to think about the goals they would like to pursue in the future. Goals should be very close to their daily life based activities like most decided to reuse home based materials and making them productive, and recycle electronics. Investing on inborn talents and utilizing them like most of the female caregivers decided to start some home based baking and cooking based activities and make a goal of future to work on that grounds. Becoming a mentor to disadvantage people, like helping the needy, many clients decided to help the other caregivers of CP children who are facing the same crisis and don't have the opportunity to come for rehabilitation like, sharing the information, detailed about the rehabilitation, sharing the extra wheelchairs to needy etc. Promoting innovative ways to increase charitable giving. Most of the client decided to work on identifying the needy person in family and trying to help them out on personal capacity and working on the concept of food bank to communal dining (Dastar khwaan for needy). it can contribute to the cause that can comfort the needy.

#### In session practice

It is based upon positive legacy, which forces us to envision our future and really able the client to think about how the clients fulfil their hope and dreams. Worksheet 15.2 was given

to the client regarding Positive Legacy. Clients mentioned the goals related to their life which they want to acquire in their life. Caregivers specify many goals like working based, family support based, and child related goals etc, like one of the client express that she would like to be the healer for others through helping others who asked and those who needed specially the caregivers of cerebralpalsy in the family and in the community. According to one client ' I cannot help others, find peace and happiness in myself, without first finding my own track of meaning life. If I will be able manage my self I will be able to manage and feel the life of people like me ( caregiver's of cerebralpalsy). Clients made list in which they prioritize their goals by keeping in mind the key aspects they have learned in the previous sessions.

Reflection and discussion was done.

At the end of the session relaxation & meditation practice was done.

### **Maintenance & Follow Up Sessions plan**

Participant were briefed on the pros and cons of each session tasks & exercise in order to have a positive change in life. Every participants were instructed to follow the practice repeatedly for several consecutive months as the simplest way to maintain their positivity of life. Follow up plan was planned with the client after one month accordingly.

## **Control Group**

### ***Control Group (Counseling sessions) (n=10)***

The researchers introduced the participants about the research, informed them about the counseling sessions and their consent was taken. It helped the participants to become aware of their responsibility for personal change.

- Psycho-education regarding the treatment of the child
  1. Elaborate about the disability of the child.
  2. Treatment and management guideline regarding the disability of the child.

### **Rapport Building session**

It helps to build relationship with the client. The psychologist can understand client's ideas or feelings and client can communicate well. Rapport building is a procedure to gain trust and confidence of the client (Myers, 2007). Rapport was built through active listening, engaging skills, empathy, building trust, and co-operation. In the beginning sessions the client enjoyed general discussion in which easygoing speak was done about the client and the therapist, their preferences and aversions were additionally requested that be highlighted. In order to build the rapport client was observed in their natural behavior (participant and non-participant observation) (Harwood & Eyberg, 2004).

### **Sessions plan**

Following were the goals

- Rapport was built and maintained with the client to gain trust and confidence of the client.
- Client has partial insight about their problems so psych education regarding their problem was done.
- The researcher introduced the concept of counseling to the participants and

informed the participant about the session plan and their responsibilities

- Signs of the stressors were discussed with the client. Physical emotional and behavioral symptoms of stress due to child's life long disability was addressed.
- Counseling sessions were given for current problem of the caregivers.

### **Control Group**

Present study was held in psychology department of National Institute of Rehabilitation Medicine (NIRM) on the basis of regular clinical practice psycho-education based counseling was given to every caregivers of the Cerebral palsy children. Keeping in mind the prevailing practice of NIRM present study was planned. Treatment-As-Usual (TAU) means that the usual treatment according to accepted standards for particular discipline is given to a group of participants (Staines et al., 1999), like in the present study the general counseling given to the caregivers of cerebral palsy children in NIRM. Treatment As Usual(TAU) within the area of mental health has been investigated in a number of studies (Freedland et al., 2011; Somerville et al., 2008; Witt et al., 2018; & Gul et al., 2022). In the present study control group was given treatment as usual (TAU).

### **Sessions detail (TAU)**

For control group overall (15) fifteen counseling sessions were conducted. One session per week was conducted with caregivers of cerebral palsy children in control group. During initial, first, second and third session caregivers of CP child in control group were counseled on child's disability i.e., cerebral palsy and issues linked with it. Clients were asked about their own major concerns due to having and taking care of a CP child. Fourth session was about management regarding insight of the child's issue by focusing client's attention towards child's strengths. Thoughts regarding the future of the child, due to child's disability were discussed. Fifth session was about client's own irregular sleep habits. The clients were counseled on limiting their own intake of food and beverages before bed. Limit their caffeine intake (tea, coffee). Go

to bed by ten o'clock every night. Avoid using their phone or watching TV on bed. Make journal writing a part of their life. Clients were overburdened & fatigued due to having long lasting effort with the child. In sixth session, clients were counseled through different steps, like to divide their activities with other family members regarding child (spouse or family). Participants/clients were guided not to be over perfectionist in daily household activities. They were advised to channelize their daily activities and limit the over expectations. Clients were told to enjoy small achievements in their lives in spite of waiting some big to come. seventh session was related to client's appetite issues. Counseling was done, regarding their appetite issues. While handling the child client's basic, diet should be up to the mark. Certain tasks were given to the client like to divide activities with other family members regarding child (spouse or family) and have proper meal timely. Follow proper meal timings (breakfast, lunch & dinner) mindfully. Observe daily caloric intake according to requirement or add some multivitamins also, add short meals. Follow the routine of diet, increase water intake and add physical activity in their own life. Three sessions were conducted on skilled behavior and problematic behaviors of the CP child. Clients were counseled on the skilled behavior of the child like self-help based activities (toilet training, self eating & self dressing). In these sessions counseling session was conducted based on child's activities (Skilled behavior & problematic behavior). Counseling was provided for self-help skills and tasks were given and behavioral issues of their CP's Child was also discussed. Eleventh session was about anger of the clients. Clients were counseled regarding how to minimize the anger due to child's problematic behavior. In twelfth session clients major concerns regarding the independent activity of the child was discussed. Clients were counseled to have patience in each step and give positive attention to their child. Clients were counseled on healthy activities (routine, necessary and pleasurable). In thirteenth session clients were counseled about how to come out from social isolation. They were advised to start meeting and discussion with the persons whom they feel

comfortable (friends & family). They were also told about going to market places. Start from least bothering points of social restriction to the point of most restricted places. In last two session clients were counseled about importance of support group in their social circles involving their family, friends, relatives and teachers etc.

### **Posttest**

After the completion of the therapeutic sessions, post assessment of the study variables, caregiver burden, burnout, and psychological distress, sense of coherence, social support and wellbeing was done on both treatment and control group for analyzing the effectiveness of positive psychotherapy.

## **RESULTS**

## Results

**Table 10**

*Frequency and percentages of demographics of Caregivers of Cerebral Palsy (N=100)*

Variable	Groups	<i>f</i>	%
Caregiver Gender	Male	26	26
	Female	74	74
Relationship with child	Father	19	19
	Mother	68	68
	Other Relatives	13	13
Caregivers Age	25-35	47	47
	3	46	46
	6		
	-		
	4		
	5		
	4	7	7
	6		
Caregiver Education	Less educated	68	68
	Highly Educated	32	32
Caregiver Occupation	No Occupation	64	64
	Labor Work/Pvt Job	12	12
	Government Servant	21	21
	Business	3	3
Marital Status	Married	92	92
	Unmarried/Alone	08	8
Marriage Type	In Family	73	73
	Out of family	23	23
	N	4	4
Family System	A		
	Joint Family	64	64
	Nuclear Family	36	36

No of Children	1	53	53
	-		
	3		
	4	38	39
	-		
	6		
	7	5	4
	-		
	9		
H/o disability in family	No children	4	4
	Y	36	36
	e s		
Monthly Income	N o	64	64
	20,000 -40,000	39	39
	41,000- 60,000	27	27
	61,000-80,000	24	24
	81,000-100,000	6	6
	<100,000	4	4

The above table 10 shows the frequency and percentage of each demographic variable of the study. The gender of the caregivers included in the study were males (26%) and female (74%). The age of respondents varies from 25 years to 55 years. In between 25-35 there were 47 participants and from 36 to 45 there were 47 (46%) participants whereas 7 participants were from 46 to 55 years old (7%). Caregiver's relationship with child included father mother and other related caregivers (siblings, Uncle, Aunts). From the caregivers fathers were 19 (19%), mothers were 68 (68%) and others were 13 (13 %). Educational status of the caregivers were less educated to highly educated, 68% were less educated, and 32% were highly educated. Occupational status of the caregivers included, no occupation (House wives) were 64 (64%), labor Work/Pvt Job were 12 (12%), government Servants were 21 (21%) Business based were 3 (3%). In marital status there were married 92 (92%) and alone were 8 (unmarried & widowed). In marriage type there were in family marriage (73%) out of family marriage (23%) and (4%)

were not married. In family system there were joint family system (64%) and nuclear family system (36%). In no of children caregiver having 1-3 children were 53 (53%), having 4-6 children were 39 (39%) , having 7-9 children were 4 (4%) and with no children there were 4 respondents (4%). No of disability status in family. Previous family history of disability is also part of demographics, as 64 respondents (64%) have no previous history of disability and 36 % have family history of disability. Monthly income included from 20,000 to 100,000. 39% respondents were having income status between 20,000 to 40,000. 27% respondents were having income status between Rs. 41,000 to 60,000. 24% respondents were having income status between Rs.61,000 to 80,000. 6% respondents were having income status between Rs.81,000 to 100,000, and 4% respondents were having income status Rs.<100,000.

**Table 11**

*Frequency and percentages of demographics of cerebral palsy children of caregivers (N=100)*

Demographics	Groups	<i>f</i>	%
Gender of CP Child	Male	67	68
	Female	33	32
Age Of CP Child	2year to 7years	54	54
	8years to 13 years	46	46
Birth order	First	28	28
	Second	28	28
	Third	18	18
	Fourth	13	13
	Fifth	7	7
	Sixth	4	4
	Seventh	0	0
	Eighth	0	0
	Ninth	2	2
Current disability	Physical, Intellectual Disability, Speech Impairment	83	83
	Physical Impairment	14	14
	Physical & Speech Impairment	3	3
Type of CP	Spastic	70	70
	Athetoid	9	9
	Hemiplegic	9	9
	Diplegic	4	4
	Paraplegic	8	8

The above table 11 shows the frequency and percentage of demographic variable related to Cerebral Palsy child included in the study. The gender of the CP child included in the study were males (67%) and female (33%). The age of CP child varies from 2 years to 13 years Approx. From 2 years to 7 years there were 54 (53%) children, from 8 to 13 (46%) years. Birth order of the children included 1<sup>st</sup> to 9<sup>th</sup>, 28 (28%) children were 1<sup>st</sup> born, 28 (28%) were 2<sup>nd</sup> born, 18 (18%) were 3<sup>rd</sup> born, 13 (18%) children were 4<sup>th</sup> born, 7 (7%) were fifth born, 4 (4%) were 6<sup>th</sup> born and 2 (2%) were 9<sup>th</sup> born. Current functional status of the child with CP is the problem child is facing currently (assessed by physiotherapist, speech therapist and Psychologist). 83 (83%) of CP children were having physical, intellectual and Speech disability, 14 (14%) of CP children were having physical disability only, 3 (3%) of the respondents having Physical & speech disability only. Types of CP included in the study were spastic (70%), Athetoid (9%), paraplegic (8%), hemiplegic (7%) and Diplegic (4%).

**Table 12**

*Descriptive Statistics and Alpha-Reliability Coefficient of Caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing among Caregivers of Cerebral Palsy Children (N =100)*

variables	k	$\alpha$	M	SD	Range		Skewness	Kurtosis
					Actual	Potential		
CDS	25	.85	84.73	11.94	29-116	5-125	-.88	3.1
Concern for the child (CFC)	8	.80	30.50	5.08	12-40	5-40	-.59	.72
Impact on Self (IoS)	7	.62	23.07	4.19	7-30	5-35	-1.03	1.83
Support for Caregiver (SfCg)	5	.77	14.52	3.14	7-23	5-25	.05	.19
Social & Economic Stains (SeS)	5	.63	17.22	3.21	5-24	5-25	-.33	1.01
PBA	23	.91	72.19	27.08	23-134	7-161	.43	-.64
DASS	21	.94	48.44	13.09	22-82	4-84	.21	-.45
Depression	07	.85	16.13	4.84	7-28	4-28	.22	-.36
Anxiety	07	.84	15.06	4.53	7-28	4-28	.28	-.50
Stress	07	.85	17.18	4.67	7-28	4-28	.24	.48
SOC	13	.89	49.61	16.35	13-91	7-91	.05	.08
MSPSS	12	.96	43.03	18.98	12-84	7-84	.04	-.92
Wellbeing	25	.97	76.20	23.06	30-124	5-125	.12	-.70

Note.  $k$ = No. of items,  $M(SD)$ = Mean (Standard Deviation),  $\alpha$ = Cronbach's Alpha. *CDS*= Caregiver Difficulties Scale, *CFC*= Concern for the Child, *IoS*= Impact on Self, *SfCg*= Support for Caregiver, *SES*= Social & Economic Strains, *PBA*= Parental Burnout Assessment, *DASS*= Depression Anxiety Stress Scale, *SOC*= Sense of Coherence, *SS*= Social Support, *PPTI*= Positive Psychotherapy Inventory

Table 12 shows Cronbach's Alpha for caregiver burden (Caregiver Difficulties Scale), & its dimensions CFC, IoS, CFCg, and SeS, PBA (Parental Burnout Assessment), Psychological distress DASS (Depression Anxiety, Stress Scales), Sense of Coherence (Orientation of Life Scale), Social Support (Multidimensional Scale of Perceived Social Support) and mental wellbeing based on Positive Psychotherapy Inventory (PPTI). The results indicate satisfactory internal consistency for CDS, PBA, DASS-21, Sense of Coherence, Social Support and wellbeing. The score of caregiver burden (CDS) is ranged from 29 to 116 ( $M=84.73$ ,  $SD=11.94$ ) and score of Parental Burnout based on the scores of PBA is ranged from 23 to 134 ( $M=72.19$ ,  $SD=27.08$ ), score of Psychological Distress based on the scores of DASS-21 is ranged from 22 to 82 ( $M=48.37$ ,  $SD=12.99$ ) and score of sense of coherence based on the scores of The Orientation of Life scale is ranged from 13 to 91 ( $M=49.61$ ,  $SD=16.35$ ). The scores of social support based upon the scale of (Multidimensional Scale of Perceived Social Support scale ranged from 12 to 84 ( $M=43.03$ ,  $SD=18.98$ ) and scores of wellbeing based on the scales of PPTI ranged from 30-124 ( $M=76.20$ ,  $SD=23.06$ ). Caregiver Burden (Caregiver Difficulties Scale (CDS) score was normally distributed with skewness of  $-0.88$  ( $SE = .24$ ) and Kurtosis of  $3.71$  ( $SE = .47$ ), burnout PBA (Parental Burnout Assessment) score was normally distributed with skewness of  $.43$  ( $SE = .24$ ) and Kurtosis of  $-0.64$  ( $SE = -.47$ ), Psychological distress DASS (Depression Anxiety, Stress Scales) score was normally distributed with skewness of  $.21$  ( $SE = .24$ ) and Kurtosis of  $.48$  ( $SE = .47$ ), Sense of Coherence (Orientation of Life Scale) score was normally distributed with skewness of  $.05$  ( $SE = .24$ ) and Kurtosis of  $.08$  ( $SE = .47$ ), Social Support (Multidimensional

Scale of Perceived Social Support) scores was normally distributed with Skewness of  $-.04$  ( $SE = .24$ ) and Kurtosis of  $-.92$  ( $SE = .48$ ), and wellbeing based on Positive Psychotherapy Inventory (PPT) score was normally distributed with Skewness of  $.12$  ( $SE = .24$ ) and Kurtosis of  $-.70$  ( $SE = .47$ ).

Reliability test in the SPSS, the reliability of each variable is  $>0.60$  which is recommended in the social sciences. The range of each variable is compared with actual and potential values. Skewness and Kurtosis of each variable is calculated to check the normality of data, the Skewness and kurtosis results show that data is normal and parametric test can be used for further analysis.

### **Table 13**

*Correlation matrix of Caregiver burden, burnout, psychological distress (depression, anxiety & Stress), Sense of Coherence, Social support and mental wellbeing among Caregivers of Cerebral Palsy Children (N = 100)*



*Note: CDS=Caregiver Difficulties Scale, PBA= Parental Burnout Assessment, DASS=Depression Anxiety and Stress Scale, OLS= Orientation of Life Scale, MSPSS = Multidimensional Social Support Scale and PPTI= Positive Psychotherapy Inventory*  
 \*\* $p < .01$  \*  $p < .05$

*Above table 13 shows that there correlation between total of CDS, PBA, DASS, OLS, MPSSS and PPTI and its sub scales among the scores of Caregivers of cerebral palsy Children. Table indicates that there significant (\*\* $p < .01$ ) correlation between scales and sub scales of the present study. Some variables are positively correlated and some are negatively correlated. Caregiver burden is negatively correlated with the Social Support, which indicates that as the social support increase caregiver burden will be low among caregivers of CP Children. Caregiver burden is negatively correlated with the Sense of Coherence, which indicates that as the caregiver burden increase Sense of Coherence decreases among caregivers of CP Children. Caregiver burden is negatively correlated with mental wellbeing.*

**Table 14***Sample demographics of Caregivers of Cerebral Palsy children in Positive**Psychotherapy Treatment Group (n=10)*

Variable	Groups	<i>f</i>	%
Caregiver Gender	Male	00	00
	Female	10	10
Relationship with child	Father	00	10
	Mother	10	10
Caregivers Age	25-35	07	70
	36-45	03	30
Caregiver Education	Matric	03	30
	FA	03	30
	Graduation	03	30
	MA	01	10
Caregiver Occupation	No Occupation	09	90
	Government Servant	01	10
Marital Status	Married	09	90
	Alone	01	10
Marriage Type	In Family	09	90
	Out of Family	01	10
Family System	Joint Family	08	80
	Nuclear Family	02	20
No of Children	1-3	03	30
	4-6	07	70
No of Disability in Family	Yes	04	40
	No	06	60
Monthly Income	20,000 -40,000	03	30

41,000- 60,000	03	30
61,000-80,000	03	30
81,000-100,000	01	10

The above table 14 shows the frequency and percentage of each demographic variable of the study. The gender of the caregivers included in the study were males (0%) and female (10%). The age of respondents varies from 25 years to 45 years. In between 25-35 there were 07 (70%) participants and from 36 to 45 there were 04 (40%) participant. caregiver's relationship with child included mothers only included in the group. Educational status of the caregivers were Matric to masters Level. 03 (30%) were having matric education, (30%) were having FA education, 03(30%) were having Graduation education, 1 (10%) were having MA education . Occupational status of the caregivers included, no occupation (House wives) were 09 (90%), and government Servants were 01 (10%). In marital status there were married 09 (90%) and alone were 1 (widowed). In marriage type there were in family marriage (90%) out of family marriage (10%). In family system there were joint family system (80%) and nuclear family system (20%). In no of children caregiver having 1-3 children were 03 (30%), having 4-6 children were 07 (70%). Previous family history of disability is also part of demographics, as 04 respondents (40%) have no previous history of disability and 60 % have family history of disability. Monthly income included from 20,000 to 100,000. 30% respondents were having income status between 20,000 to 40,000, 30% respondents were having income status between Rs. 41,000 to 60,000. 30% respondents were having income status between Rs.61,000 to 80,000. 10% respondents were having income status between Rs.81,000 to 100,000 respectively.

**Table 15**

*Display of sample demographics of cerebral palsy children of the caregivers*

*in PositivePsychotherapy Treatment Group (n=10)*

<i>Demographics</i>	<i>Groups</i>	<i>f</i>	<i>%</i>
Gender of CP Child	Male	07	70
	Female	03	30
Age Of CP Child	02year to 6years	05	50
	7years to 11 years	05	50
Birth order	First	06	60
	Second	03	30
	Fourth	01	10
Current disability	Physical, Intellectual Disability, Speech Impairment	09	90
	Physical Impairment	01	10
Type of CP	Spastic	05	50
	Athetoid	02	20
	Hemiplegic	02	20
	Diplegic	01	10

The above table 15 shows the frequency and percentage of demographic variable related to Cerebral Palsy child included in the study. The gender of the CP child included in the study were males (70%) and female (30%). The age of CP child varies from 2 years to 11 years Approx. From 2 years to 6 years there were 05 (50%) children, from 7 to 11 05 (50%) years. Birth order of the children included 1<sup>st</sup> to 4<sup>th</sup>, 06 (60%) children were 1<sup>st</sup> born, 03 (30%) were 2<sup>nd</sup> born, 01 (30%) were 4<sup>th</sup> born. Current functional status of the child with CP is the problem child is facing currently (assessed by physiotherapist, speech therapist and Psychologist). 09 (90%) of CP

children were having physical, intellectual and Speech disability, 01 (10%) of CP children were having physical disability only. Types of CP included in the study were spastic (50%), Athetoid (20%), hemiplegic (20%) and Diplegic (10%).

**Table 16**

*Sample demographics of Caregivers of Cerebral Palsy in Control Group (n=10)*

Variable	Groups	<i>f</i>	%
Caregiver Gender	Male	02	20
	Female	08	80
Relationship with child	Father	02	20
	Mother	08	80
Caregivers Age	25-35	04	40
	36-45	06	60
Caregiver Education	Matric	04	17
	FA	04	9
	Graduation	2	6
Caregiver Occupation	No Occupation	08	80
	Labor Work/Pvt Job	02	20
Marital Status	Married	10	100
	Unmarried/Alone	00	00
Marriage Type	In Family	09	90
	Out of Family	01	10
Family System	Joint Family	03	30
	Nuclear Family	07	70
No of Children	1-3	05	50
	4-6	04	40
	7-9	01	10
No of Disability in Family	Yes	04	40
			60

	No	06	39
Monthly Income	20,000 -40,000	03	27
	41,000- 60,000	03	24
	61,000-80,000	03	6
	81,000-100,000	01	

The above table 16 shows the frequency and percentage of each demographic variable of the study. The gender of the caregivers included in the study were males (20%) and female (80%). The age of respondents varies from 25 years to 45 years. In between 25-35 there were 40 participants and from 36 to 45 there were 47 (60%) participants. Caregiver's relationship with child included father & mother. From the caregivers fathers were 20 (20%), mothers were 80 (80%). Educational status of the caregivers were from matric level to graduation Level. 04(40%) were having matric education, 04(40%) were having FA education, 02(20%) were having Graduation education. Occupational status of the caregivers included, no occupation (House wives) were 08 (80%), and labor Work/Pvt Job were 02 (20%). In marital status there were all married. In marriage type there were in family marriage 09(90%) out of family marriage 01 (10%). In family system there were joint family system 03(30%) and nuclear family system 07(70%). In no of children caregiver having 1-3 children were 5 (50%), having 4-6 children were 4 (40%) , having 7-9 children were 01 (10%). Previous family history of disability is also part of demographics, as 04 respondents (40%) have no previous history of disability and 6 (60%) have family history of disability. Monthly income included from 20,000 to 100,000. 30% respondents were having income status between 20,000 to 40,000. 30% respondents were having income status between Rs. 41,000 to 60,000. 30% respondents were having income status between Rs.61, 000 to80,000. 01% respondents were having income status between Rs.81, 000 to 100,000.

**Table 17**

*Sample demographics of Cerebral Palsy children of caregivers in control group (n=10)*

Demographics	Groups	<i>f</i>	%
Gender of CP Child	Male	06	60
	Female	04	40
Age Of CP Child	2year to 6years	05	50
	7years to 11 years	05	50
Birth order	First	04	28
	Second	02	28
	Third	02	18
	Fifth	01	13
	Ninth	01	7
Current disability	Physical, Intellectual Disability, Speech Impairment	10	10
Type of CP	Spastic	6	60
	Athetoid	3	30
	Hemiplegic	1	10
	Diplegic	0	0
	Paraplegic	0	0

The above table 17 shows the frequency and percentage of demographic variable related to Cerebral Palsy child included in the study. The gender of the CP child included in the study were males (60%) and female (40%). The age of CP child varies from 2 years to 10 years Approx. From 2 years to 5 years there were 05(50%) CP children, from 6 to 10 years there were 05(50%) CP children. Birth order of the children included 1<sup>st</sup> to 9<sup>th</sup>, 04 (40%) children were 1<sup>st</sup> born 02(20%) were 2<sup>nd</sup> born, 02(20%) were 3<sup>rd</sup> born, 01 (10%) were fifth born, ) and 01 (10%) were 9<sup>th</sup> born.

Current functional status of the child with CP is the problem child is facing currently (assessed by physiotherapist, speech therapist and Psychologist). 10 (100%) of CP children were having physical, intellectual and Speech disability. Types of CP included in the study were spastic (60%), Athetoid (3%), paraplegic (1%), hemiplegic (0%) and Diplegic (0%).

**Table 18**

*Comparison of treatment group (positive psychotherapy) and control group of caregivers of CP children on caregiver burden, parental burnout, psychological distress, depression anxiety & stress, sense of coherence, perceived social support & mental wellbeing among caregivers of CP children. (n=20)*

Variables	K	Groups				t	p	95% Confidence Interval		Cohen's d
		Control Group (n = 10)		Treatment Group(PPT) (n = 10)				Lower	Upper	
		M	SD	M	SD					
CDS	25	77.10	5.08	65.80	4.94	5.04	.000	6.59	16.01	2.25
PBA	23	73.20	9.15	63.10	11.14	2.21	.04	.52	19.68	.99
DASS	21	45.50	4.52	40.70	4.14	2.47	.02	.72	8.87	1.11
Dep	7	15.30	2.91	12.40	1.58	2.77	.01	.70	5.09	1.24
Anxiety	7	13.70	2.49	11.10	1.66	2.74	.01	.60	4.69	1.23
Stress	7	14.20	2.44	11.90	1.73	2.43	.03	.31	4.29	1.09
OLS	13	44.10	7.72	56.30	7.41	3.60	.002	-19.31	-5.09	1.61
MSPSS	12	43.80	8.32	56.00	11.69	2.69	.01	-21.73	-2.66	1.20
MW	25	69.60	10.40	80.20	5.96	2.79	.01	-18.56	-2.63	1.25

Note: CDS=Caregiver Difficulties Scale, PBA= Parental Burnout Assessment, DASS=Depression Anxiety and Stress Scale, OLS= Orientation of Life Scale, MSPSS = Multidimensional Social SupportScale and MW= Mental Wellbeing

The above table 18 shows the comparison of two groups: Treatment group and control group of caregivers of cerebral palsy children on the scales of CDS, PBA, DASS, Depression, Anxiety, Stress, OLS (Sense of coherence), MSPSS (social support) & PPT (Mental wellbeing). The *p* value label, the significance value of independent sample t-test is given. The result shows that the mean value of CDS in control group is 77.10 with standard deviation 5.08 and the mean value in treatment group (positive psychotherapy) is 65.80 with standard deviation 4.94, it indicates that in treatment group (positive psychotherapy) the score of CDS decrease as compared to control group. The control group and treatment group (positive psychotherapy) of caregivers of CP on CDS show significance difference  $p \leq .001$ , it is  $p = .000$ .

This value indicates that there is a significant difference between control group and treatment group (positive psychotherapy) among caregivers of CP children. Caregiver burden level in the treatment group (positive psychotherapy) decreased after getting positive psychotherapy based interventions.

The result shows that the mean value of PBA in control group is 73.20 with standard deviation 9.15 and the mean value in treatment group (positive psychotherapy) group is 63.10 with standard deviation is 11.14, it indicates that in treatment group (positive psychotherapy) the score of PBA decrease as compared to control group. The control group and treatment group (positive psychotherapy) of caregivers of CP on PBA show significance difference  $p \leq .05$ , it is  $p = .04$ . This value indicates that there is a significant difference of burnout between control group and treatment group (positive psychotherapy) among caregivers of CP children. Burnout level in the PPT intervention group decreased after getting positive psychotherapy based interventions.

The result shows that the mean value of psychological distress (DASS) in control group is 45.50 with standard deviation 4.52 and the mean value in treatment group (positive psychotherapy) is 40.70 with standard deviation 4.14, it indicates that in treatment group (positive psychotherapy) the score of DASS decreased as compared to control group. The control group and treatment group (positive psychotherapy) of caregivers of CP on DASS show significance difference  $p \leq .05$ , it is  $p = .02$ . This value indicates that there is a significant difference between control group intervention and treatment group (positive psychotherapy) among caregivers of CP children. Psychological distress level in the treatment group (positive psychotherapy) decreased after getting positive psychotherapy based interventions.

The result shows that the mean value of depression on control group is 15.30 with standard deviation 2.91 and the mean value in treatment group (positive psychotherapy) is 12.40 with standard deviation 1.58, it indicates that in treatment group (positive

psychotherapy) group the score of depression decreased as compared to control group. The control group and treatment group (positive psychotherapy) of caregivers of CP on depression show significance difference  $p \leq .05$ , it is  $p=.01$ . This value indicates that there is a significant difference between control group and treatment group (positive psychotherapy) among caregivers of CP children. Depression level in treatment group (positive psychotherapy) decreased after getting positive psychotherapy based interventions.

The result shows that the mean value of anxiety in control group is 13.70 with standard deviation 2.49 and the mean value in positive psychotherapy treatment group is 11.10 with standard deviation 1.66, it indicates that in PPT treatment group the score of anxiety decreased as compared to control group. The control group and PPT treatment/intervention group of caregivers of CP on anxiety show significance  $p \leq .05$ , it is  $p=.01$  difference. This value indicates that there is a significant difference between control group and treatment group (positive psychotherapy) intervention among caregivers of CP children. Anxiety level in the treatment group (positive psychotherapy) decreased after getting positive psychotherapy based intervention.

The result shows that the mean value of stress in control group is 14.20 with standard deviation 2.44 and the mean value in treatment group (positive psychotherapy) is 11.90 with standard deviation 1.73, it indicates that in treatment group (positive psychotherapy) the score of stress decreased as compared to control group. The control group and treatment group (positive psychotherapy) of caregivers of CP on stress show significance  $p \leq .05$ , it is  $p=.03$  difference. This value indicates that there is a significant difference between control group intervention and treatment group (positive psychotherapy) interventions among caregivers of CP children. Stress level in the PPT intervention group decreased after getting positive psychotherapy based intervention.

The result shows that the mean value of OLS (sense of coherence) in control group is 44.10 with standard deviation 7.72 and the mean value in treatment group (positive psychotherapy) group is 56.30 with standard deviation 7.41, it indicates that in treatment group (positive psychotherapy) group the score of sense of coherence increased as compared to control group. The control group and treatment group (positive psychotherapy) of caregivers of CP on OLS show significance  $p \leq .005$ , it is  $p = .002$  difference. This value indicates that there is a significant difference between control group and treatment group (positive psychotherapy) intervention among caregivers of CP children. Sense of coherence of the treatment group (positive psychotherapy) improved after getting positive psychotherapy based interventions

The result shows that the mean value of MSPSS (Social Support) in control group is 43.80 with standard deviation 8.32 and the mean value in treatment group (positive psychotherapy) is

56.00 with standard deviation 11.69, it indicates that in treatment group (positive psychotherapy) the score of social support increased as compared to control group. The control group and PPT treatment/intervention group of caregivers of CP on social support show significance difference  $p$

$\leq .05$ , it is  $p = .01$ . This value indicates that there is a significant difference between control group intervention and treatment group (positive psychotherapy) among caregivers of CP children. Social support of the treatment group (positive psychotherapy) improved after getting positive psychotherapy based interventions

The result shows that the mean value of PPTI (mental wellbeing) in control group is 69.60 with standard deviation 10.40 and the mean value in treatment group (positive psychotherapy) is 80.20 with standard deviation 5.96, it indicates that in treatment group (positive psychotherapy) the score of mental wellbeing increased as compared to control group. The control group interventions and treatment group (positive psychotherapy) of caregivers of

CP on mental wellbeing show significance  $p \leq .05$ , it is  $p=.01$  results. This value indicates that there is a significant difference between control group and treatment group (positive psychotherapy) interventions among caregivers of CP children. Mental wellbeing of the treatment group (positive psychotherapy) improved after getting positive psychotherapy based intervention.

**Table 19**

*Comparison of per-treatment and post treatment in positive psychotherapy treatment group on caregiver burden, parental burnout, psychological distress, depression anxiety & stress, sense of coherence, perceived social support & wellbeing among caregivers of CP children. (n=10)*

Variables	Treatment Groups						95% Confidence Interval	Cohen's d		
	Pre testing (n = 10)		Post testing (n = 10)		<i>t</i>	<i>p</i>				
	<i>K</i>	<i>M</i>	<i>SD</i>	<i>M</i>			<i>SD</i>			<i>Lower</i>
CDS	25	94.70	8.07	65.80	4.94	12.10	.000	23.50	34.30	4.31
PBA	23	106.60	15.34	63.10	11.14	16.75	.000	37.63	49.37	3.24
DASS	21	62.40	8.29	40.70	4.14	6.36	.000	13.98	29.42	3.31
Dep	7	21.30	3.65	12.40	1.58	6.74	.000	5.91	11.88	3.16
Anx	7	19.50	2.17	11.10	1.66	19.68	.000	7.43	9.37	4.33
Stress	7	21.60	3.66	11.90	1.73	10.99	.000	7.70	11.69	3.38
OLS	13	34.60	6.99	56.30	7.41	6.79	.000	-28.93	-14.47	3.01
MSPSS	12	23.40	11.12	56.00	11.69	8.76	.000	-41.02	-24.18	2.86
S										
MW	25	49.00	9.03	80.20	5.96	9.02	.000	-39.03	-23.37	4.08

Note: CDS=Caregiver Difficulties Scale, PBA= Parental Burnout Assessment, DASS=Depression Anxiety and Stress Scale, OLS= Orientation of Life Scale, MSPSS = Multidimensional Social SupportScale and MW= Mental Wellbeing

The above table 19 shows the comparison of two groups (within group pre & post PPT): Positive psychotherapy pre treatment group and PPT post treatment group of caregivers of cerebralpalsy children on the scales of CDS, PBA, DASS, Depression, Anxiety, Stress, OLS (Sense of coherence), MSPSS (social support) & PPT (Mental wellbeing). The value label, the significance value of the paired sample t-test is given. The result shows that the mean value of CDS in PPT pre treatment group score is 94.70 with standard deviation 8.07 and the mean value on PPT post treatment group is 65.80 with standard deviation 4.94, it indicates that in PPT post treatment group the score of CDS decrease as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on CDS show significance  $p \leq .001$ , difference, it is  $p = .000$ . This value indicates that there is a significant difference between PPT pre treatment group and PPT post treatment group among caregivers of CP children.

The result shows that the mean value of burnout in PPT pre treatment group score is 106.60 with standard deviation 15.34 and the mean value on PPT post treatment group is 63.10 with standard deviation is 11.14, it indicates that in PPT post treatment group the score of PBA decrease as compared to PPT pre group. The PPT pre treatment group and PPT post group of caregivers of CP on PBA show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference of burnout between PPT pre treatment group and PPT post treatment group among caregivers of CP children.

The result shows that the mean value of psychological distress (DASS) in PPT pre treatment group score is 62.40 with standard deviation 8.29 and the mean value in PPT post treatment group is 40.70 with standard deviation 4.14, it indicates that in PPT post treatment group the score of DASS decreased as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on DASS show significance  $p \leq .001$ , difference it is  $p = .000$ . This value indicates that there is a significant

difference between PPT pretreatment group and PPT post treatment group among caregivers of CP children.

The result shows that the mean value of Depression in PPT pre treatment group score is 21.30 with standard deviation 3.65 and the mean value on PPT post treatment group is 12.40 with standard deviation 1.58, it indicates that in PPT post treatment group the score of depression decreased as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on depression show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between PPT pre treatment group and PPT post treatment group intervention among caregivers of CP children.

The result shows that the mean value of anxiety in PPT pre treatment group score is 19.50 with standard deviation 2.17 and the mean value in PPT post treatment group is 11.10 with standard deviation 1.66, it indicates that in PPT post treatment group the score of anxiety decreased as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on anxiety show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between PPT pre treatment group and PPT post treatment group intervention among caregivers of CP children.

The result shows that the mean value of stress in PPT pre group score is 21.60 with standard deviation 3.66 and the mean value in PPT post treatment group is 11.90 with standard deviation 1.73, it indicates that in PPT post treatment group the score of stress decreased as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on stress show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between PPT pre treatment group and PPT post treatment group interventions among caregivers of CP children.

The result shows that the mean value of OLS (Sense of Coherence) in PPT pre treatment group score is 34.60 with standard deviation 6.99 and the mean value in PPT post treatment group is 56.30 with standard deviation 7.41, it indicates that in PPT post treatment group the score of sense of coherence increased as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on OLS show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between PPT pre treatment group and PPT post treatment among caregivers of CP children.

The result shows that the mean value of MSPSS (Social Support) in PPT pre treatment group score is 23.40 with standard deviation 11.12 and the mean value on PPT post treatment group is 56.00 with standard deviation 11.69, it indicates that in PPT post treatment group the score of social support increased as compared to PPT pre treatment group. The PPT pre treatment group and PPT post treatment group of caregivers of CP on social support show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between PPT pre treatment group and PPT post treatment group among caregivers of CP children.

The result shows that the mean value of PPTI (mental wellbeing) on PPT pre treatment group score is 49.00 with standard deviation 9.03 and the mean value in PPT post treatment group is 80.20 with standard deviation 5.96, it indicates that in PPT post treatment group the score of PPTI increased as compared to PPT pre treatment group. The pre treatment PPT group and PPT post treatment group of caregivers of CP on wellbeing show significance  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre treatment PPT group and PPT post treatment group intervention among caregivers of CP children.

**Table 20**

*Comparison of pre-testing and post testing in control group on caregiver burden, parental burnout, psychological distress, depression anxiety & stress, sense of coherence, perceived social support & mental wellbeing among caregivers of CP children. (n=10).*

Variables	Control Group						t	p	95%		Cohen's d
	Pre testing (n = 10)		Post testing (n = 10)		Lower	Upper					
	K	M	SD	M	SD						
CDS	25	97.50	4.35	77.10	5.08	40.48	.000	19.32	21.48	4.31	
PBA	23	105.90	17.96	73.20	9.15	4.76	.001	17.17	48.23	2.29	
DAS	21	62.20	6.86	45.50	4.53	9.20	.000	12.59	20.80	2.87	
S											
Dep	7	21.60	2.84	15.30	2.91	4.33	.002	3.01	9.58	2.80	
Anx	7	18.30	2.45	13.70	2.49	4.44	.002	2.26	6.94	1.86	
Strs	7	21.60	2.83	14.20	2.44	13.66	.000	6.17	8.62	2.80	
OLS	13	27.10	10.83	44.10	7.72	4.14	.003	-26.28	7.71	1.81	
MSP	12	24.00	8.86	43.80	8.32	14.09	.000	-22.97	16.62	2.30	
SS											
MW	25	50.60	4.43	69.60	10.41	9.09	.000	-23.73	14.27	2.37	

Note: CDS=Caregiver Difficulties Scale, PBA= Parental Burnout Assessment, DASS=Depression Anxiety and Stress Scale, OLS= Orientation of Life Scale, MSPSS = Multidimensional Social Support Scale and MW= Mental wellbeing

The above table 20 shows the comparison of control group (pre control group and post control group) of caregivers of cerebral palsy children on the scales of CDS, PBA, DASS, Depression, Anxiety, Stress, OLS (Sense of coherence), MSPSS (social support) & PPT (Mental wellbeing). The *p* value label, the significance value of paired sample t-test is given. The result shows that the mean value of CDS in pre control group score is 97.50 with standard deviation 4.35 and the mean value on post control group is 77.10 with standard deviation 5.08, it indicates that in post control group the score of CDS decrease as compared to pre control

group. The control group and post control group of caregivers of CP on CDS show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre control group and post control group among caregivers of CP children.

The result shows that the mean value of PBA in pre control group score is 105.90 with standard deviation 17.96 and the mean value on post control group is 73.20 standard deviation is 9.15, it indicates that in post control group, the score of PBA decrease as compared to pre control group. The pre control group and post control group of caregivers of CP on PBA show significance difference  $p \leq .001$ , it is  $p = .001$ . This value indicates that there is a significant difference of burnout between pre control group and post control Group interventions among Caregivers of CP children. The result shows that the mean value of DASS (psychological distress) in pre control group score is 62.20 with standard deviation 6.86 and the mean value on post control group is 45.50 with standard deviation 4.53, it indicates that in post control group the score of DASS decrease as compared to pre control group. The pre control group and post control group of caregivers of CP on DASS show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre control group and post control group among caregivers of CP children.

The result shows that the mean value of depression in pre control group score is 21.60 with standard deviation 2.84 and the mean value on post control group is 15.30 with standard deviation 2.99, it indicates that in post control group the score of depression decrease as compared to control group. The pre control group and post control group of caregivers of CP on depression show significance difference  $p \leq .005$ , it is  $p = .002$ . This value indicates that there is a significant difference between control group intervention and PPT treatment group among caregivers of CP children.

The result shows that the mean value of anxiety in pre control group score is 18.30 with standard deviation 2.45 and the mean value on post control group is 13.70 with standard deviation 2.49, it indicates that in post control group the score of anxiety decreased as compared to pre control group. The pre control group and post control group of caregivers of CP on anxiety shows significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre control group and post control group among caregivers of CP children.

The result shows that the mean value of stress in pre control group score is 21.60 with standard deviation 2.83 and the mean value in post control group is 14.20 with standard deviation 2.44, it indicates that in post control group the score of stress decrease as compared to control group. The pre control group and post control group intervention of caregivers of CP on stress show significance  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre control group and post control group among caregivers of CP children.

The result shows that the mean value of OLS (Sense of Coherence) in pre control group score is 27.10 with standard deviation 10.83 and the mean value in post control group intervention is 44.10 with standard deviation 7.72, it indicates that in post control group the score of sense of coherence increased as compared to pre control group. The pre control group and post control group of caregivers of CP on OLS show significance difference  $p \leq .005$ , it is  $p = .003$ . This value indicates that there is a significant difference between pre control group and post control group among caregivers of CP children.

The result shows that the mean value of MSPSS (Social Support) in pre control group score is 24.00 with standard deviation 8.86 and the mean value in post control group is 43.80 with standard deviation 8.32, it indicates that in post control group the score of social support increased as compared to pre control group. The pre control group and post control Group of

caregivers of CP on social support show significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre control group and post control Group among caregivers of CP children.

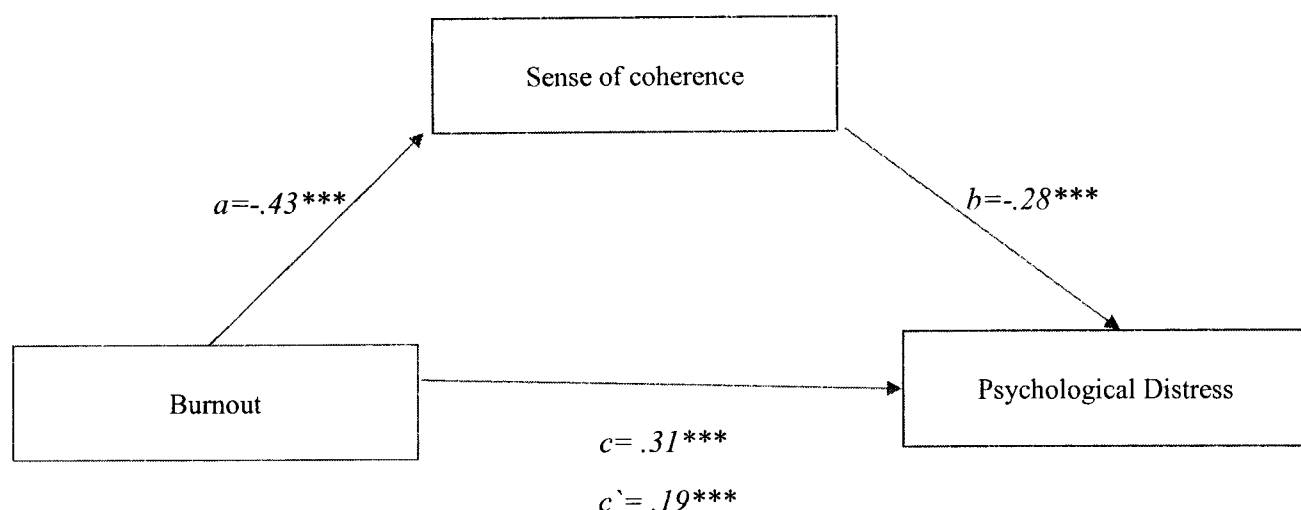
The result shows that the mean value of mental wellbeing in pre control group score is 50.60 with standard deviation 4.43 and the mean value in post control group is 69.60 with standard deviation 10.41, it indicates that in post control group the score of PPTI increased as compared to pre control group. The pre control group and post control group of caregivers of CP on PPTI shows significance difference  $p \leq .001$ , it is  $p = .000$ . This value indicates that there is a significant difference between pre control group and post control group among caregivers of CP children.

**Table 21**

*Mediating role of sense of coherence between Burnout & Psychological Distress amongcaregivers of cerebral palsy children (N=100).*

Effect	$\beta$	SE	p	95% CI	
				LLCI	ULCI
<b>Indirect Effect (a*b)</b>					
Burnout→Sense of Coherence→ Psychological Distress	.12	.04	-	.05	.20
<b>Direct Effect (c)</b>					
Burnout→ Psychological Distress	.19	.05	.000	.09	.29
<b>Total Effect (c)</b>					
Burnout →Psychological Distress	.31	.037	.000	.23	.38

Result of the above table displays that the total effect of the burnout on psychological distress is statistically significant ( $\beta=.31, p<.001$ ). With the addition of the mediating variable sense of coherence. The direct effect of burnout on psychological distress decreases and remained statistically significant ( $\beta= .19, p<.001$ ). The indirect effect of burnout on psychological distress through sense of coherence was found to be statistically significant ( $\beta=.12, 95\% CI: .05, .20$ ). This indicates that the relationship between burnout and psychological distress is significantly partially mediated by sense of coherence. The mediation model is shown in figure below.



*Figure 6 mediation model indicating direct paths and their significance*

Result of above model indicated that variable of burnout positively predict psychological Distress,  $\beta = .31^{***}$ ,  $t = (8.29)$   $p < .001$ , 95% BCaCI [.23, .38] and explain 41% of its variation. The sense of coherence negatively predict burnout,  $\beta = -.43^{***}$ ,  $t = (9.98)$ ,  $p < .001$ , 95% BCaCI [-.51, -.34] and explain 50% of its variation. Sense of coherence is negatively predicting psychological distress,  $\beta = -.28^{***}$ ,  $t = (3.33)$   $p < .001$ , 95% BCaCI [-.44, -.11] and explain 47% of its variation. The effect of burnout (an independent variable) on sense of coherence (a mediator) is significant. The effect of burnout (an independent variable) on psychological distress (a dependent variable) is significant. Lastly the effect of sense of coherence on psychological distress is significant and the effect of burnout on psychological distress is significant after controlling for sense of coherence. The direct effect suggests that, whilst controlling for the effect of burnout on psychological distress, the sense of coherence (mediator) has a significant negative relationship with psychological distress. The direct effect (path c')  $\beta = .19^{***}$  is smaller and significant than the total effect (path c)  $\beta = .31^{***}$ . Therefore, from above model it can infer that a partial mediation effect of sense of coherence was found between burnout and psychological distress.

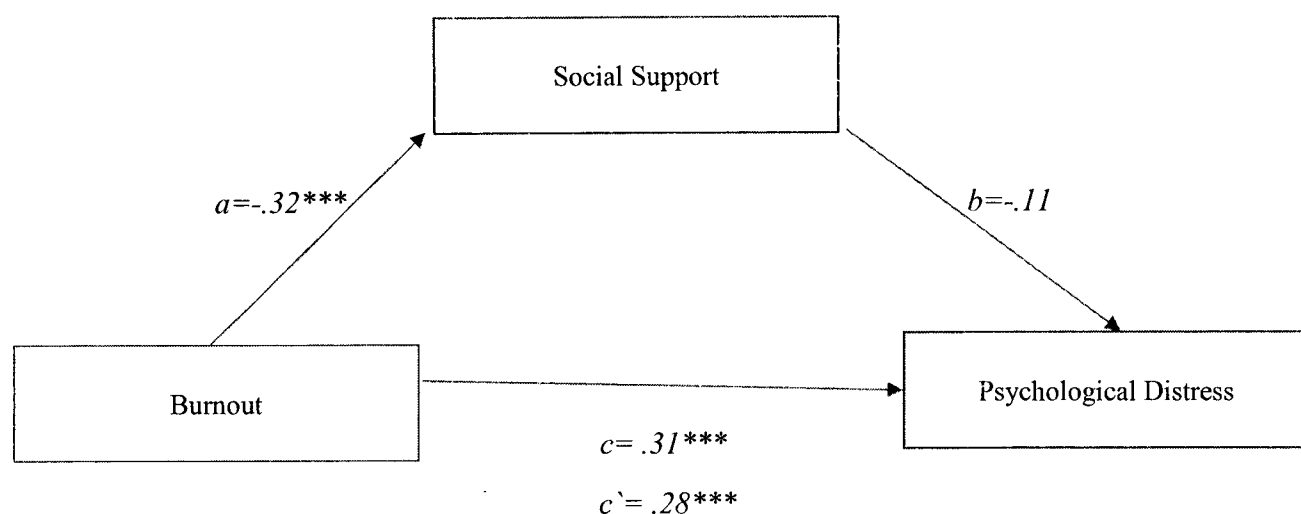
**Table 22**

*Mediating role of social support between burnout & psychological distress among caregivers of cerebral palsy children (N=100).*

<i>Effect</i>	$\beta$	<i>SE</i>	<i>p</i>	<i>95% CI</i>	
				<i>LLCI</i>	<i>ULCI</i>
<b>Indirect Effect (a*b)</b>					
Burnout→Social support→ Psychological Distress	.34	.02	n.s	-.003	.09
<b>Direct Effect (c)</b>					
Burnout→Psychological Distress	.28	.041	.000	.19	.35
<b>Total Effect (c)</b>					
Burnout →Psychological Distress	.31	.037	.000	.23	.38

Result of the above table displays that the total effect of the burnout on psychological distress is statistically significant ( $\beta = .31, p < .001$ ). With the addition of the mediating variable social support the direct effect of burnout on psychological distress decreases and remained statistically significant ( $\beta = .28, p < .001$ ). The indirect effect of burnout and psychological distress through social support was found to be statistically non significant ( $\beta = .34, CI: -.003, .09$ ). This indicates that the relationship between burnout and psychological distress is partially mediated by social support but it is non significant. The mediation model is shown in figure below.

Figure 7



*Figure 7 mediation model indicating direct paths and their significance*

Result of above model indicated that variable of burnout positively predict psychological Distress,  $\beta = .31^{***}$ ,  $t = (8.29)$   $p < .000$ , 95% BCaCI [.23, .38] and explain 41% of its variation. Social support negatively predict burnout,  $\beta = -.32^{***}$ ,  $t = (5.01)$ ,  $p < .000$ , 95% BCaCI [-.44, -.19] and explain 45% of its variation. Social support is negatively predicting psychological distress,  $\beta = -.11$ ,  $t = (1.99)$   $p = \text{n.s.}$ , BCaCI [-.22, .009] and explain 43% of its variation. The effect of burnout (an independent variable) on Social support (a mediator) is negatively significant. The effect of burnout (an independent variable) on psychological distress (a dependent variable) is positively significant. Lastly the effect of social support on psychological distress is non significant and the effect of burnout and psychological distress is significant. The direct effect suggests that, whilst controlling for the effect of burnout on psychological distress, the social support (mediator) has a non significant relationship with psychological distress. The direct effect (path *c'*)  $\beta = .28^{***}$  is smaller but significant than the total effect (path *c*)  $\beta = .31^{***}$ . Therefore, from above model we can infer a partial mediation effect of social support through burnout and psychological distress but it is not significant.

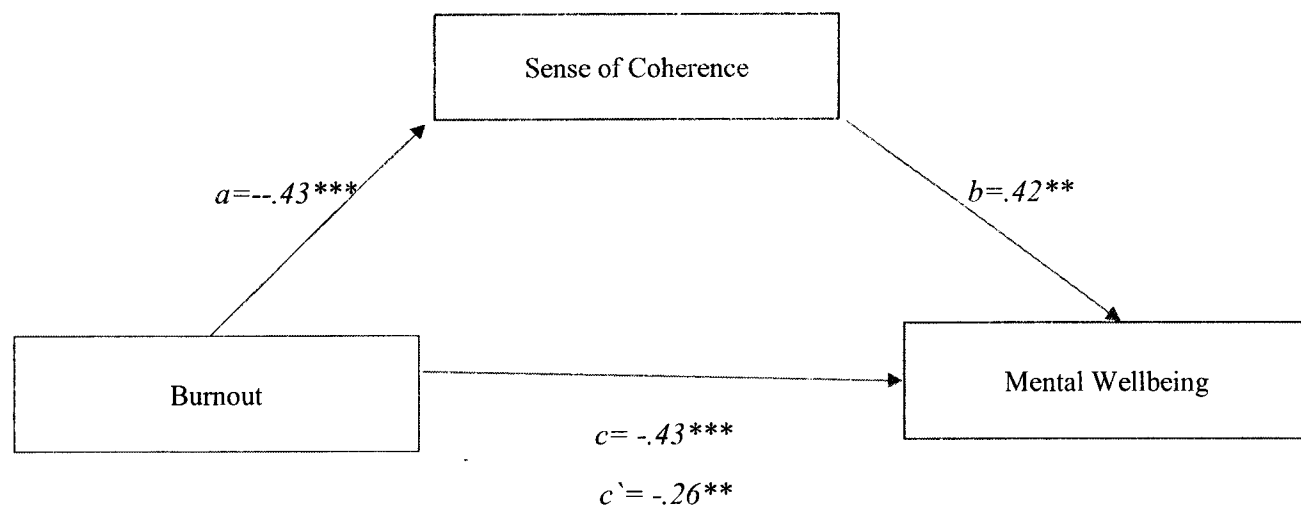
**Table 23**

*Mediating role of sense of coherence between burnout & mental wellbeing among caregivers of cerebral palsy children (N=100).*

<i>Effect</i>	$\beta$	<i>SE</i>	<i>P value</i>	<i>95% CI</i>	
				<i>LLCI</i>	<i>ULCI</i>
Indirect Effect (a*b)					
Burnout→Sense of Coherence→ M.Wellbeing	-.18	.07	-	-.34	-.04
Direct Effect (c)					
Burnout→ M.wellbeing	-.26	.10	.01	-.46	-.05
Total Effect (c)					
Burnout →M.wellbeing	-.43	.07	.000	-.58	-.28

Result of the above table displays that the total effect of the burnout on wellbeing is statistically significant ( $\beta = -.43, p < .001$ ). With the addition of the mediating variable sense of coherence. The direct effect of burnout on wellbeing decreases and remained statistically significant ( $\beta = -.26$ ). The indirect effect of burnout on wellbeing through sense of coherence was found to be statistically significant ( $\beta = -.18, 95\% \text{ CI: } -.34, -.04$ ). This indicates that the relationship between burnout and wellbeing is significantly partially mediated by sense of coherence. The mediation model is shown in figure below.

Figure 8



*Figure 8 mediation model indicating direct paths and their significance*

Result of above model indicated that variable of burnout negatively predict psychological wellbeing,  $\beta = -.43^{***}$ ,  $t = (5.89)$   $p < .001$ , 95% BCaCI [-.58, -.29] and explain 26% of its variation. The sense of coherence negatively predict burnout,  $\beta = -.43^{***}$ ,  $t = (9.98)$ ,  $p < .001$ , 95% BCaCI [-.51, -.34] and explain 50% of its variation. Sense of coherence is positively predicting wellbeing,  $\beta = .42^{**}$ ,  $t = (2.48)$   $p < .05$ , 95% BCaCI [.08, .75] and explain 31% of its variation. The effect of burnout (an independent variable) on sense of coherence (a mediator) is significant. The effect of burnout (an independent variable) on Wellbeing (a dependent variable) is significant. Lastly, the effect of sense of coherence on Wellbeing is significant and the effect of burnout on wellbeing is significant after controlling for sense of coherence. The direct effect suggests that, whilst controlling for the effect of burnout on wellbeing, the sense of coherence (mediator) has a significant negative relationship with wellbeing. The direct effect (path c')  $\beta = -.26^{**}$  significant and smaller than the total effect (path c)  $\beta = .43^{***}$ . Therefore, from above model we can infer a significant partial mediation effect of sense of coherence through burnout on wellbeing.

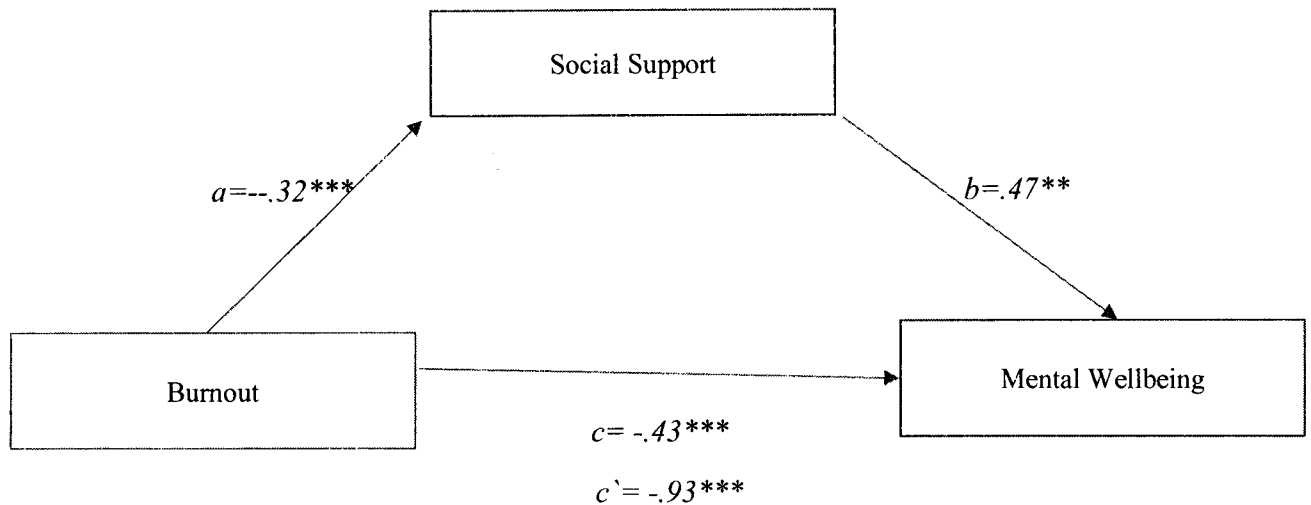
**Table 24**

*Mediating role of Social support between burnout & mental wellbeing among caregivers of cerebral palsy children (N=100).*

<i>Effect</i>	$\beta$	<i>SE</i>	<i>P value</i>	<i>95% CI</i>	
				<i>LLCI</i>	<i>ULCI</i>
<b>Indirect Effect (a*b)</b>					
Burnout→Social support→ M.Wellbeing	-.15	.05	-	-.25	-.07
<b>Direct Effect (c)</b>					
Burnout→M. wellbeing	-.29	.076	.000	-.44	-.14
<b>Total Effect (c)</b>					
Burnout →M.wellbeing	-.07	.073	.000	-.58	-.28

Result of the above table displays that the total effect of the burnout on wellbeing is statistically significant ( $\beta=-.07, p<.001$ ). With the addition of the mediating variable social support. The direct effect of burnout on wellbeing decreases and remained statistically significant ( $\beta=-.29, p<.001$ ). The indirect effect of burnout and mental wellbeing through social support was found to be statistically significant ( $\beta=-.15, 95\% CI: -.25, -.07$ ). This indicates that the relationship between burnout and wellbeing is partially mediated by social support, significantly. The mediation model is shown in figure below.

Figure 9



*Figure 9 mediation model indicating direct paths and their significance*

Result of above model indicated that variable of burnout negatively predict mental wellbeing,  $\beta = -.43^{***}$ ,  $t = (5.89)$   $p < .001$ , 95% BCaCI [-.58, -.29] and explain 27% of its variation. The social support negatively predict burnout,  $\beta = -.32^{***}$ ,  $t = (5.01)$ ,  $p < .001$ , 95% BCaCI [-.44, -.19] and explain 20% of its variation. Social Support is positively predicting wellbeing,  $\beta = .47^{***}$ ,  $t = (4.28)$   $p < .001$ , 95% BCaCI [.25, .68] and explain 37% of its variation. The effect of burnout (an independent variable) on social support (a mediator) is significant. The effect of burnout (an independent variable) on Wellbeing (a dependent variable) is significant. Lastly the effect of social support on Wellbeing is significant and the effect of burnout on Wellbeing is significant after controlling for social support. The direct effect suggests that, whilst controlling for the effect of burnout on wellbeing, the social support (mediator) has a significant positive relationship with wellbeing. The direct effect (path c')  $\beta = -.29^{***}$  is significant but smaller than the total effect (path c)  $\beta = -.43^{***}$ . Therefore, from above model we can infer that a significant partial mediation effect of social support occurred between burnout on wellbeing.

**Table 25**

*Mean Standard Deviation & t-values of male and female Caregivers of Cerebral Palsy Children on the Scores of Caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing (N=100)*

Group	Male		Female		t(df)	p	Cohen's d
	Caregivers		caregivers				
	(n=26)		(n=74)				
Variables	M	SD	M	SD			
CDS	80.46	10.23	86.23	12.20	2.15(98)	.03	.05
CFC	29.19	5.07	30.96	5.05	1.53(98)	.12	
IoS	21.73	3.83	23.54	4.23	1.91(98)	.05	.04
SfCg	13.92	2.74	14.73	3.27	1.13(98)	.26	
SES	17.04	2.86	17.28	3.34	.33(98)	.74	
PBA	65.62	22.90	74.50	28.19	1.44(98)	.15	
DASS	43.00	10.20	50.35	13.51	2.53(98)	.01	.06
Depression	14.15	4.22	16.83	4.88	2.48(98)	.01	.06
Anxiety	13.46	4.03	15.62	4.59	2.13(98)	.03	.50
Stress	15.38	3.66	17.81	4.84	2.33(98)	.02	.57
SOC	54.46	16.43	47.91	16.08	1.77(98)	.08	
SS	50.73	17.21	40.32	18.93	2.47(98)	.02	
MW	82.88	18.00	73.85	23.69	1.74(98)	.08	

Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child, IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS=Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory (MW)

Above table 25 shows Mean, SD and t values for comparing gender based differences on CDS & its dimension (Concern for the Child, Impact on Self, Support for Caregiver, Social & Economic Strains) PBA, DASS, Depression, Anxiety & Stress, Sense of Coherence, Social support and wellbeing. Results show that gender differences are significant on CDS, DASS depression, Anxiety & stress variable ( $p < .05$ ). Results revealed that there is significant gender difference is found on CDS, ( $p < .05$ ) on caregiver's burden female caregivers scored high ( $M=86.23$ ,  $SD=12.20$ ) which indicate that females are more burdened as compared to male caregivers. Results indicate that female caregivers ( $M=50.35$ ,  $SD=13.51$ ) are more psychologically distressed as compared to male caregivers of cerebral Palsy children ( $M=43.00$ ,  $SD=10.20$ ). Results indicate that female caregivers ( $M=16.83$ ,  $SD=4.88$ ) are more depressed as compared to male caregivers of cerebral Palsy children ( $M=14.15$ ,  $SD=4.22$ ). Results indicate that female caregivers ( $M=15.62$ ,  $SD=4.59$ ) have more anxiety as compared to male caregivers of cerebral Palsy children ( $M=13.46$ ,  $SD=4.03$ ). Results indicate that female caregivers ( $M=17.81$ ,  $SD=4.84$ ) are more stressed as compared to male caregivers of cerebral Palsy children ( $M=15.38$ ,  $SD=3.66$ ). There are non-significant difference is found on PBA scales among caregivers of CP children but from mean difference results indicated that female caregivers ( $M=40.32$ ,  $SD=18.93$ ) are more burnout as compared to male caregivers ( $M=50.73$ ,  $SD=17.21$ ) of cerebral palsy children. Results revealed that female caregivers have less social support as compared to male caregivers, so there is a significant difference is found on social support. There is a non-significant difference is found on sense of coherence and mental wellbeing variables but from mean differences it is indicated that male caregivers having better wellbeing, social support and sense of coherence as compared to female caregivers of cerebral palsy children.

**Table 26**

*Mean Standard Deviation & t-values of educational status of Caregivers of Cerebral Palsy Children on the Scores of caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing (N=100)*

Group	Less Educated		Highly Educated		<i>t(df)</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
	(n=68)		(n=32)				
Variables	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t(df)</i>	<i>p</i>	
CDS	86.56	10.85	80.84	13.35	2.28(98)	.02	.04
CFC	31.49	4.46	28.41	5.74	2.93(98)	.004	.06
IoS	23.69	3.93	21.75	4.49	2.20(98)	.03	.05
SfCg	14.63	3.28	14.28	2.87	.51(98)	.61	.11
SES	17.71	3.10	16.19	3.24	2.25(98)	.03	.04
PBA	73.43	27.00	69.53	27.51	.67(98)	.51	
DASS	49.71	12.95	45.75	13.19	1.42(98)	.16	
Depression	16.53	4.73	15.28	5.06	1.20(98)	.23	
Anxiety	15.35	4.25	14.44	5.09	.94(98)	.35	
Stress	17.72	7.73	16.03	4.38	1.70(98)	.09	
SOC	47.16	16.49	54.81	14.98	2.22(98)	.03	.49
SS	40.75	19.02	47.88	18.23	1.77(98)	.08	
MW	76.90	19.61	83.66	24.37	1.79(98)	.06	

Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child, IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS=Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, MW=Mental wellbeing, PPTI= Positive Psychotherapy Inventory (Mental Wellbeing)

Table 26 indicates mean, standard deviation and t values of CDS & dimensions (CFC, IoS, Sfcg, SES) PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and well being across less educated ( Matric, FA), highly educated (Graduate, Masters) among the caregivers of cerebral palsy children. Results revealed that there is significant education based difference is found on CDS, ( $p < .05$ ). On caregiver Difficulty Scale less educated caregivers scored high ( $M=86.23$ ,  $SD=12.20$ ) which indicate that less educated caregivers of CP are more burdened as compared to highly educated caregivers. There is significant education based difference is found on Concern for the Child (CfC), Impact on Self (ISs), and Social & Economical Strains (SeS).

There is significant difference is found on OLS (Sense of Coherence) ( $p < .05$ ) among less educated and highly educated caregivers of Cerebral Palsy Children. It indicated that highly educated caregivers have better sense of Coherence as compared to less educated caregivers of CP children

**Table 27**

*Mean Standard Deviation & t-values of family System of Caregivers of Cerebral Palsy Children on the Scores of caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing(N=100)*

Group	Nuclear Family		Joint Family		<i>t(df)</i>	<i>p</i>
	<i>(n=36)</i>		<i>(n=64)</i>			
Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CDS	84.56	15.78	84.8 3	9.27	.11(98)	.91
CFC	31.17	5.59	30.1 3	4.78	.98(98)	.33
IoS	23.00	4.95	23.1 1	3.74	.13(98)	.90
SfCg	14.08	3.37	14.7 7	3.01	.95(98)	.30
SES	17.31	3.82	17.1 7	2.84	.19(98)	.84
PBA	69.75	28.32	73.5 6	26.52	.67(98)	.50
DASS	49.06	14.99	48.0 9	12.01	.35(98)	.73
Depression	16.00	5.06	16.2 0	4.75	.20(98)	.84
Anxiety	15.50	4.91	14.8 1	4.32	.73(98)	.47
Stress	17.56	5.87	16.9 7	3.87	.60(98)	.55
SoC	49.53	15.07	49.6 6	17.14	.03(98)	.80
SS	41.39	17.44	43.9 5	19.86	.65(98)	.49
MW	78.39	23.18	74.9 7	23.07	.71(98)	.43

Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child ,  
IoS= Impact on Self, CfCg= Support for Caregiver, SES= Social &

Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, MW=Mental wellbeing

Above table 27 shows Mean, SD and t-values for comparing family system based differences on CDS & dimensions(Concern for the Child , Impact on Self, Support for Caregiver,Social & Economic Strains,), PBA, DASS, Depression, Anxiety & Stress, Sense of Coherence, Social support and wellbeing. There is a non-significant difference is found on CDS & (dimensions), PBA, DASS, Depression, & Anxiety scales among caregivers from joint and nuclearfamily system. There is a non-significant difference is found on SOC, SS and Wellbeing variables.

**Table 28**

*Mean Standard Deviation & t-values of caregivers on the Scores of Caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing along with gender of their child with CP.*

Group	Gender of the CP children				<i>t(df)</i>	<i>p</i>	Cohen's <i>d</i>
	Male children (n=67)		Female Children(n=33)				
Variables	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CDS	85.75	10.68	82.56	14.21	1.25(98)	.21	
CFC	30.60	4.73	30.25	5.84	.34(98)	.74	
IoS	23.15	3.71	22.91	5.13	.27(98)	.79	
SfCg	14.68	3.19	14.19	3.06	.72(98)	.47	
SES	17.72	3.04	16.16	3.35	2.32(98)	.02	.49
PBA	73.16	26.61	70.21	28.33	.51(98)	.61	
DASS	47.63	12.41	50.60	14.49	.89(98)	.37	
Depression	15.88	4.76	16.66	5.04	.74(98)	.46	
Anxiety	14.82	4.32	15.56	4.97	.76(98)	.45	
Stress	16.93	4.51	17.72	5.02	.79(98)	.43	
SOC	49.18	16.32	50.48	16.62	.71(98)	.71	
SS	41.96	19.29	45.21	18.41	.42(98)	.42	
MW	74.30	23.15	80.06	22.72	.24(98)	.24	

Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= SocialSupport, MW (mental wellbeing) PPTI= Positive Psychotherapy Inventory

Above table 28 shows Mean, SD and t values for comparing gender of the child based differences on CDS & dimensions, PBA, DASS, Depression, Anxiety & Stress, Sense of Coherence, Social support and wellbeing. Results shows significant difference on Social & Economic Stains variable, having a disable male child have an impact on caregiver's social & economic burden. Results show that CP child's gender based differences are non- significant on all variables. There is non-significant difference is found on CDS, DASS, PBA, SOC, SS and mental wellbeing variable.

**Table 29**

*Mean Standard Deviation & t-values of caregivers of Cerebral Palsy on the Scores of Caregiverburden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing based on age ranges of their CP child.*

Group	Ages of the child				<i>t(df)</i>	<i>p</i>	Cohen's <i>d</i>
	(Early childhood)		(Middle & late childhood)				
	( <i>n</i> =54)		( <i>n</i> =46)				
Variables	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CDS	85.56	9.62	83.76	14.24	.75(98)	.46	
CFC	31.07	4.48	29.83	5.68	1.23(98)	.22	
IoS	23.39	3.36	22.70	5.01	.82(98)	.41	
SfCg	14.28	3.01	14.80	3.31	.83(98)	.41	
SES	17.59	2.64	16.78	3.75	1.26(98)	.21	
PBA	77.98	24.02	65.39	29.10	2.37(98)	.02	.53
DASS	51.00	11.87	45.43	13.93	2.15(98)	.03	.43
Depression	16.96	4.50	15.15	5.09	1.88(98)	.06	
Anxiety	16.09	4.46	13.85	4.35	2.53(98)	.01	.51
Stress	17.94	4.17	16.28	5.10	1.79(98)	.07	
SoC	47.59	13.44	51.98	19.09	1.34(98)	.18	
SS	42.02	17.76	44.22	20.44	.57(98)	.56	
MW	74.70	23.55	77.96	22.59	.70(98)	.48	

*Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, Sfcg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory, MW= Mental wellbeing*

Above table 29 shows Mean, SD and t values for comparing age ranges of the child based differences on CDS & dimensions, PBA, DASS, Depression, Anxiety & Stress, Sense of Coherence, Social support and wellbeing. Results shows significant difference on burnout, psychological distress & Anxiety variables. Result indicated that there is a significant difference of burnout among caregivers who have children of CP having ages between 2 to 7 years. It revealed that caregivers having cp child in early childhood (age ranges 2-7 years) are more burnout (M=77.98, SD=24.02 as compared to having children middle and late childhood (M=65.39, SD= 29.10) (age 8 to 13 years). Results revealed that parents of younger CP children are more psychologically distressed (M=51.00, SD=11.87) as compared to parents having elder children (M=45.43, SD=13.93). There is a significant difference of on anxiety variable, which revealed that care givers of younger CP children having more anxiety (M=16.09, SD= 4.46) as compared to caregivers of elder CP children (M=13.85, SD= 4.35).

**Table 30**

*Mean Standard Deviation & t-values of history of disability in family of Caregivers of Cerebral Palsy Children on the Scores of Caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, Social support and mental wellbeing.*

Groups	<i>H/o Disability in family</i>				<i>t(df)</i>	<i>p</i>	Cohen's <i>d</i>
	<i>H/o Disability (n=36)</i>		<i>No h/o Disability (n=64)</i>				
Variables	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CDS	87.86	9.71	82.97	12.77	1.99(98)	.05	.43
CFC	31.25	4.03	30.08	5.57	1.10(98)	.27	
IoS	23.61	4.35	22.77	4.10	.97(98)	.33	
SfCg	15.31	2.69	14.08	3.31	1.9(98)	.06	
SES	17.47	3.13	17.08	3.27	.59(98)	.55	
PBA	74.33	25.00	70.98	28.31	.59(98)	.55	
DASS	48.17	12.08	48.59	13.72	.16(98)	.87	
Depression	16.28	4.47	16.05	5.07	.23(98)	.82	
Anxiety	14.61	4.28	15.31	4.68	.74(98)	.46	
Stress	17.28	4.40	17.13	4.84	.16(98)	.87	
SOC	48.56	14.91	51.58	16.76	.89(98)	.37	
SS	43.56	16.73	46.63	19.62	1.48(98)	.14	
MW	72.89	17.83	82.53	22.49	1.66(98)	.10	

Note: Having disability in family, No history of disability in family, CDS= Caregiver Difficulties Scale, CFC= Concern for the Child, IoS= Impact on Self, CfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory, MW= Mental Wellbeing

Above table 30 shows Mean, SD and t values for comparing previous history of disability in family based differences on CDS & its dimensions, PBA, DASS, Depression, Anxiety & Stress, Sense of Coherence, Social support and wellbeing. Results show there is significant difference is found on caregiver burden variable among caregivers of CP having family history of disability (M=87.86, SD, 9.71) ( $p>.05$ ) as compared to caregivers having no family history of disability (M=82.97, SD= 12.77), it indicates that caregiver's having already of disability are more burdened as compared to caregiver's having no history of disability previously. There is non-significant difference is found on PBA, DASS, Depression, Anxiety & stress, sense of coherence, social support and wellbeing variables which indicates that both having no difference. But from mean difference it indicates that caregivers having previous history of disabled child in family are more burdened, psychologically distressed and burnout as compared to caregivers having no family history of disability.

**Table 31**

*One way ANOVA for type of caregivers on caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, social support, mental wellbeing & sub scales among caregivers of CP children (N=100)*

Variables	Caregivers (type)	n	M	SD	95% Confidence		F(2, 97)	p	$\eta^2$
					Interval for Mean				
					Lower	Upper			
					Bound	Bound			
CDS	Father	19	82.42	10.60	77.31	87.53	1.80	.17	
	Mother	68	86.22	12.62	83.17	89.27			
	Others	13	80.31	8.81	74.99	85.63			
CFS	Father	19	30.47	4.53	28.29	32.66	.60	.54	
	Mother	68	30.78	5.21	29.52	32.04			
	Other	13	29.08	5.33	25.86	32.30			
IoS	Father	19	22.11	4.04	20.16	24.05	.82	.44	
	Mother	68	23.43	4.33	22.38	24.47			
	Other	13	22.62	3.66	20.40	24.83			
SfCg	Father	19	13.84	2.911	11.28	14.40	2.43	.09	
	Mother	68	14.97	3.228	13.21	15.23			
	Other	13	13.15	2.609	9.36	13.41			
SES	Father	19	17.00	2.45	15.82	18.18	.05	.95	
	Mother	68	17.28	3.39	16.46	18.10			
	Other	13	17.23	3.39	15.18	19.28			
PBA	Father	19	63.53	20.44	54.67	73.38	2.51	.08	
	Mother	68	76.29	28.16	69.48	83.11			

	Others	13	63.38	26.45	47.40	79.37			
	Father	19	43.26	10.56	38.17	48.35			
<i>DASS</i>	Mother	68	51.24	13.34	48.01	54.46	5.35	.006	.09
	Others	13	41.38	10.64	34.95	47.82			
	Father	19	13.84	4.27	11.78	15.90			
<i>Depression</i>	Mother	68	17.16	4.70	16.02	18.30	5.23	.007	.09
	Others	13	14.08	4.90	11.11	17.04			
	Father	19	13.68	3.94	11.78	15.59			
<i>Anxiety</i>	Mother	68	15.88	4.55	14.78	16.99	3.86	.024	.07
	Others	13	12.77	4.22	10.22	15.32			
	Father	19	15.74	3.03	14.27	17.20			
<i>Stress</i>	Mother	68	18.09	4.91	16.90	19.28	4.57	.01	.08
	Others	13	14.54	3.99	12.13	16.95			
	Father	19	52.21	16.08	44.46	59.69			
<i>SOC</i>	Mother	68	47.32	16.15	43.37	51.27	2.60	.08	
	Others	13	57.77	14.79	48.83	66.71			
	Father	19	51.89	16.44	43.97	59.82			
<i>SS</i>	Mother	68	40.21	19.53	35.48	44.97	3.00	.05	.06
	Others	13	44.85	16.17	35.07	54.62			
	Father	19	86.84	18.27	78.03	95.65			
<i>MW</i>	Mother	68	71.22	22.23	65.84	76.60	5.39	.006	.10
	Others	13	86.69	26.17	70.88	102.51			

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Note: Others = brother, sister & any uncles & grandparents, CDS= Caregiver Difficulties Scale, CFC= Concern for the Child, IoS= Impact on Self, Sfcg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, MW=Mental Wellbeing

Table 31 indicates mean, standard deviation and F values of CDS & its dimensions (CFC,IoS, Sfcg,SES), PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and Wellbeing across categories of caregivers (father, mother and others) among the caregivers of cerebral Palsy children. The results in table also indicate the  $\eta^2$  values to check the eta square effectsize among different categories of caregivers groups.

Results indicates significant mean differences across categories of caregivers on psychological distress with  $F(2, 97) = .006$ . Findings revealed that from caregivers specifically mothers of cerebral palsy children are more psychologically distressed as compared to fathers and other caregivers of CP children. The value of  $\eta^2$  is .096 ( medium to large effect size). The post-hoc comparisons indicated significant between group mean differences of each group with other two group ( $2 > 1 > 3$ , mother > father > others). Results indicates significant mean differences across categories of caregivers on depression with  $F(2, 97) = .007$ . Findings revealed that from caregivers specifically mothers of Cerebral palsy children are more depressed as compared to fathers and other caregivers of CP children. The value of  $\eta^2$  is .097 ( medium to large effect size). The post- hoc comparisons is significant between group mean differences of each group with other two group ( $2 > 1 > 3$ , mother > father > others). Results indicates significant mean differences across categories of caregivers on anxiety with  $F(2, 97) = .02, p < .05$ . Findings revealed that from caregivers specifically mothers of cerebral palsy children are more anxious as compared to fathers and othercaregivers of CP children. The value of  $\eta^2$  is .073 ( medium effect size). The post-hoc comparison is significant between group mean differences of each group with other two group ( $2 > 1 > 3$ , mother > father > others). Results indicates significant mean differences across categories of caregivers on stress with  $F(2, 97) = .013, p < .01$ . Findings

revealed that from caregivers specifically mothers of cerebral palsy children are more psychologically stressed as compared to fathers and other caregivers of CP children. The value of  $\eta^2$  is .086 (between medium to large effect size). The post-hoc comparison is significant between group mean differences of each group with other two group ( $2 > 1 > 3$ , mother > father > others).

Results indicates significant mean differences across categories of caregivers on social support with  $F(2, 97) = .05$ . Findings revealed that from caregivers specifically mothers of cerebral palsy children having less social support as compared to fathers and other caregivers of CP children. The value of  $\eta^2$  is .06 (medium effect size). The post-hoc comparison is significant between group mean differences of each group with other two group ( $2 > 1 > 3$ , mother > father > others).

Results indicates significant mean differences across categories of caregivers on mental wellbeing with  $F(2, 97) = .01, p < .001$ . Findings revealed that from caregivers specifically mothers of cerebral palsy children having lower mental wellbeing as compared to fathers and other caregivers of CP children. The value of  $\eta^2$  is .10 (large effect size). The post-hoc comparisons is significant between group mean differences of each group with other two group ( $2 > 1 > 3$ , mother > father > others).

**Table 32**

*One way ANOVA for Age-wise differences of caregivers on caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, social support, mental wellbeing & sub scales (N=100)*

Variables	Age Range s	n	M	SD	95% Confidence		F(2,97)	p	$\eta^2$
					Interval for Mean				
					Lower Bound	Upper Bound			
CDS	25-35	47	84.98	9.76	82.11	87.85	.19	.82	
	36-45	46	84.89	13.77	80.80	88.98			
	46-55	7	82.00	13.86	69.18	94.82			
CFS	25-35	47	31.51	4.27	30.26	32.76	1.93	.15	
	36-45	46	29.46	5.58	27.80	31.12			
	46-55	7	30.57	6.05	24.97	36.17			
IoS	25-35	47	22.66	4.48	21.34	23.98	.44	.65	
	36-45	46	23.39	3.87	22.24	24.54			
	46-55	7	23.71	4.57	19.49	27.94			
SfCg	25-35	47	14.49	2.76	12.01	14.20	2.74	.07	
	36-45	46	14.93	3.40	13.12	15.62			
	46-55	7	12.00	3.00	8.22	15.20			
SeS	25-35	47	16.96	2.84	16.12	17.79	1.12	.33	
	36-45	46	17.67	3.62	16.60	18.75			
	46-55	7	16.00	2.52	13.67	18.33			
	25-35	47	69.70	28.19	61.42	77.98			

<i>PBA</i>	36-45	46	75.85	25.97	67.13	82.56	.42	.66
	46-55	7	71.43	29.17	44.45	98.41		
<i>DASS</i>	36-45	46	47.83	12.48	44.12	51.53	.12	.89
	46-55	7	50.00	17.55	33.77	66.23		
<i>Depression</i>	25-35	47	16.19	4.85	14.77	17.62	.01	.99
	36-45	46	16.04	4.78	14.62	17.46		
	46-55	7	16.29	5.94	10.80	21.78		
<i>Anxiety</i>	25-35	47	15.04	4.81	13.63	16.45	.28	.75
	36-45	46	14.89	3.94	13.72	16.06		
	46-55	7	16.29	6.57	10.20	22.37		
<i>Stress</i>	25-35	47	17.57	4.73	16.19	18.96	.38	.69
	36-45	46	16.74	4.61	15.37	18.11		
	46-55	7	17.43	5.19	12.63	22.23		
<i>SOC</i>	25-35	47	49.34	17.32	45.14	54.43	.15	.85
	36-45	46	49.37	16.24	44.25	54.19		
	46-55	7	53.00	10.82	44.55	63.00		
<i>Social Support</i>	25-35	47	41.64	19.50	35.91	47.36	.26	.76
	36-45	46	44.02	19.06	38.36	49.68		
	46-55	7	45.86	16.34	30.74	60.97		
<i>MW</i>	25-35	47	78.72	22.96	71.98	85.47	1.09	.34
	36-45	46	72.65	23.93	65.55	79.76		
	46-55	7	82.57	15.50	68.24	96.91		
	25-35	47	48.81	13.25	44.92	52.70		

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Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child, IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory, MW= Mental Wellbeing

Table 32 indicates mean, standard deviation and F values for CDS & its dimensions (CFC, IoS, CfCg, SES) PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and Wellbeing across age groups (25 to 55) among caregivers of cerebral Palsy children. The results in table also indicate the  $\eta^2$  values to check the eta square effect size among different age groups. There is no significant difference is found in all variables with the small effect size.

**Table 33**

*One way ANOVA for occupation -wise differences of caregivers on caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, social support, mental wellbeing & sub scales (N=100)*

Variables	Occupation	n	M	SD	95% Confidence Interval		F(3,96)	p	$\eta^2$
					Lower Bound	Upper Bound			
CDS	Not Working	64	86.13	12.67	82.96	89.29	1.39	.25	
	Labour/Private work	12	85.00	11.71	77.56	92.44			
	Government job	21	81.67	9.26	77.45	85.88			
	Business	3	75.33	9.87	50.83	99.84			
CFS	Not Working	64	31.02	5.08	29.75	32.29	1.41	.24	
	Labour/Private work	12	30.92	5.43	27.46	34.37			
	Government job	21	29.33	4.62	27.23	31.44			
	Business	3	26.00	6.08	10.89	41.11			
IoS	Not Working	64	23.56	4.46	22.45	24.68	2.67	.05	.08
	Labour/Private work	12	24.42	2.78	22.65	26.18			
	Government job	21	21.19	3.52	19.59	22.79			
	Business	3	20.33	3.21	12.35	28.32			
SfCg	Not Working	64	14.78	3.42	13.93	15.64	.45	.72	
	Labour/Private work	12	14.33	3.17	12.32	16.35			
	Government job	21	13.90	2.14	12.93	14.88			

	Business	3	14.00	3.46	5.39	22.61		
<i>SeS</i>	Not Working	64	17.48	3.39	16.64	18.33	.47	.70
	Labour/Private	12	17.00	3.19	14.97	19.03		
	work							
	Government	21	16.71	2.69	15.49	17.94		
	job							
	Business	3	16.00	3.46	7.39	24.61		
	Not Working	64	74.77	26.17	68.09	81.44		
<i>PBA</i>	Labour/Private	12	57.83	27.61	40.29	75.38	1.54	.20
	work							
	Government	21	74.14	27.82	61.48	86.81		
	job							
	Business	3	61.00	15.10	23.49	98.51		
	Not Working	64	50.61	13.38	47.27	53.95	2.39	.07
<i>DASS</i>	Labour/Private	12	45.67	12.89	37.48	53.85		
	work							
	Government	21	45.43	11.39	40.24	50.61		
	job							
	Business	3	34.33	7.02	16.89	51.78		
	Not Working	64	16.97	4.76	15.78	18.16	2.02	.12
<i>Depression</i>	Labour/Private	12	14.67	4.77	11.63	17.70		
	work							
	Government	21	14.90	4.82	12.71	17.10		
	job							
	Business	3	12.67	4.73	.93	24.41		
	Not Working	64	15.59	4.63	14.44	16.75	1.36	.26
<i>Anxiety</i>	Labour/Private	12	14.17	4.39	11.38	16.95		
	work							
	Government	21	14.52	4.19	12.62	16.43		
	job							
	Business	3	11.00	4.36	.17	21.83		
	Not Working	64	17.94	4.93	16.71	19.17	3.17	.03 .09

<i>Stress</i>	Labour/Private work	12	16.83	4.41	14.03	19.63		
	Government job	21	16.00	3.19	14.55	17.45		
	Business	3	10.67	3.05	3.08	18.26		
	Not Working	64	48.25	16.74	44.07	52.43	.42	.74
<i>SOC</i>	Labour/Private work	12	51.17	19.03	39.08	63.25		
	Government job	21	52.43	14.54	45.81	59.05		
	Business	3	52.67	11.50	24.09	81.24		
	Not Working	64	40.69	19.24	35.88	45.49	1.16	.34
<i>Social Support</i>	Labour/Private work	12	43.83	18.58	32.03	55.64		
	Government job	21	48.24	18.75	39.70	56.77		
	Business	3	53.33	11.24	25.41	81.25		
	Not Working	64	77.55	22.01	68.05	89.05	.90	.44
<i>MW</i>	Labour/Private work	12	81.42	18.08	79.92	92.91		
	Government job	21	81.71	27.97	69.00	94.43		
	Business	3	73.33	27.00	6.25	140.42		

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Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= SocialSupport, PPTI= Positive Psychotherapy Inventory, MW=Mental Wellbeing

Table 33 indicates mean, standard deviation and F values of CDS & dimensions (CFC= Concern for the Child , IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains) PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and Wellbeing across occupation (Not working, Labour/Private work, Government job, Business)among the caregivers of cerebral Palsy children.

The results in table also indicate the  $\eta^2$  values to check the eta square effect size among different categories of caregivers groups. Results indicates significant mean differences across occupation of caregivers on Impact on Self variable' with  $F(3, 96) = .05$   $p \leq .05$ . Findings revealed

that caregivers having no working status are more burdened (Impact on self ) as compared to caregivers having some job or working status. The value of  $\eta^2$  is .08 indicate large effect size. The post-hoc comparisons is significant between group mean differences of each group with other groups (1>2>3>4).

The results in table also indicate the  $\eta$  values to check the eta square effect size among different categories of caregivers groups. Results indicates significant mean differences across occupation of caregivers on Stress variable' with  $F(3, 96) = .03$ ,  $p < .05$ . Findings revealed that caregivers having no working status are more stressed as compared to caregivers having some job or working status. The value of  $\eta^2$  is .09 indicate large effect size. The post-hoc comparisons is significant between group mean differences of each group with other groups (1>2>3>4).

**Table 34**

*One way ANOVA for Number of children wise differences on caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, social support, mental wellbeing & sub scales (N=100)*

Variables	No. of CP Children	n	M	SD	95% Confidence Interval for Mean		F(3,96)	p	$\eta^2$
					Lower Bound	Upper Bound			
CDS	1-3	53	85.62	9.477	83.01	88.23	3.13	.03	.09
	4-6	38	82.29	14.09	77.66	86.92			
	7-9	5	98.00	13.17	81.64	114.36			
	No Child	4	79.50	7.37	67.77	91.23			
CSF	1-3	53	30.81	4.86	29.47	32.15	1.47	.23	
	4-6	38	29.61	5.34	27.85	31.36			
	7-9	5	34.40	5.03	28.15	40.65			
	No Child	4	30.00	4.55	22.77	37.23			
IoS	1-3	53	23.49	3.48	22.53	24.45	3.50	.02	.09
	4-6	38	22.00	4.79	20.43	23.57			
	7-9	5	27.80	2.49	24.71	30.89			
	No Child	4	21.75	4.65	14.36	29.14			
SfCg	1-3	53	14.77	2.89	13.98	15.57	1.75	.16	.05
	4-6	38	14.18	3.20	13.13	15.24			
	7-9	5	16.40	4.45	10.87	21.93			
	No Child	4	12.00	3.37	6.64	17.36			

<i>SeS</i>	1-3	53	17.23	2.85	16.44	18.01	.65	.58	
	4-6	38	16.92	3.63	15.73	18.11			
	7-9	5	19.00	4.06	13.96	24.04			
	No Child	4	17.75	2.87	13.18	22.32			
<i>PBA</i>	1-3	53	72.81	25.61	65.75	78.87	.84	.47	
	4-6	38	70.32	30.18	60.39	80.24			
	7-9	5	88.20	25.69	56.30	120.10			
	No Child	4	61.75	9.94	45.92	77.58			
<i>DASS</i>	1-3	53	49.66	12.28	46.28	53.04	3.08	.03	.09
	4-6	38	45.58	13.58	41.12	50.04			
	7-9	5	62.20	12.21	47.03	77.37			
	No Child	4	42.25	8.77	28.29	56.21			
<i>Depression</i>	1-3	53	16.68	4.44	15.46	17.90	3.05	.03	.09
	4-6	38	14.87	5.02	13.22	16.52			
	7-9	5	21.00	4.31	15.66	26.34			
	No Child	4	14.75	5.50	6.00	23.50			
<i>Anxiety</i>	1-3	53	15.40	4.39	14.18	16.61	1.41	.24	
	4-6	38	14.53	4.69	12.98	16.07			
	7-9	5	17.80	4.09	12.73	22.87			
	No Child	4	12.25	4.57	4.97	19.53			
<i>Stress</i>	1-3	53	17.45	4.35	16.25	18.65	4.19	.008	.11
	4-6	38	16.18	4.75	14.62	17.74			
	7-9	5	23.40	4.39	17.95	28.85			

	No Child	4	15.25	2.22	11.72	18.78		
<i>SOC</i>	1-3	53	49.23	16.01	44.81	53.64	.82	.48
	4-6	38	50.32	17.04	44.71	55.92		
	7-9	5	41.40	14.06	23.94	58.86		
	No Child	4	58.25	17.73	30.04	86.46		
<i>Social Support</i>	1-3	53	42.42	19.06	37.16	47.67	.91	.43
	4-6	38	44.18	18.59	38.08	50.29		
	7-9	5	32.80	21.25	6.41	59.19		
	No Child	4	53.00	19.76	21.55	84.45		
<i>MW</i>	1-3	53	77.64	23.37	71.20	84.08	2.60	.06
	4-6	38	74.29	21.26	67.30	81.28		
	7-9	5	57.60	23.98	27.82	87.38		
	No Child	4	98.50	20.29	66.21	130.79		

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Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, Sfcg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory, MW = Mental Wellbeing

Table 34 indicates mean, standard deviation and F values of CDS & dimensions (CFC= Concern for the Child, IoS= Impact on Self, SfCg= Support for Caregiver, SES= Social & Economic Strains), PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and Wellbeing across no of children (1-3, 6-7, 9, no child) among the caregivers of cerebral Palsy children. The results in table also indicate the  $\eta^2$  values to check the eta square effect size among different categories of caregivers groups. Results indicates significant mean differences across no of total children of caregivers on caregiver burden, Impact on Self, Support for Caregiver Psychological distress, depression and stress.

Results indicates significant mean differences across no of total children of caregivers on caregiver burden with  $F(3, 96) = .03, p < .05$ . Findings revealed that caregivers having 7 to 9 children with one CP child are more burdened as compared to caregivers having less children. The post-hoc comparisons indicated significant between group mean differences of each group with other groups ( $3 > 1 > 2 > 4$ ). Results indicates significant mean differences across no of total children of caregivers on Impact on Self with  $F(3, 96) = .02, p < .05$ . The post-hoc comparisons is significant between group mean differences of each group with other groups ( $3 > 2 > 1 > 4$ ) & ( $3 > 1 > 2 > 4$ ). Results reveals that there is a significant mean differences across no of total children of caregivers on psychological distress with  $F(3, 96) = .03, p < .05$ , which indicates that caregivers having more than 7 children are more psychologically distressed as compared to caregivers having less no of children. The value of  $\eta^2$  is .09 indicate large effect size. The post-hoc comparisons indicated significant between group mean differences of each group with other groups ( $3 > 1 > 2 > 4$ ). Similarly Results indicates significant mean differences across no. of children of caregivers on depression  $F(3, 96) = .032, p < .01$ . Findings revealed that caregivers having more than 7 children are more depressed as compared to caregivers with less children. The value of  $\eta^2$  is .87 indicate large effects size. The post-hoc comparisons is significant between group mean differences of each group with other groups ( $3 > 1 > 2 > 4$ ). Results reveals that there

is a significant mean differences across no of total children of caregivers on stress with  $F(3, 96) = .008, p < .001$ , which indicates that caregivers having more than 7 children are more psychologically stressed as compared to caregivers having

less no of children. The value of  $\eta^2$  is  $.1(>.14)$  indicate large effect size. Post-hoc comparisons issignificant between group mean differences of each group with other groups (3>1>2>4)

**Table 35**

*One way ANOVA for type of Cerebral Palsy -wise differences of CP child of the caregivers on caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, social support, mental wellbeing & sub scales (N=100)*

<i>Variables</i>	<i>CP Type</i>	<i>n</i>	<i>M</i>	<i>SD</i>	95% Confidence Interval for Mean		<i>F(4,95)</i>	<i>p</i>	$\eta^2$
					<i>Lower Bound</i>	<i>Upper Bound</i>			
	Spastic	70	87.96	9.91	85.59	90.32			
<i>CDS</i>	Hemiplegic	9	73.33	19.41	58.41	88.25	6.071	.000	.20
	Diplegic	4	80.00	6.93	68.98	91.02			
	Athetoid	9	82.22	11.66	73.26	91.18			
	Paraplegic	8	74.50	5.58	69.83	79.17			
	Spastic	70	31.71	4.16	30.72	32.71			
<i>CSF</i>	Hemiplegic	9	26.00	7.59	20.16	31.84	5.476	.001	.19
	Diplegic	4	32.00	2.94	27.32	36.68			
	Athetoid	9	28.89	6.37	23.99	33.79			
	Paraplegic	8	26.00	3.25	23.28	28.72			
<i>IoS</i>	Spastic	70	23.86	3.83	22.94	24.77	2.920	.02	.11
	Hemiplegic	9	20.44	5.57	16.16	24.73			

	Diplegic	4	20.75	6.34	10.65	30.85			
	Athetoid	9	23.11	3.82	20.17	26.05			
	Paraplegic	8	20.25	2.71	17.98	22.52			
<i>CfCg</i>	Spastic	70	14.89	3.27	14.11	15.67	.913	.46	
	Hemiplegic	9	13.44	3.05	11.10	15.79			
	Diplegic	4	13.00	1.41	10.75	15.25			
	Athetoid	9	14.22	3.15	11.80	16.65			
	Paraplegic	8	13.63	2.50	11.53	15.72			
<i>SeS</i>	Spastic	70	17.73	3.069	17.00	18.46	2.388	.05	.09
	Hemiplegic	9	14.56	4.45	11.14	17.97			
	Diplegic	4	16.25	3.09	11.32	21.18			
	Athetoid	9	17.22	2.82	15.06	19.39			
	Paraplegic	8	16.25	1.98	14.59	17.91			
	Spastic	70	76.74	28.07	70.05	83.44			
<i>PBA</i>	Hemiplegic	9	73.22	25.39	53.71	92.74	2.45	.05	.08
	Diplegic	4	58.00	16.99	30.96	85.04			
	Athetoid	9	52.89	22.26	35.78	70.00			
	Paraplegic	8	60.00	14.48	47.89	72.11			
	Spastic	70	50.34	12.70	47.31	53.37			
<i>DASS</i>	Hemiplegic	9	46.33	15.43	34.47	58.19	1.569	.189	
	Diplegic	4	45.25	7.81	32.83	57.67			
	Athetoid	9	40.89	13.42	30.57	51.20			
	Paraplegic	8	44.25	13.79	32.72	55.78			

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	Spastic	70	16.71	4.74	15.58	17.85			
<i>Depression</i>	Hemiplegic	9	15.67	6.14	10.94	20.39	1.251	.29	
	Diplegic	4	15.50	3.32	10.22	20.78			
	Athetoid	9	13.33	4.74	9.69	16.98			
	Paraplegic	8	15.00	4.63	11.13	18.87			
<i>Anxiety</i>	Spastic	70	15.57	4.47	14.51	16.64	1.138	.34	
	Hemiplegic	9	15.11	5.30	11.04	19.19			
	Diplegic	4	12.75	4.27	5.95	19.55			
	Athetoid	9	13.11	4.01	10.03	16.20			
	Paraplegic	8	13.88	4.82	9.84	17.91			
<i>Stress</i>	Spastic	70	17.96	4.45	16.90	19.02	1.949	.11	
	Hemiplegic	9	15.56	4.75	11.91	19.20			
	Diplegic	4	17.00	2.16	13.56	20.44			
	Athetoid	9	14.44	5.15	10.49	18.40			
	Paraplegic	8	15.38	5.73	10.58	20.17			
<i>SOC</i>	Spastic	70	47.04	15.77	49.67	18.24	2.78	.03	.10
	Hemiplegic	9	49.67	18.24	35.65	63.69			
	Diplegic	4	57.50	14.06	35.13	79.87			
	Athetoid	9	64.67	19.27	49.85	79.48			
	Paraplegic	8	51.13	6.60	45.61	56.64			
	Spastic	70	38.39	18.66	34.48	43.38			
<i>SS</i>	Hemiplegic	9	45.22	13.25	35.04	55.40	4.37	.003	.15

	Diplegic	4	68.50	17.33	40.92	96.08		
	Athetoid	9	50.33	19.46	35.37	65.29		
	Paraplegic	8	55.50	10.39	46.81	64.19		
<i>M.W</i>	Spastic	70	72.66	21.69	67.48	77.83	1.70	.15
	Hemiplegic	9	80.11	29.02	57.80	102.42		
	Diplegic	4	94.25	21.51	60.01	128.49		
	Athetoid	9	85.89	24.45	67.09	104.69		
	Paraplegic	8	82.88	23.08	63.58	102.17		

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Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, CfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory, MW= Mental Wellbeing

Table 35 indicates mean, standard deviation and F values of CDS & its dimensions ( CFC=Concern for the Child, Impact on Self, Support for Caregiver, Social & Economic Strains, PBA,DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and Wellbeing across type of cerebral Palsy (Spastic, Hemiplegic, Diplegic, Athetoid & paraplegic) among the caregivers of cerebral Palsy children. The results in table also indicate the  $\eta^2$  values to check the eta square effect size among different categories of caregivers groups. Results indicates significant mean differences across type of CP of children on caregiver burden with  $F(4, 95) = .000, p < .001$ . Findings revealed that caregivers having Spastic CP children are more burdened as compared to CP with athetoid, diplegic and hemiplegia and paraplegia. The value of  $\eta^2$  is .20 indicate large effect size. The post-hoc comparisons is significant between group mean differences of each group with other group (1>4>3>5>2).

Results indicates significant mean differences across type of CP of children on CSF with  $F(4, 95) = .001, p < .001$ . Findings revealed that caregivers having diaphragic CP children are more burdened (concern for the child) as compared to CP with Athetoid, spastic, hemiplegia and paraplegia. The value of  $\eta^2$  is .20 indicate large effect size. The post-hoc comparison is significant between group mean differences of each group with other group ( $3 > 1 > 4 > 2 > 5$ ).

Results indicates significant mean differences across type of CP of children on impact on self dimension with  $F(4, 95) = .025, p < .05$ . Findings revealed that caregivers having spastic CP children are more burdened which effect on their own self, as compared to CP with athetoid, diplegia and hemiplegia and paraplegia. The value of  $\eta^2$  is .20 indicate large effect size. The post- hoc comparison is significant between group mean differences of each group with other groups ( $1 > 4 > 3 > 2 > 5$ ). Similarly Results indicates significant mean differences across type of CP on social & economic Strains with  $F(4, 95) p < .05$ . Findings revealed that caregivers having Spastic CP children have poor social support as compared to others CP type. The value of  $\eta^2$  is .09.1 indicate large effect size. The post-hoc comparisons is significant between group mean differences of each group with other groups ( $1 > 4 > 2 > 3 > 5$ ).

Results indicates significant mean differences across type of CP on burnout with  $F(4, 95) = .05, p < .05$ . Findings revealed that caregivers having Spastic CP children are burnout as compared to others CP type. The value of  $\eta^2$  is .08 .1 indicate large effect size. The post-hoc comparison is significant between group mean differences of each group with other groups ( $1 > 4 > 2 > 5 > 3$ ).

Similarly Results indicates significant mean differences across type of CP on sense of coherence with  $F(4, 95) = .03, p < .05$ . Findings revealed that caregivers having Spastic CP children have poor sense of coherence as compared to others CP type. The value of  $\eta^2$  is .11.1 indicate large

effect size. The post-hoc comparisons is significant between group mean differences of each group with other groups (1>2>5>3>4).

Similarly results indicates significant mean differences across type of CP on social support with  $F(4, 95) = .003, p < .05$ . Findings revealed that caregivers having Spastic CP children have poor social support as compared to others CP type. The value of  $\eta^2$  is .15 indicate large effect size. The post-hoc comparisons is significant between group mean differences of each group with other groups (1>2>4>5>3).

**Table 36**

*One way ANOVA for current disability status-wise differences of the CP child of caregivers on caregiver burden, burnout, psychological distress (depression, Anxiety & Stress), Sense of Coherence, social support, mental wellbeing & sub scales (N=100)*

Group s	Current Disability	n	M	SD	95% Confidence Interval for Mean		F(2, 97)	p	$\eta^2$
					Lower Bound	Upper Bound			
CDS	Physical, Intellectual, Speech	8 3	86.2 5	10.34 5	83.99	88.51			
	Physical	1 4	76.8 6	17.06 5	67.00	86.71	4.29	.0 2	.08
	Physical, Intellectual	3	79.3 3	14.46 8	43.39	115.2 7			
	Physical, Intellectual, Speech	8 3	30.9 8	4.588	29.97	31.98			
CFS	Physical	1 4	27.2 9	6.944	23.28	31.30	3.52	.0 3	.07
	Physical, Intellectual	3	32.3 3	4.163	21.99	42.68			
	Physical, Intellectual, Speech	8 3	23.4 6	3.785	22.63	24.28			
	Physical	1 4	21.8 6	5.201	18.85	24.86	3.28	.0 4	.06
IoS	Physical, Intellectual	3	18.0 0	7.211	.09	35.91			
	Physical, Intellectual, Speech	8 3	14.7 3	3.193	14.04	15.43			

<i>SfCg</i>	Physical	1	13.5	3.00	11.76	15.2	1.1	.32
		4	0	6		4	5	
	Physical,Intellectu al	3	13.3	1.15	10.46	16.2		
	Physical,Intellectu al,	8	17.5	2.91	16.87	18.1		
		3	1	9		4		
	Speech							
<i>SES</i>	Physical	1	15.5	4.31	13.01	17.9	2.4	.09
		4	0	0		9	1	
	Physical,Intellectu al	3	17.3	4.04	7.29	27.3		
	Physical,Intellectu al,	8	74.0	28.6	67.75	80.2		
		3	0	6		5		
	Speech							
<i>PBA</i>	Physical	1	61.6	16.9	53.03	70.2	1.2	.29
		4	4	2		6	5	
	Physical,Intellectu al	3	71.3	18.8	24.44	118.		
	Physical,Intellectu al,	8	49.2	13.10	46.37	52.0		
		3	3	5		9		
	Speech							
<i>DASS</i>	Physical	1	44.3	12.92	36.89	51.8		.89
		4	6	9		2		
	Physical,Intellectu al	3	45.6	14.36	9.98	81.3		
	Physical,Intellectu al,	8	16.3	4.93	15.28	17.4		
		3	6	0		4		
	Speech							
<i>Depres sion</i>	Physical	1	15.2	4.44	12.72	17.8	.69	.50
		4	9	5		5		
	Physical,Intellectu al	3	13.6	4.61	2.19	25.1		
	Physical,Intellectu al,	8	15.3	4.48	14.32	16.2		
		3	0	0		8		
	Speech							
<i>Anxiety</i>	Physical	1	13.7	5.02	10.88	16.6	.70	.49
		4	9	6		9		
	Physical,Intellectu al	3	14.3	4.04	4.29	24.3		
	Physical,Intellectu al,	8	17.4	4.55	16.49	18.4		
		3	8	4		8		
	Speech							

<i>Stress</i>	Physical	1	15.2	5.03	12.38	18.1	1.3	.26
		4	9	0		9	5	
	Physical,Intellectual	3	17.6	6.02	2.69	32.6		
			7	8		4		
	Physical,Intellectual,	8	48.9	17.0	45.25	52.6		
		3	6	1		8		
	Speech							
<i>SOC</i>	Physical	1	52.7	11.9	45.80	59.6	.37	.69
		4	1	8		3		
	Physical,Intellectual	3	53.0	18.0	8.29	97.7		
			0	0		1		
	Physical,Intellectual,	8	41.24	19.0	37.0	45.41		
		3		8	7			
	Speech							
<i>SS</i>	Physical	1	51.29	15.0	42.5	60.00	2.2	.11
		4		9	7		5	
	Physical,Intellectual	3	54.00	25.1	7.77	8.40		
				2				
	Physical,Intellectual,	8	74.81	21.6	72.2	70.08		
		3		6	6			
	Speech							
<i>MW</i>	Physical	1	83.21	29.5	66.1	100.3	.89	.41
		4		7	4			
	Physical,Intellectual	3	82.00	30.1	6.98	157.0		
				9				

Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child , IoS= Impact on Self, CfCg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= Social Support, PPTI= Positive Psychotherapy Inventory, MW=Mental Wellbeing

Table 36 indicates mean, standard deviation and F values of CDS & dimensions (CFC= Concern for the Child , IoS= Impact on Self, CfCg= Support for Caregiver, SES= Social & Economic Strains), PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Support and Wellbeing across current status of cerebral palsy children (Physical,intellectual,speech problems, or physical & intellectual problem or physical problem only ). The results in table also indicate the  $\eta^2$  values to check the eta square effect size among different categories of caregivers groups. Results indicates significant mean differences across

current status of cerebral palsy children having impact on caregivers, on caregiver burden with  $F(2, 97) = .02, p < .05$ . Findings revealed that caregivers having CP children with physical, intellectual, speech disability are more burdened as compared to caregivers of children having physical and intellectual disability & physical disability only. The value of  $\eta^2$  is .08 indicate large effect size. The post-hoc comparisons is significant between group mean differences of each group with other two group ( $1 > 2 > 3$ ). Results indicates significant mean differences across current disability/problems of cerebral palsy children having impact on caregivers, on concern for the child variable with  $F(2, 97) = .03, p < .05$ . Findings revealed that caregivers having CP children with physical, intellectual, speech disability are more concerned towards their child's disability as compared to caregivers of children having physical and intellectual disability or having physical disability only. The value of  $\eta^2$  is .06 indicate medium effect size. The post-hoc comparisons is significant between group mean differences of each group with other two group ( $1 > 2 > 3$ ).

Results indicates significant mean differences across current disability/problems of cerebral palsy children on Impact on Self variable with  $F(2, 97) = .042, p < .05$ . Findings revealed that caregivers having CP children with three level of problems i.e, physical, intellectual, speech disability have more impact on caregiver's self-health as compared to caregivers of CP children having physical and intellectual disability & physical disability only. The value of  $\eta^2$  is .06 indicate medium effect size. The post-hoc comparison is significant between group mean differences of each group with other two groups ( $1 > 2 > 3$ ).

Results indicates non-significant mean differences across current disability/problems of cerebral palsy children on sense of coherence, social support & wellbeing variables.



	81,000-	6	26.67	3.204	23.30	30.03		
	100,000							
	Above	4	27.25	6.185	17.41	37.09		
	20,000-	39	24.31	3.968	23.02	25.59		
	40,000							
<i>IoS</i>	41,000-	27	22.81	3.669	21.36	24.27	1.68	.16
	60,000							
	61,000-	24	21.75	5.144	19.58	23.92		
	80,000							
	81,000-	6	21.67	.816	20.81	22.52		
	100,000							
	Above	4	22.75	4.646	15.36	30.14		
	20,000-	39	14.82	3.655	13.64	16.01		
	40,000							
<i>SfCg</i>	41,000-	27	14.48	2.392	13.54	15.43	.66	.62
	60,000							
	61,000-	24	14.33	2.854	13.13	15.54		
	80,000							
	81,000-	6	15.00	4.195	10.60	19.40		
	100,000							
	Above	4	12.25	2.630	8.07	16.43		
	20,000-	39	18.15	3.158	17.13	19.18		
	40,000							







	81,000-	6	47.33	17.61	28.85	65.82			
	100,000								
	Above	4	68.50	11.68	49.92	87.08			
	20,000-	39	71.18	20.63	64.49	77.87			
	40,000								
<i>MW</i>	41,000-	27	73.63	19.23	66.02	81.24	2.71	.03	.08
	60,000								
	61,000-	24	79.25	24.39	68.95	89.55			
	80,000								
	81,000-	6	90.67	37.73	51.07	130.27			
	100,000								
	Above	4	102.5	14.48	79.46	125.54			

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Note: CDS= Caregiver Difficulties Scale, CFC= Concern for the Child, IoS= Impact on Self, Sfcg= Support for Caregiver, SES= Social & Economic Strains, PBA= Parental Burnout Assessment, DASS= Depression Anxiety Stress Scale, SOC= Sense of Coherence, SS= SocialSupport, PPTI= Positive Psychotherapy Inventory, MW= Mental Wellbeing

Table 37 indicates mean, standard deviation and F values of CDS & dimensions (CFC= Concern for the Child , IoS= Impact on Self, Sfcg= Support for Caregiver, SES= Social & Economic Strains,,) PBA, DASS, Depression, Anxiety, Stress, Sense of Coherence, Social Supportand Wellbeing across monthly income (20,000-40,000,41,000-60,000, 61,000-80,000, 81,000- 100,000 and above) among the caregivers of cerebral palsy children. The results in table also indicate the  $\eta^2$  values to check the eta square effect size among different categories of caregivers groups.

Results indicates significant mean differences across monthly income of caregivers on caregiver burden with  $F(4, 95) = .03, p < .50$ . Findings revealed that caregivers having less incomestatus having higher caregiver burden as compared to caregivers having high income group. The value of  $\eta^2$  is .01 indicate small effect size. The post-hoc comparisons is significant between groupmean differences of each group with other groups ( $1 > 2 > 3, > 4 > 5$ ).

Results indicates significant mean differences across monthly income of caregivers on Care for Self (CFS) & Social & economic Strains (SES) indicator of CDS with  $F(4, 95) = .01, .05, p < .50$ . Findings revealed that caregivers having less income having poor self-care & social and econimicstrains as compared to caregivers having high income group. The value of  $\eta^2$  is .01 & .09 indicatesmall effect size and large effect size. The post-hoc comparison is significant between group mean differences of each group with other groups ( $1 > 2 > 3, > 4 > 5$ ) & ( $1 > 4 > 2 > 3 > 5$ ).

Results indicates significant mean differences across monthly income of caregivers on Psychological distress with  $F(4, 95) = .03, p < .50$ . Findings revealed that caregivers having less income are psychologically distressed as compared to caregivers having high income group. The value of  $\eta^2$  is .01 indicate small effect size. The post-hoc comparison is significant between groupmean differences of each group with other groups ( $1 > 2 > 3, > 4 > 5$ ).

Results indicates significant mean differences across monthly income of caregivers on depression with  $F(4, 95) = .032, p < .50$ . Findings revealed that caregivers having less income having high depression well being as compared to caregivers having high income group. The valueof  $\eta^2$  is .01 indicate small effect size. The post-hoc comparison is significant between group meandifferences of each group with other groups ( $1 > 2 > 3, > 4 > 5$ ).

Results indicates significant mean differences across monthly income of caregivers on Anxiety with  $F(4, 95) = .002, p < .001$ . Findings revealed that caregivers having less income are more anxious as compared to caregivers having high income group. The value of  $\eta^2$  is .16

indicate large effect size. The post-hoc comparison is significant between group mean differences of each group with other groups (1>2>3,>4>5).

Results indicates significant mean differences across monthly income of caregivers on stress with  $F(4, 95) = .003, p < .001$ . Findings revealed that caregivers having less income are more stressed as compared to caregivers having high income group. The value of  $\eta^2$  is .15 indicate large effect size. The Post-Hoc comparisons indicated significant between group mean differences of each group with other groups (1>2>3,>4>5).

Results indicates significant mean differences across monthly income of caregivers on social support with  $F(4, 95) = .03, p < .05$ . Findings revealed that caregivers having less income have less social support as compared to caregivers having high income group. The value of  $\eta^2$  is .15 indicate medium effect size. The post-hoc comparisons indicated significant between group mean differences of each group with other groups (1>2>3,>4>5).

Results indicates significant mean differences across monthly income of caregivers on wellbeing with  $F(4, 95) = .03, p < .05$ . Findings revealed that caregivers having less income have poor wellbeing as compared to caregivers having high income group. The value of  $\eta^2$  is .15 indicate medium effect size. The Post-Hoc comparisons indicated significant between group mean differences of each group with other groups (1>2>3,>4>5).

## **DISCUSSION**

## Discussion

The aim of the main study was to assess the caregiver burden, burnout, psychological distress, depression anxiety, and stress, sense of coherence, social support and wellbeing among caregivers of cerebral palsy children. It was also aimed to assess the relationship between the variables. The major goal of this phase was also the selection & allocation of caregivers for therapeutic interventions. After screening data from the main study, the random allocation was done. It was intended to give the participants of the data proper interventions, based on positive psychotherapy and counseling. For this purpose participants were divided into two groups, positive psychotherapy treatment group & control group. The aim was to evaluate the effectiveness of positive psychotherapy on well being of the caregivers of cerebral palsy children.

Demographic details of the present study showed that the (table 10 & 11) caregivers included in the study were males (26%) and female (74%). The age of respondents varies from 25 years to 55 years. In between 25-35 there were 47 participants and from 36 to 45 there were 47 (46%) participants whereas 7 participants were from 46 to 55 years old (7%). Caregiver's relationship with child included father mother and other related caregivers (siblings, Uncle, Aunts). From the caregivers fathers were 19 (19%), mothers were 68 (68%) and others were 13 (13 %). Educational status of the caregivers were ranged as less educated to highly educated, 68% were less educated, and 32% were highly educated. Occupational status of the caregivers included, no occupation (House wives) were 64 (64%), labor Work/Pvt Job were 12 (12%), government servants were 21 (21%) Business based were 3 (3%). In marital status there were married 92 (92%) and alone were 8 (unmarried & widowed). In marriage type there were in family marriage (73%) out of family marriage (23%) and (4%) were not married. In family system there were joint family system (64%) and nuclear family system (36%). In no of children caregiver having 1-3 children were 53 (53%), having 4-6 children were 39 (39%)

, having 7-9 children were 4 (4%) and with no children there were 4 respondents (4%). No of disability status in family. Previous family history of disability is also part of demographics, as 64 respondents (64%) have no previous history of disability and 36 % have family history of disability. Monthly income included from 20,000 to 100,000. 39% respondents were having income status between 20,000 to 40,000. 27% respondents were having income status between Rs. 41,000 to 60,000. 24% respondents were having income status between Rs. 61,000 to 80,000. 6% respondents were having income status between Rs. 81,000 to 100,000, and 4% respondents were having income status Rs. <100,000.

The above table 11 shows the frequency and percentage of demographic variable related to Cerebral Palsy child included in the study. The gender of the CP child included in the study were males (67%) and female (33%). The age of CP child varies from 2 years to 13 years Approx. From 2 years to 7 years there were 54 (53%) children, from 8 to 13 (46%) years. Birth order of the children included 1<sup>st</sup> to 9<sup>th</sup>, 28 (28%) children were 1<sup>st</sup> born 28 (28%) were 2<sup>nd</sup> born, 18 (18%) were 3<sup>rd</sup> born, 13 (18%) children were 4<sup>th</sup> born, 7 (7%) were fifth born, 4 (4%) were 6<sup>th</sup> born and 2 (2%) were 9<sup>th</sup> born. Current functional status of the child with CP is the problem child is facing currently (assessed by physiotherapist, speech therapist and Psychologist). 83 (83%) of CP children were having physical, intellectual and Speech disability, 14 (14%) of CP children were having physical disability only, 3 (3%) of the respondents having Physical & speech disability only. Types of CP included in the study were spastic (70%), Athetoid (9%), paraplegic (8%), hemiplegic (7%) and Diplegic (4%).

Previous research based on the caregivers on cerebral palsy reported the following demographics. The average age of the children diagnosed with cerebral palsy (CP) was 8.5 years, with a standard deviation of 3.5. A total of 129 male students, accounting for 62.6% of the sample, were observed, while 77 female students, representing 37.4% of the sample, were also included in the study. Furthermore, the study found that 77.2% of the children had spastic.

cerebral palsy ( $n = 159$ ), whereas 13.6% displayed paraplegic cerebral palsy ( $n = 28$ ), and 9.2% showed Athetoid cerebral palsy ( $n = 19$ ). Furthermore, it is worth noting that a significant proportion of the moms, specifically 35.4%, 60.2%, and 4.4%, fell between the age ranges of 30-39 ( $n=73$ ), 40-49 ( $n=124$ ), and  $\geq 50$  ( $n=9$ ) years old, respectively. Regarding the educational background, a significant proportion of the moms, specifically 77.2% ( $n = 159$ ), had completed college. A smaller percentage, 20.9% ( $n = 43$ ), had graduated from high school, while only 0.5% ( $n = 1$ ) had completed middle school. Out of the total sample of mothers, 59 individuals, accounting for 28.6% of the group, were engaged in employment, while 154 individuals, constituting 69.9% of the group, were not employed (Park, 2023).

Table 12 indicate the Cronbach's alpha for caregiver burden (Caregiver Difficulties Scale), & its dimensions, PBA (Parental Burnout Assessment), Psychological distress DASS (Depression Anxiety, Stress Scales), Sense of Coherence (Orientation of Life Scale), Social Support (Multidimensional Scale of Perceived Social Support) and wellbeing based on Positive Psychotherapy Inventory (PPT). The results indicate satisfactory internal consistency for CDS, PBA, DASS-21, Sense of Coherence, Social Support and wellbeing. Reliability test in the SPSS, the reliability of each variable is  $>0.60$  which is recommended in the social sciences.

Previous research on Caregiver Difficulties Scale on caregivers of CP children has reported the internal consistency of the whole scale was deemed satisfactory, as indicated by a Cronbach's  $\alpha$  coefficient of 0.89. The internal consistency of Concern for the Child, Impact on Self, and Support for Caregiving was deemed satisfactory, as indicated by Cronbach's  $\alpha$  coefficients of 0.823, 0.849, and 0.767, respectively. The internal consistency of Social and Economic Strain was found to be low, as indicated by a Cronbach's  $\alpha$  coefficient of 0.69 (Park, 2021). In a Previous research on caregivers of cerebral Palsy children burnout was assessed by using Maslach Burnout Inventory (MBI) and its reliability is 0.86 on caregivers of CP children

(Vicentic, et al., 2013). Research reported that the value of Cronbach's  $\alpha$  coefficient for the whole anxiety and depression subscale is 0.81–0.89 (Gugal et al., 2019). Previous study aimed to evaluate the factor structure of the Depression Anxiety and Stress Scale (DASS-21) among caregivers, and result indicated that it is a valid measure to assess depression, anxiety, & stress (Murphy et al., 2023). In the previous research among the caregivers of cerebral Palsy children the Cronbach's alpha coefficient for the Sense of Coherence questionnaire was .82 (Farhadi et al., 2022). Research on Burden of caregiving, social support and quality of life of informal caregivers of patients with cerebral palsy showed that Multidimensional Scale of Perceived Social Support (MSPSS) is a reliable scale to measure social support among caregivers of CP (Ahanotu et al., 2018).

Table 13 shows that there is a correlation between caregiver burden (its sub scales), burnout, sense of coherence, social support, psychological distress (depression, anxiety & stress) and mental wellbeing among the scores of caregivers of cerebral palsy children. Table indicates that there is significant (\*\* $p < .01$ , \* $p < .05$ ) correlation between scales and sub scales of the present study. Some variables are positively correlated and some are negatively correlated. There is a positive correlation of caregiver burden and burnout with psychological distress (depression, anxiety and stress) among caregivers of cerebral palsy children.

There is a negative correlation between with sense of coherence, social support & mental wellbeing among caregivers of cerebral palsy children. Caregiver burden is negatively correlated with the sense of coherence, which indicates that as the caregiver burden increase and sense of coherence decreases among caregivers of CP children. Caregiver burden is negatively correlated with the social support, which indicates that as the social support decreases, caregiver burden is increased among caregivers of CP children. In the present study it was analyzed that caregivers burden is positively correlated with burnout, depression, anxiety & stress among caregivers of cerebral palsy children. In the present study it was

analyzed that burnout is negatively correlated with the sense of coherence, social support & mental wellbeing. In the present study, it is evaluated that psychological distress is negatively correlated with the sense of coherence, social support & mental wellbeing. In the present study it is investigated that depression & anxiety is negatively correlated with the sense of coherence, social support & mental wellbeing. In the present study, it was also studied that stress is negatively correlated with the sense of coherence, social support & mental wellbeing.

Previous research reported that burden of caregiving is positively related to psychological distress (depression & anxiety). The manifestation of mental diseases in caregivers is contingent upon the level of stress imposed upon them, and the presence of collaborative efforts serves to mitigate worry (Barutcu et al., 2021). In many previous studies, it was found that as a result of long-term care, caregiver burden can lead to severe depression, anxiety, a decrease in physical health, social isolation, and exhaustion (Sari, 2007). The findings of the previous study indicated that there is a positive relationship between caregiver burden and aspects of burnout.

The perception of burnout is found to be negatively linked with social support. Based on these results, interventions for familial caregivers should focus on enhancing social support and providing education on effective regulation of emotional empathy in order to reduce caregiver burden and burnout (Khalaila, 2022). In the present study it was analyzed that burnout is positively correlated with depression, anxiety & stress among caregivers of cerebral Palsy children. Previous research reported that among caregivers, the participant who scored higher on burnout, also scored higher on anxiety and depression. It suggested that both are positively correlated with each other (Vicentic, 2016).

In the present study (table 13) it was analyzed that caregiver burden is negatively correlated with the social support, There was a substantial correlation between caregiver burden and social support, it was found that higher levels of spousal support were associated

with decreased caregiver burden. The act of seeking social assistance has been found to mitigate the heightened burden that is often linked with more pronounced functional limitations (Wijesinghe, et.al, 2015). Previous research reported that caregiving burden was negatively associated with parent's social support (Carona et al., 2013).

Caregiver burden is negatively correlated with the sense of coherence, which indicates that as the caregiver burden increases, sense of coherence decreases among caregivers of CP children (table 13). Findings of the previous research reported that revealed that caregivers with intellectually disabled children reported more caregiver burden, and lower sense of coherence (Krenawi et al., 2011).

In the present study (table 13) it was analyzed that burnout is negatively correlated with the sense of coherence & wellbeing among caregivers of CP children. Previous research on nurses as caregivers has depicted that there is a significant correlation between the various dimensions of burnout and sense of coherence, suggesting that SOC serves as a protective factor against the development of burnout. Conversely, the presence of perceived social support and access to resources serves as a safeguard, however the decline in mental and physical well-being remains the most significant risk factor (Navarro Prados et al., 2022).

In the current study, (table 13) it was determined that among carers of children with cerebral palsy, depression is adversely connected with sense of coherence, social support, and wellbeing. According to earlier studies, depression was the primary predictor of poor sense of coherence since depression is associated with a low sense of coherence (Välimäki et al., 2009). Anxiety was found to have a negative correlation with sense of coherence (Henje et.al, 2010). Anxiety was found to have a negative correlation with social support (Davaridolatabadi et.al, 2016).

In the present study it was analyzed that stress is negatively correlated with the sense of coherence, Social Support & wellbeing (table 13). Previous research reported that sense of

coherence and social support are linked take part in reducing stress in caregivers of hearing impaired children (Hintermair, 2004). Individuals who provide care for others and experience elevated levels of anxiety and despair are more inclined to report diminished levels of sense of coherence. The association between caregiving-related stress and depressive symptoms are influenced by the self- perceived sense of coherence among caregivers (Orgeta & Sterzo, 2013).

The major aim of the present research was to explore the effectiveness of positive psychotherapy on caregivers of cerebral palsy children. Positive psychotherapy manual & worksheet was translated into urdu by the researcher for the present study. Positive psychotherapy was used on caregivers of cerebral palsy children at rehabilitation unit of NIRM. Only those caregivers were selected having high scores on burnout, caregiver burden and psychological distress, depression, anxiety, stress & low scores on sense of coherence, social support & wellbeing. Caregivers of CP children are divided into two groups one is treatment group (positive psychotherapy) & other is control group. Participants are divided through randomization into two groups. Each group has 10 participants. Due to long lasting care of the disabled child caregiver's experience psychological issues. While caregiving of a child with chronic disability and long-term dependency entails enormous stress for both caregivers and their families, raising children is a crucial responsibility and hectic work for caregivers (Mori et al., 2017). Parents of children with cerebral palsy may experience financial hardship due to the high cost medical & rehabilitation care (Bareeto et al., 2020). A caregiver's quality of life may be significantly impacted by the on-going provision of excessive care, which can lead to depression and burdened (Albayrak et al., 2019). Caregivers of CP's were more likely to feel burdened than caregivers of normal kids, according to studies by Tugul (Corona et al., 2013) and Turkey (Albayrak et al., 2019). A multitude of factors may influence the burden experienced by parents of CP's within the framework of the stress process model. Previous

research reported that it is important to lessen the stress of parents of children with cerebral palsy (Zhong et al., 2023). Thus, providing positive psychotherapy-based therapy to caregivers of children with cerebral palsy was the goal of the current study. Previous research based on fifty Bengali parents were given caregivers based therapeutic program. Every participant expressed satisfaction with the therapeutic interaction programs' efficacy; on average, 80% of parents preferred and rated this program as especially successful (Palit, & Chatterjee, 2006).

Stress and depression symptoms decreased in parents who received the combined Stepping Stones Triple P (SSTP) therapy and acceptance & commitment therapy (ACT) treatments. Parental worry, parental confidence, or the degree to which parents found their parenting duties difficult were unaffected. This is a significant finding because parents of CP's are more likely to experience stress (Parkes et al., 2011) and depression (Barlow et al., 2006; Lach et al., 2009). Moreover, it aligns with previous studies that show how ACT helps parents of children with autism, as shown by Blackledge & Hayes (2006) and Brown et al. (2015). Study showed how well SSTP and ACT, two parenting interventions, work to improve both parental adjustment and children's functional performance and quality of life (Whittingham et al., 2016).

Present research indicated that in PPT treatment/ intervention group the score of caregiver burden, burnout and psychological distress & depression, anxiety & stress decrease as compared to control group and sense of coherence, social support and mental wellbeing increased (**table 18**). The present research indicates that there is a significant difference between control group intervention and PPT treatment group interventions among caregivers of CP children. Positive psychotherapy treatment group show more effective results as compared to control group. In a previous research, a manual based intervention termed well-focus PPT a 14-session standard PPT modified using an evidence-based theoretical framework was created with the goal of enhancing the well-being of individuals suffering from psychosis.

Results demonstrated good results of positive psychotherapy (Riches et al., 2016). Previous research reported that the wellbeing & quality of life of caregiver is affected when they provide care for a child with a long-term physical handicap or health condition, thus it's critical to recognize and assess the efficacy of interventions aimed at enhancing caregivers' well-being. This is crucial since there is currently a growing demand to enhance caregivers' mental health in addition to children with disabilities' quality of life and functional results (Dambi et al., 2016).

The delivery of rehabilitation services has undergone a paradigm shift in recent decades, with the family-centered approach emerging as the "gold standard" model of treatment delivery (Kuo et al., 2012). Along with addressing the functional needs of kids with CP, there is also a greater focus on offering support services for caregiver (Byrne, 2010). In order to attain the best possible rehabilitation results, the caregiver must adhere to appointment schedules and follow directions on how to facilitate better functioning by quickly putting the recommended home exercise program into practice (Jack et al., 2010).

According to recent research, caregivers' mental health significantly improves when PPT therapy is used to treat their psychological issues. The results of this study demonstrate that the post-PPT treatment group's scores on the Parental Burnout Scale (PBA), the Caregivers Difficulty Scale (CDS), and the Caregivers Difficulty Scale were higher than those of the pre-PPT treatment group. Depression, and Anxiety & Stress Scale (DASS), depression, anxiety & stress decreased and scores of (OLS) sense of coherence, (MSPSS) social support and (PPTI) wellbeing increased. The effects of CP caregiver' pre PPT treatment group and post-PPT treatment group therapies on CDS, PBA, DASS, and depression, anxiety & stress are noteworthy. This number shows that among caregivers of CP's, there is a substantial difference between the pre-PPT treatment group intervention and the post treatment group interventions (**table 19**). Furthermore, it has been shown through previous research that participation in

support groups reduces parental stress and improves psychological well-being in areas including hope, happiness, and self-esteem for Hong Kong parents of CP's. To investigate the effectiveness of a mutual support group that emphasizes strengths in lowering stress and improving the psychological health of parents of CP's a study was conducted recruited 12 primary caregivers of CP's in Hong Kong for this pre- and post- intervention outcome research.

A guidebook for strength-focused support groups was created to assist caregivers in recognizing and nurturing their children's character qualities while also boosting their own positive feelings. Participants showed noticeably reduced levels of parental stress and elevated levels of hope. When the group was still going strong, their perception of social support was much higher, but not after it ceased. In summary, this group intervention approach was considered to be effective to assist caregivers in lowering their stress levels as parents and increasing their optimism. Introducing a curriculum such to this one with additional sessions and frequent follow-up meetings could aid in sustaining beneficial outcomes and creating a network of social support (Fung et al., 2011).

Present research reported that to address the caregiver's psychological issues through individual counseling, have a great impact on their wellbeing (control group). The result of the present study (**table 20**) shows that in post control group the score of Caregiver Difficulty scale (CDS), Parental Burnout Scale (PBA), DASS (Depression Anxiety & Stress Scale), DASS (Psychological distress) and depression, anxiety & stress decrease as compared to pre control group. The control group interventions and post control group interventions on caregivers of CP on CDS, PBA, DASS & depression, anxiety, stress show significance difference. The values indicates that there is a significant difference between pre control group intervention and post control group interventions among caregivers of CP children. Previous research reported that in order to ascertain the effect of family behavioral therapies, such as acceptance and commitment therapy, on the wellbeing of caregivers. Brown et al., 2015 conducted a randomized controlled

study (RCT) in Australia. The findings suggested that family behavioral treatments such as Acceptance & commitment therapy (ACT) could enhance the psychological well-being, self-efficacy, confidence, and family adjustment of caregivers.

According to the current study's model I, feeling of coherence has a major mediating role in the association between psychological distress and burnout (table 21). As seen in model III above, feeling of coherence serves as a partial mediating factor in the link between burnout and wellbeing (**table 23**). Previous studies have documented that the association between depression and sense of coherence might be partially explained by burnout, according to mediation analysis. Between depression and burnout, the perception of coherence served as a detrimental mediator (Pachi et al., 2022). Higher level of sense of coherence was associated with less psychological distress (Padmanabhanunni, 2022). Sense of coherence mediates psychological outcomes while simultaneously promoting mental health (Shankland et al., 2019). Research reported that there is significant associations between the sense of coherence, wellbeing and burnout levels. Research indicated sense of coherence and burnout as significant predictors of the wellbeing (Harry, & Coetzee, 2011).

According to the current study's model II, social support has a major mediating role in the association between psychological distress and burnout (**table 22**). Model of the current investigation showed a strong positive correlation between psychological distress and burnout. This suggests that there is a small, but not statistically significant, social support component to the association between psychological distress and burnout. According to earlier studies, those who experience more social support in stressful situations tend to exhibit better psychological well-being than people who experience less social support. According to earlier studies, low psychological well-being can be influenced by burnout through the mediation effect of inadequate social support (Rehman et al., 2020). According to the model IV research findings, social support has a substantial mediating role in the relationship between burnout and

wellbeing. Psychological wellness and burnout are significantly correlated (Shin et al., 2014). There was a bad correlation between psychological health and burnout. According to Koniarek et al. (1996), social support can help to mitigate burnout and facilitate the acquisition of support from diverse social networks, ultimately leading to enhanced psychological well-being. According to earlier studies, social support from friends and family can raise wellbeing and lower the risk of burnout (Gradeski et al., 2020). High levels of social support also correspond to high levels of wellbeing (Afonso et al., 2014).

In the table 25 it is analyzed gender differences are significant on caregiver burden, psychological distress (depression, anxiety & stress) variable ( $p < .05$ ). Results revealed that there is significant gender difference is found on caregiver burden, ( $p < .05$ ) on caregiver's burden female caregivers scored high ( $M=86.23$ ,  $SD=12.20$ ) which indicate that females are more burdened as compared to male caregivers.

Previous research reported that parents, particularly mothers who have children with cerebral palsy (CP), may experience negative effects and exhibit elevated levels of burden (Basaran, et.al, 2013). The responsibility of caregiving has been demonstrated to result in a diminished quality of life among parental individuals. Children diagnosed with cerebral palsy (CP) have been studied extensively in previous research (Glinac et al., 2017). In the previous study, when comparing mothers the caregiver burden shown a considerable increase on caregiver burden scales compared to normal children's mother (Kaydok et al., 2020).

The findings show that female caregivers of children with cerebral palsy experience higher levels of psychological anguish than do male caregivers. The findings show that female caregivers of children with cerebral palsy experience higher levels of depression than male caregivers. The findings show that female caregivers of children with cerebral palsy have higher levels of worry than male caregivers. The findings show that female caregivers of children with cerebral palsy experience higher levels of stress than male caregivers.

Table 25 of the present study indicates significant mean differences across categories of caregivers on psychological distress. Findings revealed that from caregivers specifically females of cerebral palsy children are more psychologically distressed as compared to fathers and other caregivers of CP children. Results show significant mean differences across categories of caregivers on depression. Findings revealed that from caregivers specifically mothers of cerebral palsy children are more depressed as compared to fathers and other caregivers of CP children. Results indicates significant mean differences across categories of caregivers on anxiety. Findings revealed that from caregivers specifically mothers of Cerebral palsy children are more anxious as compared to fathers and other caregivers of CP children. Results indicates significant mean differences across categories of caregivers on stress. Findings revealed that from caregivers specifically mothers of cerebral palsy children are more psychologically stressed as compared to fathers and other caregivers of CP children. Results indicates significant mean differences across categories of caregivers on wellbeing. Findings revealed that from caregivers specifically female caregivers of cerebral palsy children having lower mental well being as compared to male caregivers.

According to a study conducted by Sawyer et al. (2011) a significant proportion of women with children diagnosed with cerebral palsy (CP) experienced depression. Furthermore, the study found that this depression had a detrimental impact on the health-related quality of life of these mothers.

The presence of a disability in a child, which is a fundamental element within a family, can have a profound impact on other family members and may generate significant levels of worry. The continuous responsibility of caring for a disabled kid throughout the day and over an extended period of time has been found to have a detrimental impact on the physical and psychosocial well-being of family members (Erdoganoglu et al., 2007). Due to the cultural influences in Turkey, it is predominantly the mothers who assume the primary responsibility

for caring for impaired children, hence necessitating their sustained engagement with the unique issues associated with the condition. Hence, it is posited that the well-being of mothers is significantly compromised in terms of both their physical and emotional health. In previous research, it was found that, the quality of life of mothers with children who have cerebral palsy is significantly impaired, particularly in terms of their mental well-being. Additionally, it was observed that high levels of depression had a detrimental impact on the quality of life of CP's mothers (Yilmaz et al., 2013). The results of the study suggest that there is a correlation between having a child with cerebral palsy and increased levels of depression and anxiety in mothers as compared to those with typically developing children. Furthermore, it was found that the severity of speech abnormalities and functional disability in children with CP is connected with the higher levels of sadness and anxiety experienced by their mothers (Yilmaz et al., 2013). Research reported that mothers are more psychologically distressed as compared to others (Barlow, et.al, 2006). Most caregivers are mothers, who provide the majority of care. A greater number of psychological problems, such as anxiety, sadness, and distress in them, are predicted by long-term care of children with CP and limited social activities for the mother caregiver (Barreto et al., 2020).

According to present study in table 26 it was reported that less educated caregivers of CP are more burdened as compared to highly educated caregivers. There is significant education based difference is found on caregiver burden, concern for the child (CfC), Impact on Self (IoS), and Social & Economical Strains (SeS). There is significant difference is found on OLS (Sense of Coherence) ( $p < .05$ ) among less educated and highly educated caregivers of cerebral palsy children. It indicated that highly educated caregivers have better sense of coherence as compared to less educated caregivers of CP children

Previous research reported that among caregiver related characteristics, caregiver burden was higher in individuals who were females and had less education (Kim et.al, 2009).

Previous study analyses that the burden was greater for caregivers with less education. It's possible that caregivers with higher levels of education are more capable of handling a variety of living circumstances, are better able to handle difficulties, and have access to social support, all of which can lessen their perceived burden (Adib-Hajbaghery & Ahmadi, 2019).

There are non-significant difference is found on burnout (PBA scale) among caregivers of CP children but from mean difference results indicated that female caregivers are more burnout as compared to male caregivers of cerebral palsy children. There is a non-significant difference is found on psychological distress, social support and wellbeing variables which indicates that no difference is found but from mean differences it is indicated that male having better well being, social support as compared to female caregivers of Cerebral palsy children. Previous research reported that parents of children with cerebral palsy, in comparison to parents of typically developing children, reported a decreased degree of sense of coherence (SOC) and experienced challenges in terms of manageability and meaningfulness (Dabrowska, 2007).

Previous study reveals that family caregivers faced challenges in accessing comprehensive assistance and support from a broader spectrum of family members and society. Additional Chinese family caregivers also discussed the delicate equilibrium between their caregiving obligations and personal autonomy. This issue appears to be widespread, as previous research has similarly shown the challenges experienced by caregivers due to their heightened workload and significant obligations (Boztepe et al., 2019).

According to the present research table 27 indicated the t-values for comparing family system based differences (nuclear family system & joint family system) on caregiver burden and its dimensions (concern for the child, impact on self, support for caregiver, social & economic strains), burnout, psychological distress depression, anxiety & stress, sense of coherence, social support and wellbeing among caregivers of cerebral palsy children. There is

a non-significant difference is found on caregiver burden & (dimensions), parental burnout, psychological distress, depression, & anxiety scales among caregivers from joint and nuclear family system. There is a non-significant difference is found on sense of coherence, social support and wellbeing variables. Result of the present study showed significant difference between male & female CP children on Social & Economic Strains variable among caregivers of CP children. It revealed that having a disabled male child have an impact on caregiver's social & economic strains. Having a disabled male child may effect caregiver's burden economically as being male child there are many expectation are attached with the future of the male child in Pakistan. Previous research reported that the most significant predictors of caregiver burden were severity of CP, level of caregiver's education, and male child. While the most significant predictors of stress were severity of CP, level of education, and stress. Stress and burden on caregivers are known to have harmful effects (Omole et al., 2019). There was a substantial correlation observed between caregiver burden and many factors, including poor income, male sex, and the amount of functional deficits exhibited by the challenged child. Additionally, it was found that higher levels of spousal support were associated with decreased caregiver burden. The act of actively seeking social assistance has been found to mitigate the heightened load that is often experienced in conjunction with more pronounced functional deficits. (Wijesinghe et al., 2015).

According to table 28 the present study result indicated that there is a significant difference of burnout among caregivers who have children of CP having ages between 2 to 7 years. It revealed that caregivers having younger (age ranges 2-7 years) CP children have more burnout as compared to elder one (age 8 to 13 years). Results revealed that parents of younger CP children are more psychologically distressed as compared to parents having elder children. There is a significant difference of on anxiety variable, which revealed that care givers of younger CP children having more anxiety as compared to care givers of elder CP children.

Previous research reported that the caregiver burden was found to be positively associated with higher disability-related expenditures, younger age of both the child and the mother, and better educational attainment of mothers (Oh & Lee, 2009).

Furthermore, a lack of substantial link was observed between the age of children with cerebral palsy (CP) and the stress experienced by their caregivers. Moreover, the gender of children diagnosed with cerebral palsy (CP) may have an impact on the level of burden experienced by caregivers. The responsibility associated with caring for male children tends to be more substantial as compared to that of female children, potentially due to the increased mobility typically observed among male children (Jackman et al., 2022). Therefore, although caregiving is a typical aspect of parenthood for any young CP child, the provision of extensive care for a child with enduring functional limitations can become onerous and potentially have adverse effects on the caregiver's physical and psychological well-being (Raina et al., 2004).

Present study results showed that caregivers having already history of disability are more burdened as compared to caregivers having no history of disability previously. Results show there is significant difference found on caregiver burden variable among caregivers of CP having family history of disability as compared to caregivers having no family history of disability, it indicates that caregivers having already history of disability are more burdened as compared to caregivers having no history of disability previously. Previous research reported that prior history of cerebral palsy in family and having more than one CP child in family is also linked with caregiver burden in mothers of CP children (Barutcu et al., 2021).

Results of the present study revealed that significant mean differences were found across categories of caregivers on psychological distress. Findings revealed that from caregivers specifically mothers of cerebral palsy children are more psychologically distressed as compared

to fathers and other caregivers of CP children. Results indicates significant mean differences across categories of caregivers on depression, anxiety & stress (table 31). It was reported in research that the mothers of children with CP are more psychologically distressed than mothers of normal children (Begum & Desai, 2010). Previous research reported that having a CP child increases the risk of developing depression in mothers as much as 2.26 times (Sajedi et al., 2010). It was also reported previously that mothers of children are more anxious and depressed (Kim, et al., 2001). Results indicates significant mean differences across categories of caregivers on social support. Findings revealed that from caregivers specifically mothers of cerebral palsy children having less social support as compared to fathers and other caregivers of CP children. Results indicates significant mean differences across categories of caregivers on wellbeing. Findings revealed that from caregivers specifically mothers of cerebral palsy children having lower wellbeing as compared to fathers and other caregivers of CP children. Previous research reported that the psycho-social experiences of mothers of children with CP was discovered on the basis of multiple key elements. These are burden of care, a lack of social support and the impact of CP children on mothers and poor mental wellbeing (Seroke, Siphon & Mkhize, 2023).

Findings of the present study revealed that caregivers having no working status are more stressed as compared to caregivers having some job or working status. Extensive caregiving demands had adverse effects on caregivers. Women having disabled children reported mental health issues. For females, no occupation and caring the child at home all the time, affected their mental health. Among men, those not working were at highest risk of adverse mental health effects (Kim et al., 2023).

Present findings revealed that caregivers having 7 to 9 children with one CP child are more burdened and psychologically distressed as compared to caregivers having less children. Previous research illustrates that there is a significant difference is found in the mean burden

score between caregivers with low income status and those with four or more children. Growing a family, providing for the needs of other children, and caring for a sick child are all linked to a higher perceived burden, maybe as a result of the added obligations and financial worries (Adib- Hajbaghery & Ahmadi, 2019). It was reported previously that caregivers neglect other family members, specially other children due to long lasting hectic caregiving responsibilities. Providing balanced attention to non-CP children becomes difficult for caregivers. (Kurtuncu et al., 2015).

The findings of this study showed that caregivers of children with spastic cerebral palsy are more burdened than those of children with Athetoid, Diplegic, hemiplegic, or paraplegic CP's. Results revealed that, in comparison to caregivers of other CP types, caregivers of children with spastic CP had lower levels of social support. Previous research reported that caregivers had stopped attending social events like cooking parties and other get-togethers due to social shame. They added that on sometimes, they declined the invitation because they felt uneasy leaving the disabled child with someone who they didn't believe would provide the same level of care as they would. According to the interpretation, the parent or caregiver experienced a load in terms of social, mental, physical, and financial issues (Chiloba & Moya, 2017). Quality of life of the spastic CP and quadriplegic CP children is connected with the mother's burden. Caregivers having spastic CP children with quadriplegia are more burdened. Burden in mothers is very high in the quadriplegia (Spastic CP) group, as compared to diplegic and the hemiplegic (Ozkan et al., 2018). Findings revealed that caregivers having CP children with Physical/Intellectual/Speech disability are more burdened as compared to caregivers of children having physical/intellectual disability & physical disability only. Findings revealed that caregivers having CP children with all type of Physical/Intellectual/Speech related problems are more concerned towards their child's disability as compared to caregivers of children having physical/intellectual disability & physical disability only. Findings revealed

that caregivers having CP caregivers of children with Physical/Intellectual/Speech disability have more impact on their self-health as compared to caregivers of children having physical/intellectual disability & physical disability only.

Findings revealed that caregivers having CP children with Physical/Intellectual/Speech disability have poor well being as compared to caregivers of children having physical/intellectual disability & physical disability only. Research reported that the level of assistance necessary to meet the biological and psycho social needs of the CP child is contingent upon the degree of disability and the constraints experienced by the child in their day-to-day activities. In the course of their daily routine, an individual tasked with the care of a child diagnosed with cerebral palsy (CP) must navigate the challenges posed by the child's motor and sensory impairments. Furthermore, this caregiver is also responsible for facilitating the execution of a diverse array of essential medical interventions and rehabilitation measures (physiotherapy & speech therapy). Parents encounter several hurdles when it comes to effectively managing their child's health issues and meeting the prescribed standards of care. These all issues lead the caregivers towards psychological issues (Basińska et al., 2014).

Previous findings suggested that there exists a positive correlation between a child's more pronounced intellectual handicap and an increased probability of anxiety in the parent (Gugala et al. 2019). Parkes et al. (2011) have demonstrated a robust correlation between parental stress and intellectual impairment. According to current studies, there appears to be a significant association between children with cerebral palsy's functional level and depression. A study found that the degree of functional limitation in children and the caregivers' depression were positively correlated. A child's quality of life is significantly impacted by their functional level when they have cerebral palsy.

## Conclusion

According to the results of the current study, caregiver burden, burnout and psychological distress (depression, Anxiety stress) is positively correlated with each other's. Whereas Caregiver burden, burnout and psychological distress (depression anxiety & stress) is negatively correlated with sense of coherence, social support & wellbeing. In addition to the stress of caring for others, the study's findings suggest that a variety of other factors, gender specially mothers (females), educational status of the caregivers, low income, the kind and quantity of support caregivers receive, the number of children they have, the severity of the children's conditions, and the current status of child, may also have an impact on how much of a burden & psychologically distressed the caregivers feel. The current study set out to investigate the efficacy of positive psychotherapy for caregivers of children with cerebral palsy. Caregivers with moderate to high burnout, caregiver burden, and depression scores were assessed. Two groups of caregivers of CP, one for PPT treatment and the other for control group were created. Urdu translated Positive psychotherapy manual was provided to caregivers of children with cerebral palsy. 15 positive psychotherapy based sessions were given to treatment group and 15 counseling sessions were given to control group. Study results reported that there is difference between control group and positive psychotherapy treatment group. Positive Psychotherapy group show better results as compared to control group.

## **Implications**

The study conclusion should be taken into account by clinical psychologists who work with families of CP children who have long-term medical & psychological issues. The results could help to identify the elements of caregiver's rehabilitation based intervention programs and how it affect the psychological issues of caregivers. Based on current research, psychologists ought to be concerned about the mental well-being of caregivers and offer therapeutic caregivers engagement therapy to help to alleviate the psychological issues and despair brought on by managing the child's illness. Our results imply that rehab professionals should discover ways to improve the children's self-management and transition skills, as this may lessen the mental health issues among families with disabilities, even though further research is required to give a more complete picture.

### **Over all discussion of the study**

The caregivers difficulties scale (CDS) was translated, validated, and adjusted for Urdu language use in the first part of this study. The main reason for choosing this tool was that it was designed exclusively with CP caregivers in mind. According to earlier studies, the caregivers Difficulties Scale (CDS) is a viable and reliable tool for assessing the caregivers load that parents of children with cerebral palsy in Sri Lanka suffer (Wijesinghe, Fonseka, & Hewage, 2013). The translation into Urdu language was undertaken with the aim of making the instrument comprehensible for caregivers of the cerebral palsy population. The process of scale translation encompassed many steps. Firstly, bilingual experts conducted a forward translation, followed by a committee method to ensure accuracy and consensus. Subsequently, a separate group of bilingual experts, distinct from those engaged in the initial forward translation, performed a backward translation. Finally, the same experts who conducted the forward translation employed a committee approach to review and refine the backward translation. The implementation of parallel translation methods necessitated the involvement of many multilingual specialists who separately translated the identical questionnaire. The final stage of the study involved convening a consensus meeting to determine the most optimal reconciled version of the translated scale, with the aim of achieving the objectives of the present study (Brislin, 1986). The Urdu version of the scale showed good reliability and validity. CDA is purely developed for caregivers of CP, previously for it was reported that Zarit Burden Inventory was used to assess CP's caregiver burden in Pakistan (Kiani et al., 2021).

The next study of the present research was to translate and adapt the positive psychotherapy manual & work sheets for the caregivers of cerebral palsy children. Translation was done in steps. Manual was translated adapted and validated by keeping in mind the models of Brislin, 1980, Hamblin, et al., 2005 & Barrera & Castro 2006). In Pakistan previously very limited work was done on translation, adaptation and validation of

interventional manuals. Cognitive Behavioral therapy was translated and adapted in Pakistan (Gerada et al., 2016). Translation and adaptation of Coping CAT program in Pakistan for children (Khan, et al., 2020). Recently culturally adapted psychoeducation (CaPE) intervention for bipolar disorder was done in Pakistan (Hussnain et al., 2017).

The third study of the research was to assess the caregiver burden, burnout, psychological distress, depression anxiety, and stress, sense of coherence, social support and wellbeing among caregivers of cerebral palsy children. It was also aimed to assess the relationship between the variables. The results indicate satisfactory internal consistency for CDS (caregiver burden), PBA (burnout), DASS-21 (psychological distress), OLS (sense of coherence), MSPSS (social support) and PPTI (mental wellbeing). Reliability of each variable is  $>0.60$  which is recommended in the social sciences. Present research reported that there is a correlation between total of CDS, PBA, DASS, OLS, MPSSS and PPTI and its sub scales among the scores of caregivers of cerebral palsy children. Caregiver burden is negatively correlated with the social support, which indicates that as the social support increased caregiver burden is decreased among caregivers of CP children. Caregiver burden is negatively correlated with the sense of coherence, which indicates that as the caregiver burden increased sense of coherence decreased among caregivers of CP children. In the present study it was analyzed that caregivers burden is positively correlated with burnout, depression, anxiety & stress among caregivers of cerebral Palsy children. In the present study it was analyzed that burnout is negatively correlated with the sense of coherence, social Support & wellbeing. In the present study it is evaluated that depression is negatively correlated with the sense of coherence, social support & mental wellbeing. In the present study it is investigated that anxiety is negatively correlated with the sense of coherence, social support & wellbeing. In the present study it was also studied that stress is negatively correlated with the sense of coherence, social support & mental wellbeing.

In the present study it was analyzed that caregiver burden is negatively correlated with the social support, There was a substantial correlation between caregiver burden and social support, it is found that higher levels of spousal support were associated with decreased caregiver burden. In the present study it was analyzed that burnout is negatively correlated with the sense of coherence & wellbeing among caregivers of cerebral palsy children. Depression is negatively correlated with the sense of coherence, social support & wellbeing among caregivers of cerebral palsy children.

In the present study it was analyzed that anxiety & stress is negatively correlated with the sense of coherence, social support & wellbeing. Gender differences are significant on caregiver burden, psychological distress, depression, anxiety & stress variable. Results revealed that there is significant gender difference is found on CDS, on caregiver's burden female caregivers scored high which indicate that females are more burdened as compared to male caregivers. Results specify that female caregivers are more psychologically distressed as compared to male caregivers of cerebral palsy children. Results show that female caregivers are more depressed as compared to male caregivers of cerebral palsy children. Results indicate that female caregivers have more anxiety as compared to male caregivers of cerebral palsy children. Results indicate that female caregivers are more stressed as compared to male caregivers of cerebral palsy children.

The present study signifies significant mean differences across categories of caregivers on psychological distress. Findings revealed that from caregivers specifically mothers of cerebral palsy children are more psychologically distressed as compared to fathers and other caregivers of CP children. Results show significant mean differences across categories of caregivers on depression. Findings revealed that from caregivers specifically mothers of cerebral palsy children are more depressed as compared to fathers and other caregivers of CP children. Results show significant mean differences across categories of caregivers on

anxiety. Outcomes revealed that from caregivers specifically mothers of cerebral palsy children are more anxious as compared to fathers and other caregivers of CP children. Findings indicated significant mean differences across categories of caregivers on stress. Findings revealed that from caregivers specifically mothers of cerebral palsy children are more psychologically stressed as compared to fathers and other caregivers of CP children. Outcomes indicate significant mean differences across categories of caregivers on wellbeing. Findings revealed that from caregivers specifically mothers of cerebral palsy children having lower wellbeing as compared to fathers and other caregivers of CP children. Present research reported that less educated caregivers of CP are more burdened as compared to highly educated caregivers. There is significant education based difference is found on concern for the child, impact on self, and social & economical strains. There is significant difference is found on sense of coherence among less educated and highly educated caregivers of cerebral palsy children. It indicated that highly educated caregivers have better sense of coherence as compared to less educated caregivers of CP children.

Result of the present study showed significant difference between male & female CP Children on social & economic strains variable among caregivers of CP children. It revealed that having a disabled male child have an impact on caregiver's social & economic strains. Having a disabled male child may effect caregiver's burden economically as being male child there are many expectations are attached with the future of the male child in Pakistan.

The results of this study showed that caregivers of children with spastic cerebral palsy are more burdened than those of children with athetoid, diplegic, hemiplegic, or paraplegic cerebral palsy. Results showed that, in comparison to caregivers of other CP types, caregivers of children with spastic CP had lower levels of social support.

Findings revealed that caregivers having CP children with physical, intellectual, speech disability are more burdened as compared to caregivers of children having physical,

intellectual disability & physical disability only. Findings revealed that caregivers having CP children with all type of physical, intellectual, speech related problems are more concerned towards their child's disability as compared to caregivers of children having physical, intellectual disability & physical disability only. Findings revealed that caregivers having CP children with all three type of physical, intellectual & speech disability having more impact on their self-health as compared to caregivers of children having problem in physical & intellectual only or physical disability only. Findings revealed that caregivers having CP children with Physical/Intellectual/Speech disability have poor wellbeing as compared to caregivers of children having physical/intellectual disability & physical disability only.

Results shown that caregivers having low income having higher caregiver burden as compared to caregivers having high income group. Findings revealed that caregivers having low income having poor self-care as compared to caregivers having high income group. Caregivers having less income are psychologically distressed as compared to caregivers having high income group. Outcomes revealed that caregivers having less income having high depression wellbeing as compared to caregivers having high income group. Results indicated that caregivers having low income are more anxious as compared to caregivers having high income group same as it is signified that caregivers having low income are more stressed as compared to caregivers having high income group.

The major goal of the present study was to give therapeutic interventions to the caregivers of cerebral palsy children. Positive psychotherapy was selected as a therapeutic tool in the present study. Positive psychotherapy is provided to caregivers of children with cerebral palsy. Caregivers having high scores on burnout, caregiver burden, and psychological distress (depression, anxiety & stress) and low scores on social support, sense of coherence and mental wellbeing, were randomly divided into two groups PPT treatment group and the other was control group. Study results reported that there is a difference between counseling group and

PPT intervention/treatment group. Positive psychotherapy group show better results as compared to counseling group. The findings indicated that the positive psychotherapy applied had positive effects on caregivers of CP children. Children with cerebral palsy frequently require acute medical treatment and hospital stays, and their physical, speech, and cognitive impairments have been linked to mental health issues, according to their caregivers. All these type of concerns play a vital role in the life of caregivers. They also need some type of psychosocial rehabilitation to address many concerns of their life. In this research it is concluded that positive psychotherapy is effective for caregivers of cerebral palsy children to manage their psychological issues.

## Conclusion

It was concluded that long lasting caregiving leads to psychological issues in caregivers and there is a need to design individualized rehabilitation interventions to decrease the caregiver burden, burnout, psychological distress and to enhance the mental wellbeing and sense of coherence of caregivers as it may ultimately affect the child's functional prognosis and health outcomes. Taking care of a kid who has cerebral palsy can be emotionally and physically taxing, as well as challenging and demanding. It is challenging for carers who face stigma and discrimination from society to alter their lifestyles in order to meet the needs of the child. They quit their employment, hobbies, social events, and numerous other self-related daily activities, which makes them depressed, hopeless, and gives up on their own aspirations for the future. It is crucial to create innovative coping mechanisms to deal with these difficult problems and give carers the assistance they need. It facilitates the carers' ability to contribute effectively to society. The current study set out to investigate the efficacy of positive psychotherapy for caregivers of children with cerebral palsy. The researcher translated the worksheet and handbook for positive psychotherapy into Urdu for this study. Positive psychotherapy is provided to caregivers of children with cerebral palsy. Positive psychotherapy group show better results as compared to counseling group. It was concluded that positive psychotherapy is effective for mental wellbeing of caregivers of cerebral palsy children. Study results reported positive psychotherapy group exhibited superior outcomes in comparison to the counselling group. It was determined that positive psychotherapy is useful for enhancing the mental health of parents of children with cerebral palsy. Results indicated that the caregivers' mental health was improved through positive psychotherapy-based sessions.

### **Limitation and Suggestions**

- The sample of the present study was limited. Caregivers of CP's visit the rehabilitation unit for all type of management of their children under one roof. They have to visit many departments with the child. So due to time issues there are limited sample and there were loss of follow up sessions. There are many drop off cases too in the present study. Cerebral palsy is a complex disability with multiple medical conditions that require intense medical care and attention, making it difficult for caregivers to participate in research studies. Most of the caregivers were unavailable on regular basis (sessions). Many caregivers were reluctant to participate in the present study due to their CP child's medical issues, such as hospitalization, surgeries and intense therapies.
- In the present study, only caregivers of cerebral palsy children were included so results cannot be generalized to caregivers of children with other disabilities. For further researches it can be done on the caregivers of other physical related disabilities with larger sample size.
- Some clients left the sessions due to time issues (session with the child), travelling issue (with CP child) who were further excluded from analysis in the present study. In future through funded projects & incentives can overcome this limitation.
- The sample was taken from those caregivers who are coming for rehabilitation. In future sample can be taken from caregivers who are not taking proper rehabilitation.
- The data was taken from the rehabilitation unit of NIRM; future researchers can collect data from all physical special education centers or other child rehabilitation units of Pakistan for generalizing the findings.

## Implications

- Caregiver Difficulties Scale was purely developed for Caregivers of Cerebral palsy children, so from the translated Caregiver Difficulties Scale in future it can be used for caregivers of Cerebral palsy children in Rehabilitation Units.
- Successful interventions could become part of the standard care practices for families of individuals with cerebral palsy, ensuring that caregiver support is recognized as a critical component of holistic care. Positive psychotherapy can focus on empowering individuals to take control on their lives and developing self-efficacy. It is a holistic approach and evidence based practice, which address the whole person, including their physical, emotional and social wellbeing.
- Positive psychotherapy based interventions can emphasize identifying and building individual strengths and reliance. Positive psychotherapy promote overall wellbeing, so the translated Positive Psychotherapy interventions can be used for the caregivers of other population in Pakistan.
- In clinical setup other than rehabilitation units, it can be used by clinical psychologists to enhance mental wellbeing of the persons with mental illnesses (Depression, MDD, cognitive dis, psychosis etc).
- Previously disease or illness model was followed now the trend is changing so principal of positive psychology has better outcomes. So positive psychotherapy can be used more effectively as a more productive approach.
- Positive Psychotherapy can be used as an eclectic approach with other therapies.
- Present study impart valuable knowledge to existing literature.
- As a syllabus of curriculum it can be added in the syllabus of graduation and diploma level classes and in future positive psychotherapy, based training program can help the health care providers and students of psychology.

## Recommendations

- The study highlighted serious issues of caregivers who are providing care to the children with cerebral palsy. The study emphasizes the challenges and volume of feedback required to address the needs and experiences of caregivers for people with cerebral palsy. Rehabilitation of cerebral palsy is a complex process for caregivers; they should pay close attention to their own mental wellbeing also.
- The present findings provide valuable insight regarding the challenges faced by the caregivers of children with cerebral palsy, and can help the rehab professionals working in the rehabilitation units to identify these challenges. The findings of the present study will be also helpful for the policy makers to develop psychological management services based specific indigenous interventions for caregivers of cerebral palsy children.
- Rehabilitation experts and other health care professionals related to cerebral palsy must know the effective relationship of child's disability and caregiver's mental health. Family based therapy and facilities that directly focus caregiver's health are effective for the well-being of both caregivers and for other family members.
- In addition to the frequent need for acute medical attention, caregivers of children with CP demonstrated particular mental health difficulties. It is a severe problem that has a detrimental effect on quality of life when caregivers of CP's experience depression, anxiety, or stress. When handling such circumstances, healthcare personnel sometimes overlook this reality. Through present study it was tried to develop some understandings for health professionals about the major issues related to caregivers of cerebral palsy and to enhance the care, given to those significant individuals in the lives of children with cerebral palsy (CP).
- According to this study in Pakistani social service and health policy need to be improved regarding care for the caregivers. Additionally, there is a need to change in the community

opinion regarding the care of closed relatives who look after the disabled in family. Every participant in the family took part in taking care the child. In order to combine family care for the care of individuals with disabilities, social policy will need to direct and encourage a shift in society's moral perspectives regarding the care of family members with impairments.

- Using a positive psychotherapy approach, healthcare professionals should organize rehabilitation based sessions for caregivers having children with cerebral palsy. Positive psychotherapy is an effective therapy, rehabilitation therapists can use this therapy in rehabilitation based educational sessions for parents of children with cerebral palsy. Through present research the future researchers and rehabilitation professionals can learn in a most workable and realistic way to enhance caregivers' well-being while staying within the constraints of available resources.
- Future researches can be planned to measure the effectiveness of positive psychotherapy for enhancing mental wellbeing, among caregivers of other disabilities. In Pakistan adapted version of positive psychotherapy needs to be tested on larger trials. This work can be repeated on caregivers of other disabilities using the methodology and Urdu translated manual used in the present study.
- The positive psychotherapy can also be applied to the development of indigenous multi modal, holistic interventions that enhance the well being of caregivers of all types of disabilities. In future, researches can be done to further validate the present findings.
- By educating the techniques of positive psychotherapy to clinical psychology students and psychologists at university level can help them to effectively manage the mental wellbeing of caregivers of disabled children.

- Establishing diverse community and family support networks is crucial to alleviate the stress and fatigue experienced by caregivers. Parents who are under more stressed and those who spend a lot of time in caring for others should be the target of positive psychotherapy-based interventions.
- When it comes to treating carers with CP, rehabilitation psychologists and other rehab health professionals ought to adopt a patient-family-centred therapeutic strategy. It is imperative for policymakers to provide healthcare facilities and disability subsidies to families with children with disabilities. Psychological therapy interventions are to furnish carers with emotional support, encompassing counselling, as well as precise knowledge regarding cerebral palsy.
- It is important to create healthcare facilities that are easily accessible, and caregiver peer support groups that can provide emotional support. The establishment of caregiver's rehabilitation services is necessary in order to enhance family functioning and it provide caregivers with short-term relief. Campaigns for public awareness are required in fostering acceptance and providing emotional support to caregivers of cerebral palsy children.

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## **APPENDICES**

**Appendix A**  
**(Informed Consent)**

## اجازت نامہ

میں فیکلٹی آف سوشل سائنسز بین الاقوامی اسلامک یونیورسٹی اسلام آباد میں پی ایچ ڈی کی طالبہ ہوں۔ میری تحقیق کا مقصد دماغی فالج والے بچوں کے والدین کی ذہنی صحت کے بارے میں ہے۔ یہ بچہ آپ کے لیے بہت اہم ہے اور اس کی نگہداشت کے لیے آپ ہر وقت مصروف رہتے ہیں۔ بچے کی جسمانی، ذہنی اور سماجی صلاحیتوں کو مد نظر رکھتے ہوئے آپ کو بہت سے مسائل درپیش ہو سکتے ہیں۔ جسکی وجہ سے آپکی ذہنی صحت متاثر ہو سکتی ہے۔ ذیل میں دیے گئے سوال نامے، ”شعبہ نفسیات“ میں جاری تحقیقات کا حصہ ہیں۔ آپ سے گزارش ہے کہ ہر سوال نامے میں درج ذیل ہدایات کو غور سے پڑھیں اور اپنے احساسات اور جذبات کے متعلق محقق کو معلومات سے آگاہ کریں۔ آپ کی معلومات صرف تعلیمی اور تحقیقی مقاصد کے لیے استعمال کی جائیں گی۔ معلومات کو مکمل صیغہ راز میں رکھا جائے گا۔ آپ کے تعاون کا شکریہ۔

دستخط شرکت کنندہ

**Appendix B**  
**(Demographic Sheet)**

## ذاتی کوائف

جنس \_\_\_\_\_ بچے سے تعلق \_\_\_\_\_  
عمر \_\_\_\_\_ تعلیم \_\_\_\_\_  
پیشہ \_\_\_\_\_ ازدواجی حیثیت \_\_\_\_\_  
شادی کی نوعیت \_\_\_\_\_ خاندان میں \_\_\_\_\_ خاندان سے باہر \_\_\_\_\_  
خاندانی نظام \_\_\_\_\_  
بچوں کی تعداد \_\_\_\_\_  
بچے کی عمر / جنس \_\_\_\_\_ بہن بھائیوں میں نمبر \_\_\_\_\_  
بچے کی بیماری کی نوعیت :- \_\_\_\_\_

خاندان میں کوئی معذوری \_\_\_\_\_  
ماہانہ آمدنی = \_\_\_\_\_

CP کی قسم \_\_\_\_\_

**Appendix C**  
**(Permission of Using Caregiver Difficulties Scale)**

Dear Chaitra

Thanks a lot for this. I am really thankful to you. Can you please tell me can i translate it in urdu? as my population cannot understand English.

Best regard  
Saima

Champa J Wijesinghe to you

Oct 8, 2020

Dear Saima,

Sorry again for the late reply. Please go ahead with the translation. I hope you are planning to validate it as well and if so kindly let me know the results of validation as I am interested in understanding the cross-cultural validity of the tool.

Thank  
Champa

More >

**Appendix D**  
**(Permission of Using Parental Burnout Assessment)**



Add new

## Notifications

Updates

Messages

Requests (3)

Compose message

### Permission of Using the Parental Burnout Inventory

Report ▾



**Muhammad Manan Haider Khan**

Oct 5, 2020

Hi

I am a PhD. Scholar in Psychology. I am doing my research on parents of Cerebral Palsy children. I want to measure their burnout. For that I want to use your scale of Parental Burnout Inventory. Can i Use that scale. please give me permission so i can further work on it and please share the scale also.

Best Regard  
Saima



**Isabelle Roskam** to you

Oct 5, 2020

Dear colleague,

Thanks for your e-mail. Because the Parental Burnout Inventory (PBI) was developed based on the MBI (and because we said so in the article), MindGarden considers that the PBI test is theirs. They ask people to pay for an MBI license to be allowed to use the PBI. Contrary to Mindgarden, we believe that anyone should be able to measure parental burnout for free. Therefore, we developed and validated another measure of parental burnout.

Roskam, I., Brianda, M.-E., & Mikolajczak, M. (2018). A Step Forward in the Conceptualization and Measurement of Parental Burnout: The Parental Burnout Assessment (PBA). *Frontiers in Psychology*, 9. doi: 10.3389/fpsyg.2018.00758

The results show that psychometric properties of this other measure (the Parental Burnout Assessment, PBA) are just as good as those of the PBI. Therefore, if you need a free parental burnout instrument, we advise you to use the PBA instead of the PBI.

The validation paper can be downloaded for free through this link  
<https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00758/full>

The PBA encompasses 23 items forming four factors: exhaustion (being emotionally and physically exhausted by one's parental role), emotional distancing (affective distancing from the children), saturation (being fed up with one's parental role) and contrast (not being the parent you used to be and wanted to be, and being guilty and ashamed of the parent you have become). The test is also available for free on our website [www.burnoutparental.com](http://www.burnoutparental.com) (<https://www.burnoutparental.com/diagnostic-du-burnout-parental?lang=en>)

Note that, thanks to an International Investigation of Parental Burnout, the PBA is available in more than 20 languages. The foreign translations can be downloaded for free from our website <https://www.burnoutparental.com/instruments-and-materials>.

Do not hesitate to come back to me for further information.



**Muhammad Manan Haider Khan**

Oct 5, 2020

hi dear

really thanks for such a valuable information and guidance. ok this scale is also good. but as i am from Pakistan. I need it in Urdu. and in your site it is also mentioned that it is already translated. so kits really good for me.

If you have information regarding Urdu please do share

BEST REGARD  
SAIMA MANAN

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Saima Waqar <samiwaqar23@gmail.com>

## Parental Burnout Assessment in Urdu

Isabelle Roskam <isabelle.roskam@uclouvain.be>  
To: Saima Waqar <samiwaqar23@gmail.com>  
Cc: Moira Mikolajczak <moira.mikolajczak@uclouvain.be>

Sat, Nov 21, 2020 at 12:53 AM

Dear Saima,  
Please find here below the contact information from our colleague in Pakistan.  
We do not have the final Urdu version.  
Best wishes  
Isabelle & Moira

Aamir Hashmi	IER, University of the Punjab Lahore Pakistan	aamirhashmi.ier@pu.edu.pk
--------------	---	---------------------------

[Quoted text hidden]

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**Appendix E**  
**(Permission of Using Orientation of Life Scale (SOC))**



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# permission of using Orientation of Life Scale



**Saima Waqar**

Hi Hope you will be fine. I am a PhD.Scholar( Psychology) from Pakistan



**Maurice Mittelmark**

to me

you have my permission... regards, Maurice Mittelmark

On Mon, 5 Oct 2020 at 12:38, Saima Waqar <[samiwaqar23@gmail.com](mailto:samiwaqar23@gmail.com)

Hi

Hope you will be fine. I am a PhD.Scholar( Psychology) from Pakistan parents of disabled children . I want to use the Orientation of Life scale Coherence. Please permit me to use that scale in my research.

Best Regard

—  
Saima Waqar  
Psychologist  
NIRM, Islamabad



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# The Orientation of life Scale (Sense of Coh)



**Saima Waqar 60-FSS/PHDPSY/F18**

Respected Tahira Hope You will be fine by the grace of Almighty Allah

### Mail Delivery Subsystem

Address not found Your message wasn't delivered to tahirajibeen@ya

**Tahira jibeen**

to me

Hello Saima,

Please find attached the translated scale. I translated this scale in Urdu that w  
You can find further information in the published articles.

Best!

Dr. Tahira Jibeen

Clinical Psychologist(supervised practice)

Advance Health, Toronto, Canada

---

**From:** Saima Waqar 60-FSS/PHDPSY/F18 <sa<sup>1</sup>ima.phdpsy60@iiu.edu.p

**Sent:** Tuesday, September 15, 2020 2:17 PM

**To:** tahiraimdadali@hotmail.com <tahiraimdadali@hotmail.com> tah

**Appendix F**  
**(Permission of Using Multidimensional Scale of Perceived Social Support)**

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## Permission of using Multidimensional social support Scale

[Report message](#) · [Block user](#)**Muhammad Manan Haider Khan**

2 hours ago

hi

I am a PhD scholar from IIU. I want to use your scale in my research can you please help me out in giving me permission of using this scale for research purpose.  
It will be really helpful for me.

Best Regard

Saima

**Gregory Zimet** to you

17 minutes ago

Hello Saima,

You have my permission to use the Multidimensional Scale of Perceived Social Support (MSPSS) in your research. I have attached several documents: 1. A copy of the original English version of the scale, with scoring information on the 2nd page; 2. A document listing several articles that have reported on the reliability and validity of the MSPSS (references #19, #24, and #29 all report on Urdu versions of the scale); 3. A chapter on the MSPSS; and 4. Copies of two Urdu translations and an article on the Tonsing translation (you have my permission to use the Tonsing translation). If you wish to use the Urdu translation labeled "MSPSS - Urdu Translation - 2014" you should email the translator, Dr. Rukhsana Kausar (rukhsana.saddul@gmail.com).

I hope your research goes well.

Best regards,  
Greg Zimet

**MSPSS References.pdf**

**MSPSS.pdf**

**MSPSS - Urdu Translation - 2014.pdf**

**MSPSS - Urdu-validated-2012-Tonsing et al...pdf**

**3612 Tonsing et al - MSPS...ian J Psychiatry 2012.pdf**

**0732 Zimet - MSPSS - Chapter 1998.pdf**

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## Urdu version of social support scale

Inb



**Saima Waqar**

Aoa hope you are well. I am a PhD scholar from liu university. Pakista

**Nusrat Husain**

to suleman, research.administrator@globalmentalhealthculturalpsychiatry

Dear Saima

I have copied this email to Suleman Shakoor who will share with

Don't hesitate to contact if you require any further support in yo

Professor Nusrat Husain

Professor of Psychiatry

Director Research Global Mental Health

Division of Psychology and Mental Health

University of Manchester

Mental Health SRG Lead

NIHR-CRN-NWC (Lancashire & Cumbria)

Honorary Consultant Psychiatrist - EIS

Associate Medical Director - Research



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**Saima Waqar**

ASSALAM O ALAIKUM Thanks a lot and so kind of you. I am waiting

**suleman.shakoor@pill.org.pk**

to research.administrator, Nusrat, me

ASA Prof. Husain

Ok sure.

ASA Dear Saima Waqar

Hope you are keeping well. Please find attached Urdu version

If you need any help, you may contact me.

Thanks

---

Regards,

Muhammad Suleman Shakoor

Bio-statistician

Pakistan Institute of Living & Learning

78-79/D, New Muslim Town, Wahdat Road, Lahore Pakistan

Mob # 03124019919, Office: 04235912278

**Appendix G**  
**(Permission of Using Depression Anxiety Stress Scale)**

## **DASS**

### **Who can administer and interpret the DASS?**

The DASS is a self-report instrument, and no special skills are required to administer it.

However, interpretation of the DASS should be carried out by individuals with appropriate training in psychological science, including emotion, psychopathology and assessment.

When the DASS is administered to individuals who have sought professional help, or who are displaying high levels of distress, interpretation should be carried out by an appropriately qualified health professional such as a clinical psychologist.

### **3. How do I get permission to use the DASS?**

The DASS questionnaire is public domain, and so **permission is not needed to use it**. The DASS questionnaires and scoring key may be downloaded from the DASS website and copied without restriction (go to [Download](#) page).

**Appendix H**  
**(Permission of Using Positive Psychotherapy Inventory, Manual & worksheets)**



Saima Waqar <samiwaqar23@gmail.com>

---

## Positive Psychology

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
To: Saima Waqar <samiwaqar23@gmail.com>

Sun, Sep 13, 2020 at 5:28 PM

WA Saima, glad to hear about your work, especially for parents of CP children...much needed in Pakistan. The best resource to develop more customized program for CP parents would be Rashid and Seligman, 2018; Oxford. Manual and Workbook. I am also attaching somewhat relevant resources, and also please look at the Flourish and SBR websites. In fact, Oxford is looking for a publishing partner in Pakistan to translate it in Urdu. Let me know if you know of anyone.

best  
Tayyab

### **Tayyab Rashid, Ph.D., C.Psych**

Health & Wellness Centre  
Associate Faculty, Graduate Program in Psychological Science  
**Project Lead**  
Flourish: [www.utsc.utoronto.ca/flourish](http://www.utsc.utoronto.ca/flourish)  
SBR: [www.strengthsbasedresilience.com](http://www.strengthsbasedresilience.com)  
PPT: Positive Psychotherapy  
  
University of Toronto Scarborough, Canada

[Quoted text hidden]

### **Tayyab Rashid, Ph.D., C.Psych**

Pronouns: he/him  
Health & Wellness Centre  
Associate Faculty, Graduate Program in Psychological Science

UNIVERSITY OF TORONTO SCARBOROUGH  
1265 Military Trail, Toronto, ON, M1C 1A4  
[www.utsc.utoronto.ca](http://www.utsc.utoronto.ca)

Please note that emails related to clinical information will only be read during business hours (Monday through Thursday). If you are currently experiencing an emergency, please contact:

**My Student Support Program (My SSP):** Linguistically & culturally matched mental health support; **1-844-451-9700**

**Good2Talk:** Provides confidential services for post-secondary students; **1-866-925-5454** or •

**Togetherall:** A 24/7 Online forums, self-guided group and individual mental health resources

**Connex Ontario:** Free 24/7 mental health and gambling services **1-866-531-2600**

**Youth Helpline:** A peer Support line for, 16-29 for 2SLGBTQ+ identities 4pm-9:30pm EST, **1-800-268-9688**; Local: **647-694-4275**

**Distress Centre of Toronto:** 24/7, 365 days for those at risk and most vulnerable; **416-408-4357** or Text: **45645**

**Community Crisis Program:** Mental health symptoms, **416-495-2891**

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**3 attachments**

 **Resilient Parenting\_Handout\_Rashid\_OGS.pdf**  
1258K

 **Strong Parenting\_oct\_2016.pdf**  
499K

 **Resilient Parenting\_Overview\_April 2017.pdf**  
471K



Saima Waqar <samiwaqar23@gmail.com>

---

## Positive Psychotherapy Manual

3 messages

---

**Tayyab Rashid** <tayyabrashid@gmail.com>  
To: Saima Waqar <samiwaqar23@gmail.com>  
Cc: Faisal Nisar <faisalnisar3@yahoo.com>

Tue, Sep 22, 2020 at 3:20 PM

Hi Saima, I have been been to manage to find a copy of Positive Psychotherapy Manual for you. I am copying my dearest friend, Faisal Nisar (we did our MSc in Psychology from Govt College, Lahore together), please provide him your address, he will send you.

Faisal, when Saima emails you her address, please send her, Positive Psychotherapy Manual  
Best  
Tayyab

**Tayyab Rashid, Ph.D., C.Psych**

Health & Wellness Centre

Associate Faculty, Graduate Program in Psychological Science

**Project Lead**

Flourish: [www.utsc.utoronto.ca/flourish](http://www.utsc.utoronto.ca/flourish)

SBR: [www.strengthsbasedresilience.com](http://www.strengthsbasedresilience.com)

PPT: Positive Psychotherapy

University of Toronto Scarborough, Canada

---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: Tayyab Rashid <tayyabrashid@gmail.com>

Tue, Sep 22, 2020 at 5:44 PM

Assalam o Alaikum  
Jazakallah

Really thanks THAT from your busy schedule you have taken time for email and all this ..okay i will email to your friend then will EMAIL you again after getting that manual and will let you know ..  
and i also need your permission and guidance regarding using that manual on my participants.

BEST REGARD  
SAIMA

[Quoted text hidden]

---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: muhammad maaz <maazafnanomi23@gmail.com>

Sat, Sep 21, 2024 at 4:51 PM

[Quoted text hidden]

permission. As you and Dr. Seligman are the authors so kindly answer me that you are giving me permission to use this manual in my research work?. This is very important for me because without this i cannot proceed further ethically and morally also.

Best Regards

[Quoted text hidden]

--

Saima Waqar  
Psychologist  
NIRM, Islamabad

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
To: Saima Waqar <samiwaqar23@gmail.com>

Tue, Sep 29, 2020 at 6:00 PM

Salaam Saima, since this is a published work, in the public domain, you don't need permission to use it.

I receive many emails from Pakistan, and I feel bad for not being able to respond to all...it will drive me insane to respond to 9000+ email in my inbox, at the moment... but I am glad your persistence worked, may Allah help you with this noble cause

T

[Quoted text hidden]

---

**Saima Waqar** <samiwaqar23@gmail.com>  
Draft To: Tayyab Rashid <tayyab.rashid@utoronto.ca>

Tue, Sep 29, 2020 at 6:04 PM

[Quoted text hidden]

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
To: Saima Waqar <samiwaqar23@gmail.com>

Thu, Oct 15, 2020 at 5:27 PM

Hi Saima, I hope your study is going well.

Could you please let me know if you would be able to do Urdu translation of the PPT manual. I have another psychologist from Karachi interested in translating...?

All the best  
Tayyab

**Tayyab Rashid, Ph.D., C.Psych**

Pronouns: he/him

Health & Wellness Centre

Associate Faculty, Graduate Program in Psychological Science

UNIVERSITY OF TORONTO SCARBOROUGH

1265 Military Trail, Toronto, ON, M1C 1A4

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- **My Student Support Program (My SSP):** Linguistically & culturally matched mental health support
- Phone: 1-844-451-9700 (North America) or (00) 416-380-6578 (Outside of North America)
- **Good2Talk:** Provides confidential services for post-secondary students 1-866-925-5454 or Text GOOD2TALKON to 686868
- **Big White Wall:** A 24/7 community forum offers text-based service, self-guided group & individual courses

---

**Positive Psychotherapy**

15 messages

**Saima Waqar** <samiwaqar23@gmail.com>

Tue, Sep 29, 2020 at 4:22 PM

To: Tayyab Rashid &lt;tayyabrashid@gmail.com&gt;, Tayyab Rashid &lt;tayyab.rashid@utoronto.ca&gt;

Assalam O Alaikum

Hope You will be fine by the grace of Almighty Allah. Well I have gone through the manual. It's really good. Thanks a lot for sharing your valuable manual with me.

Now I want to ask something, please answer. I have already shared with you that I am from International Islamic University (IIU) and working on my synopsis and want to work on the mental health of the parents of the disabled children based on Positive Psychological interventional plan. please tell me can i use your Positive Psychotherapy manual sessions on my sample. Secondly as you are from Pakistan you know here we have language barriers due to educational issues so most of the family visit us are not well educated and it will be very difficult for them to understand the language in English so can I translate your manual (if yes then i will share with you the translated one and you have to give me your expert opinion on it). thirdly as your manual having many sessions and i cannot take all due to time issues and poor follow up issues so can i take some part from that manual as a section like (strength based training, Gratitude, problem solving, Hope & Optimism and other if you suggest). As I am working in a Rehabilitation Unit we have to cater many issues at a time. In my review work with the parents of CP, they have identified many concerns like burnout due to multiple disability, excessive caretaking, poor prognosis of the child. so to lessen down their mental issues this therapy will really work Insha'Allah. Secondly the main focus of the parents are to work on skilled behavior of the child and to minimize the problematic behavior of the child. so in my study I want to make a manual based on focusing all these things. please guide me accordingly. As I have to answer all these things to my Supervisor.

waiting for you kind reply

BEST REGARD

--

Saima Waqar  
PhD Scholar (IIU)  
Psychologist  
NIRM, Islamabad

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>

Tue, Sep 29, 2020 at 4:37 PM

To: Saima Waqar &lt;samiwaqar23@gmail.com&gt;

WA Saima, I am glad you received the manual. You raise good point.

Unfortunately, I cannot make any recommendations as these are very specific and local issues, to be discussed with your supervisor. These issues are typically handled by student and their immediate supervisor. Furthermore, due to my fulltime clinical practice and research responsibilities, I would not be able to do a fair job in advising you. I am also not allowed do so by my licensure regulations here in Ontario. I trust you and your advisor to decide on these concerns.

For Urdu translation, Oxford requires a local publisher who is willing to publish. I think Oxford Pakistan will be willing. Jenny Child, Global Business Development officer from Oxford can share all the relevant details with you. Please contact her. Info below

**Jenny Child**

Senior Rights Manager  
Global Business Development and Rights

Oxford University Press | Great Clarendon Street | Oxford | OX2 6DP | UK  
Tel: +44 (0)1865 353 847 | Email: jennifer.child@oup.com

Please note I work Tuesday – Thursday each week

**I wish you best of luck with the study**

**Best**

**Tayyab**

Tayyab Rashid, Ph.D., C.Psych

Pronouns: He/Him

**Health & Wellness Centre**

**Associate Faculty, Graduate Program in Psychological Science**

**UNIVERSITY OF TORONTO SCARBOROUGH**

1265 Military Trail, Toronto, Ontario, M1C 1A4

**Tel 416-287-7065 (Main Office)**

www.utsc.utoronto.ca

**Tomorrow is created here.**

Please note that emails sent to this address regarding clinical concerns are will only be attended during business hours Mondays through Thursdays. If you are currently experiencing an emergency, please seek support from any of the following resources:

- **My Student Support Program (My SSP):** Linguistically & culturally matched mental health support; Phone: 1-844-451-9700 (North America) or (00) 416-380-6578 (Outside of North America)
- **Good2Talk:** Provides confidential services for post-secondary students 1-866-925-5454 or Text GOOD2TALKON to 686868
- **Youth Helpline:** A peer Support line for 2SLGBTQ+ ages 16-29; 1-800-268-9688; Local: 647-694-4275; 4-9:30pm EST
- **Distress Centre of Toronto:** 24/7, 365 days for those at risk and most vulnerable; 416-408-4357 or Text: 45645
- **Together all:** A 24/7 community forum offers text-based service, self-guided group & individual courses
- **Connex Ontario:** Free 24/7 mental health and gambling services 1-866-531-2600
- **Community Crisis Program:** Mental health symptoms, 416-495-2891
- **For Emergencies:** Call 9/11

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---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: Tayyab Rashid <tayyab.rashid@utoronto.ca>

Tue, Sep 29, 2020 at 5:42 PM

Thanks a lot for always appreciating and encouraging remarks. I know you are really busy and from your busy schedule you have taken time. It really means alot for students of your own country. But one thing please answer me, as you do not answer about author

- **Connex Ontario:** Free 24/7 mental health and gambling services 1-866-531-2600
- **Youth Helpline:** A peer Support line for 2SLGBTQ+ ages 16-29; 1-800-268-9688; Local: 647-694-4275; 4-9:30pm EST
- **Distress Centre of Toronto:** 24/7, 365 days for those at risk and most vulnerable; 416-408-4357 or Text: 45645
- **Community Crisis Program:** Mental health symptoms, 416-495-2891

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[Quoted text hidden]

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**Saima Waqar** <samiwaqar23@gmail.com>  
To: Tayyab Rashid <tayyab.rashid@utoronto.ca>

Thu, Oct 15, 2020 at 5:46 PM

Assalam o Alaikum

Well thanks alot for the email. As I have already told you i will translate it for my patients as they cannot understand it in english, so for this i have to translate, adapt and validate it in Pakistan, my topic approved as translation, adaptation and validation of Positive Psychotherapy for mothers of Cerebral Palsy Children and for this i have emailed jenny also, which is in process.

Well i will translate the whole manual and thats why i emailed you many time for your permission also and thanks to you, you always acknowledged me so please dont permit other as it will be my PhD work.

I shall be really thankful to you  
Best regards

[Quoted text hidden]

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
To: Saima Waqar <samiwaqar23@gmail.com>

Thu, Oct 15, 2020 at 6:06 PM

Thanks Ms. Waqar for your prompt response. As indicated earlier, for translation needs to have a publisher in Pakistan, willing to publish. The contract of translation is between a publisher and Oxford University Press (OUP). Not between an individual and OUP. If you do have a publisher please let me and Ms. Child know. This is how ten other translations have proceeded. These rules are stipulated by Oxford, not me.

Secondly, translation needs to be of the generic manual, not for a specific population, that is, mothers of CP?

If you could please clarify that you have a publisher and the translation will be the manual, I would appreciate. I hope you can understand my tiny bit of frustration, for two years, I have at least four individuals from Pakistan, who expressed their interest and initial commitment to do the translation, once we made all the arrangements, we never heard back from them. I really appreciate your work as it is such a noble cause to help families dealing with CP. I would also encourage you to submit an abstract for the world congress of Positive Psychology, July 2021, virtual. Details here

All the best  
Tayyab

**Tayyab Rashid, Ph.D., C.Psych**

Pronouns: he/him

Health & Wellness Centre

Associate Faculty, Graduate Program in Psychological Science

UNIVERSITY OF TORONTO SCARBOROUGH  
1265 Military Trail, Toronto, ON, M1C 1A4  
[www.utsc.utoronto.ca](http://www.utsc.utoronto.ca)

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- **My Student Support Program (My SSP):** Linguistically & culturally matched mental health support
- Phone: 1-844-451-9700 (North America) or (00) 416-380-6578 (Outside of North America)
- **Good2Talk:** Provides confidential services for post-secondary students 1-866-925-5454 or Text GOOD2TALKON to 686868
- **Big White Wall:** A 24/7 community forum offers text-based service, self-guided group & individual courses
- **Connex Ontario:** Free 24/7 mental health and gambling services 1-866-531-2600
- **Youth Helpline:** A peer Support line for 2SLGBTQ+ ages 16-29; 1-800-268-9688; Local: 647-694-4275; 4-9:30pm EST
- **Distress Centre of Toronto:** 24/7, 365 days for those at risk and most vulnerable; 416-408-4357 or Text: 45645
- **Community Crisis Program:** Mental health symptoms, 416-495-2891
- **For Emergencies:** Call 9/11

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On Oct 15, 2020, at 8:46 AM, Saima Waqar <samiwaqar23@gmail.com> wrote:

EXTERNAL EMAIL: Treat content with extra caution.

[Quoted text hidden]

---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: Tayyab Rashid <tayyab.rashid@utoronto.ca>

Thu, Oct 15, 2020 at 6:33 PM

Firstly I personally translate it for research purpose, then i will use it on my specific population for my PhD study. For publication I have searched many people. In Pakistan on Government basis  
<http://nlpd.gov.pk/> work on publication. There are many other private publishers also so I am working on it also to contact.

Secondly

Well I will translate it as a manual first as it will be my first part of research, it will be the same as you have in english and for final review i will send you also . As I will complete it in InnshaAllah then I will apply it to my specific population, for you I am mentioning mothers of CP here because after translation I will use it on my specific population. I hope you have understood my point. Nowadays I am following your valuable steps mentioned in the Positive Psychotherapy manual. Will reply to you soon.

Best Regard

[Quoted text hidden]

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
To: Saima Waqar <samiwaqar23@gmail.com>

Thu, Oct 15, 2020 at 6:44 PM

Thanks Saima, your detailed response is much appreciated.

Please know that translation contracts are beyond my control. Out of 10 translations in process, 7 directly were negotiated by Jenny Child's department and/or OUP. Once OUP finalizes all the details, they send me and Seligman contract details, to just inform us. Even if we say no, they can move ahead legally without our consent. Because Oxford owns the copyrights of PPT manual and workbook. They are not even obliged to inform us, they do, out of courtesy. Therefore, please do stay in touch with Jenny Child.

All the best on your study... May Allah bless your efforts and this work ease the challenges faced by CP family.

[Quoted text hidden]

**Saima Waqar** <samiwaqar23@gmail.com>  
To: Tayyab Rashid <tayyab.rashid@utoronto.ca>

Thu, Oct 15, 2020 at 7:23 PM

Well i just got Jenny email. I Will be intouch with you Specially and jenny also in future , as Oxford gave the permission to me for translation.

BEST REGARD

[Quoted text hidden]

---

**Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
To: Saima Waqar <samiwaqar23@gmail.com>

Sat, Feb 6, 2021 at 12:26 AM

Hi Saima, I hope you are well.

Could you please update me about your contact with Jenny and Urdu translation of Positive Psychotherapy Manual+Workbook

Much appreciated  
Tayyab

**Tayyab Rashid, Ph.D., C.Psych** (he/him)  
Health & Wellness Centre

**UNIVERSITY OF TORONTO SCARBOROUGH**  
Student Centre, Room SL270  
1265 Military Trail, Toronto, Ontario M1C 1A4  
<http://www.utsc.utoronto.ca/hwc/>  
Follow us! Facebook | Twitter | Instagram #BeWellUTSC



If you require immediate support, please access:

- My SSP – 24/7 immediate counselling support for all U of T students 1-844-951-9700
- Good2Talk - Helpline for all post-secondary students 1-866-925-5454
- Scarborough Health Network Crisis Support 416-495-2891
- Distress Centres of Greater Toronto – 24/7/365 distress phone support 416-408-4357

For emergency shelters in Toronto: call 311 or Central Intake 416-338-4766 or toll free 1-877-338-3398

If you have questions about other student mental health related resources please visit: <https://mentalhealth.utoronto.ca/>

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[Quoted text hidden]

---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: Tayyab Rashid <tayyab.rashid@utoronto.ca>

Sat, Feb 6, 2021 at 3:09 PM

Assalam o Alaikum

Hope you will be fine by the grace of Almighty Allah. As according to my previous email i have told you she has given me permission of translation of Positive psychotherapy manual & workbook for my thesis so i am working on it .

I am forwarding her email also.

BEST REGARD

[Quoted text hidden]

---

2 attachments



image002.png  
20K



image002.png  
20K

---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: muhammad maaz <maazafnanomi23@gmail.com>

Sat, Sep 21, 2024 at 4:47 PM

[Quoted text hidden]

---

**Saima Waqar** <samiwaqar23@gmail.com>  
To: muhammad maaz <maazafnanomi23@gmail.com>

Sat, Sep 21, 2024 at 4:48 PM

----- Forwarded message -----

From: **Tayyab Rashid** <tayyab.rashid@utoronto.ca>  
Date: Tue, Sep 29, 2020, 6:00 PM  
Subject: Re: Positive Psychotherapy  
To: Saima Waqar <samiwaqar23@gmail.com>

[Quoted text hidden]



Saima Waqar <samiwaqar23@gmail.com>

---

## Positive Psychotherapy Manual - Thesis - Urdu

10 messages

---

**CHILD, Jenny** <Jenny.Child@oup.com>  
To: Saima Waqar <samiwaqar23@gmail.com>

Thu, Oct 15, 2020 at 7:09 PM

Dear Saima Wagar,

Thank you for your recent e-mail, my apologies for the delayed reply, it is a very busy time of year with Frankfurt Book Fair season. I was pleased to hear of your interest in translating the Positive Psychotherapy Manual and I can confirm that no Urdu translation of this title is currently available commercially.

We are pleased to grant permission for you to translate the Positive Psychotherapy Manual for your academic thesis only and not for distribution or publication in any way, either in print or digitally/online.

Full credit should be made on your translation as follows:

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I wish you success with your thesis

With best wishes,

Jenny

**Jenny Child**

Senior Rights Manager  
Academic Rights & Licensing

Oxford University Press | Great Clarendon Street | Oxford | OX2 6DP | UK  
Tel: +44 (0)1865 353 847 | Email: jennifer.child@oup.com

Please note I work Tuesday – Thursday each week

**From:** Saima Waqar <samiwaqar23@gmail.com>

**Sent:** 29 September 2020 14:57

**To:** CHILD, Jenny <Jenny.Child@oup.com>

**Subject:** Re: Positive Psychotherapy Manual

**Appendix I**  
**(Approval Letter For Data Collection)**

No. F. 1-127/06-NIRM  
Government of Pakistan  
*Ministry of National Health Services, Regulations & Coordination*  
**NATIONAL INSTITUTE OF REHABILITATION MEDICINE**  
Street No. 9, G-8/2  
.....

Islamabad the 1<sup>st</sup> December, 2022.

**Subject:- APPLICATION FOR DATA COLLECTION FOR PHD RESEARCH WORK  
FROM PSYCHOLOGY DEPARTMENT**

Reference your application on the above subject and to inform you that the competent authority has been pleased to consider your request for data collection from Psychology department of National Institute of Rehabilitation Medicine, Islamabad.

  
(DR/ADNAN RIAZ)  
Deputy Director (Admin)

**Mrs. Saima Waqar**  
Psychologist NIRM

**Appendix J**  
**(Caregiver Difficulties Scale)**

## CAREGIVER DIFFICULTIES SCALE

نمبر شمار	تفصیل	ہمیشہ	اکثر	کبھی کبھار	بہت کم	کبھی نہیں
1-	کیا آپ کا بچہ وقتاً فوقتاً بیمار ہوتا ہے؟					
2-	کیا آپ علاج کے بعد اپنے بچے کی حالت میں بہتری سے مطمئن ہیں؟	مکمل طور پر	بہت حد تک	کسی حد تک	کم حد تک	بالکل نہیں
3-	کیا آپ کو خوف رہتا ہے کہ آپ کے بچے کا مستقبل کیا ہوگا؟					
4-	کیا آپ اپنے بچے کی موجودہ حالت کے بارے میں پریشان ہیں؟					
5-	کیا آپ پریشان ہوتے ہیں کہ آپ کا بچہ دوسرے بچوں کی طرح کام نہیں کر سکتا (مثال کے طور پر سکول جانا، کھیلنا)؟					
6-	کیا آپ افسردہ محسوس کرتے ہیں کہ آپ کا بچہ خود سے کچھ نہیں کر سکتا؟					
7-	کیا آپ دوسروں کے ہاتھوں اپنے بچے کی توہین / تضحیک ہونے پر پریشان ہیں؟					
8-	کیا آپ خوفزدہ ہیں کہ آپ کا بچہ اپنی معذوری کے باعث حادثات کا شکار ہو جائے گا؟					
9-	کیا بچے کی دیکھ بھال آپ کو تھکا دیتی ہے؟					
10-	کیا بچے کی حالت آپ کو پرسکون ہونے سے روکتی ہے؟					
11-	کیا آپ کے پاس اپنی صحت کی دیکھ بھال کے لیے کافی وقت ہوتا ہے؟					
12-	کیا آپ کے پاس اپنی بنیادی روزمرہ ضروریات کے لیے مثلاً کھانا کھانے، سونے، نہانے کے لیے کافی وقت ہوتا ہے؟					
13-	کیا آپ محسوس کرتے ہیں کہ آپ کے پاس اپنا ہر کام کرنے کے لیے کبھی بھی کافی وقت نہیں ہوگا؟					



**Appendix K**  
**(Parental Burnout Assessment)**

**PARENTAL BURNOUT ASSESSMENT**

بیشہ	بغض میں ایک مرتبہ	بغض میں چند مرتبہ	مہینہ میں ایک مرتبہ	مہینہ میں چند مرتبہ	سال میں ایک مرتبہ	سال میں چند مرتبہ	کبھی نہیں	بیان	نمبر شمار
								میں بطور والد / والدہ اپنے رول سے تھک گیا / گئی ہوں کہ رات کی نیند نا کافی لگتی ہے۔	1.
								میں محسوس کرتا / کرتی ہوں جیسے بحیثیت ماں یا باپ میں اپنی سست کھو چکا / چکی ہوں۔	2.
								میں مکمل طور پر محسوس کرتا / کرتی ہوں کہ والد / والدہ کے رول نے مجھے خستہ حال کر دیا ہے۔	3.
								میں بچے / بچی کو دیکھ بھال کے لئے صرف توانائی رکھتا / رکھتی ہوں۔	4.
								میں نہیں سمجھتا کہ میں ایک اچھا باپ / اچھی ماں ہوں جیسا کہ میں پہلے اپنے بچوں کے لئے ہوتا / ہوتی تھی۔	5.
								میں والد / والدہ کے رول کو مزید برداشت نہیں کر سکتا / کر سکتی۔	6.
								میں محسوس کرتا / کرتی ہوں کہ میں ماں / باپ کی مزید ذمہ داری ادا نہیں کر سکتا / کر سکتی ہوں۔	7.
								مجھے یوں محسوس ہوتا ہے کہ میں ایک خود کار پائلٹ کی طرح کی طرح بچوں کی دیکھ بھال کر رہا رہی ہوں۔	8.

								9. مجھے لگتا ہے کہ میں حقیقت میں بطور والد / والدہ ٹوٹ پھوٹ چکا / چکی ہوں۔
								10. جب صبح جاگ کر میرا اپنے بچوں سے سامنا ہوتا تو میں دن کے آغاز سے پہلے ہی تھکا ہوا محسوس کرتا / کرتی ہوں۔
								11. مجھے بچوں کے ساتھ ہونے میں کوئی خوشی نہیں ہوتی۔
								12. مجھے لگتا ہے کہ بحیثیت ماں / باپ حالات کا مقابلہ نہیں کر سکتا / سکتی۔
								13. میں خود کو بتاتا / بتاتی ہوں کہ میں پہلے جیسی ماں / جیسا باپ نہیں رہا۔
								14. میں وہ سب کرتا / کرتی ہوں جو مجھے بچوں کے لئے کرنا ہو مگر اس سے زیادہ نہیں سوچتا / سوچتی۔
								15. میرے سارے وسائل میرے ماں / باپ ہونے کے رول کو ادا کرنے میں لگ جاتے ہیں۔
								16. میں بطور ماں / باپ مزید کچھ کرنے کو تیار نہیں ہوں۔
								17. مجھے اپنے ماں / باپ ہونے پر شرم آتی ہے۔
								18. میں والد / والدہ ہونے پر بالکل فخر محسوس نہیں کرتا / کرتی۔
								19. جب میں بچوں سے میل جول کرتا / کرتی ہوں تو مجھے لگتا ہے کہ میں اس سے بڑھ کر ان کے ساتھ نہیں ہو سکتا / سکتی ہوں۔
								20. میں اپنے بچوں کو مزید باور نہیں کروا سکتا / سکتی کہ مجھے ان سے کتنی

								محبت ہے۔	
								ہر وہ کام جو مجھے بچوں کے لئے کرنا ہوتا ہے اسکی سوچ سے میں خود کو تھکا ہوا محسوس کرتا/کرتی ہوں۔	21.
								عام معمولات کے علاوہ (کار میں لے کر جانا، سوتے وقت ملنا، اور کھانے کے وقت ملنا) میں اپنے بچوں کے لئے مزید کچھ نہیں کر سکتا/سکتی۔	22.
								میں بحیثیت ماں/باپ زندہ رہنے کی کوشش میں لگا/لگی ہوئی ہوں۔	23.

## Scoring

### Parental Burnout

Parental burnout was assessed with the Parental Burnout Assessment (PBA; Roskam et al., 2018), a 23-item questionnaire assessing the four core symptoms of parental burnout: emotional exhaustion (9 items; e.g., I feel completely run down by my role as a parent), Contrast with previous parental self (6 items; e.g., I tell myself I'm no longer the parent I used to be), loss of pleasure in one's parental role (5 items; e.g., I do not enjoy being with my children), and emotional distancing from one's children (3 items; e.g., I am no longer able to show my children that I love them) using a 7-point frequency scale from 0 to 6 (never, a few times a year, once a month or less, a few times a month, once a week, a few times a week, every day). The parental burnout score is computed by summing the item scores: higher scores reflect higher parental burnout levels. The internal consistency (Cronbach's alpha) of the scale in each country is figured in Table 1 (range: 0.85 to 0.97).

**Appendix L**  
**(Orientation of Life Scale)**

## ہدایات

مندرجہ ذیل سوالات کی فہرست دی گئی ہے اور آپ نے سات درجے کے سکیل پر جو کہ معنی کے لحاظ سے مختلف ہے اور جس کے دو مقرر کردہ جملے دیے گئے ہیں، ایک جواب کا انتخاب کرنا ہے۔ ہر سوال کے سات ممکنہ جوابات ہیں۔ آپ کو "1" سے لے کر "7" تک اس نمبر پر نشان لگانا ہے جو کہ آپ کے جواب کو ظاہر کرتا ہے۔ اگر نمبر "1" کے نیچے دیئے گئے الفاظ آپ کے مطابق صحیح ہیں تو "1" پر دائرہ لگائیے اور اگر نمبر "7" کے نیچے دیئے گئے الفاظ درست ہیں تو "7" پر دائرہ لگائیے۔ اگر آپ مختلف طریقے سے محسوس کرتے ہیں تو آپ اس نمبر پر دائرہ لگائیے جو کہ بہترین طور پر آپ کے احساسات کو بیان کرتا ہے۔

1-	کیا ماضی میں ایسا ہوا ہے کہ آپ ان لوگوں کے برتاؤ سے حیران ہوئے ہوں جن کے بارے میں آپ کا خیال تھا کہ آپ انہیں اچھی طرح جانتے ہیں۔	کبھی نہیں ہوا 1 2 3 4 5 6 7 ہمیشہ ایسا ہوا
2-	کیا آپ کو یہ محسوس ہوتا ہے کہ آپ ایک انتہائی صورت حال میں ہیں اور یہ نہیں جانتے کہ کیا کرنا ہے۔	بہت زیادہ دفعہ 1 2 3 4 5 6 7 شاذ و نادر یا کبھی نہیں
3-	کیا آپ کے احساسات و خیالات بہت گنڈھرتے ہیں۔	بہت زیادہ دفعہ 1 2 3 4 5 6 7 شاذ و نادر یا کبھی نہیں
4-	کیا آپ کے اندر ایسے احساسات ہیں جن کے بارے میں آپ کا خیال ہے کہ وہ نہیں ہونے چاہئیں۔	بہت زیادہ دفعہ 1 2 3 4 5 6 7 شاذ و نادر یا کبھی نہیں
5-	جب کوئی واقعہ رونما ہوا تو عموماً	اس واقعہ کا اس کی اصل اہمیت سے کم یا زیادہ دائرہ لگایا 1 2 3 4 5 6 7 چڑوں کو گھج تاسب میں دیکھا۔
6-	کیا ایسا ہوا ہے کہ جن لوگوں پر آپ نے بھروسہ کیا انہوں نے آپ کو مایوس کیا۔	کبھی نہیں ہوا 1 2 3 4 5 6 7 ہمیشہ ایسا ہوا
7-	کیا آپ کو یہ احساس ہوتا ہے کہ آپ کے ساتھ غیر منصفانہ سلوک کیا جا رہا ہے۔	بہت زیادہ دفعہ 1 2 3 4 5 6 7 شاذ و نادر یا کبھی نہیں
8-	بہت سے لوگ حتیٰ کہ وہ جو کہ مضبوط کردار کے مالک ہوتے ہیں بعض اوقات ہارا ہوا محسوس کرتے ہیں۔ ماضی میں آپ نے کس حد تک ایسے محسوس کیا؟	کبھی نہیں ہوا 1 2 3 4 5 6 7 ہمیشہ ایسا ہوا
9-	یہ احساس آپ کو کتنا زیادہ ہوتا ہے کہ حالات کو آپ یقینی طور پر قابو میں نہیں رکھ سکتے۔	بہت زیادہ دفعہ 1 2 3 4 5 6 7 شاذ و نادر یا کبھی نہیں
10-	کیا آپ کو لگتا ہے کہ جو کچھ آپ کے ارد گرد ہو رہا ہے آپ واقعی اس کی پروا نہیں کرتے۔	شاذ و نادر یا کبھی نہیں 1 2 3 4 5 6 7 بہت زیادہ دفعہ
11-	اب تک آپ کی زندگی میں	کوئی بھی واضح مقصد یا نصب العین نہیں تھا 1 2 3 4 5 6 7 بہت واضح نصب العین اور مقاصد تھے۔
12-	وہ کام جو روزانہ آپ کرتے ہیں وہ	بھر پور لطف اور تسکین کا باعث ہیں 1 2 3 4 5 6 7 تکلیف اور بھاری کا باعث ہیں۔
13-	یہ احساس آپ کو کتنا زیادہ ہوتا ہے کہ آپ روزمرہ زندگی میں بے معنی کام کرتے ہیں۔	بہت زیادہ 1 2 3 4 5 6 7 شاذ و نادر یا کبھی نہیں۔

**Appendix M**  
**(Multidimensional Scale of Perceived Social Support**  
**(MSPSS)**

## Multidimensional Social Support Scale

ہدایات:

مندرجہ ذیل بیانات کو غور سے پڑھیں اور بتائیں کہ آپ ان سے کس حد تک متفق یا غیر متفق ہیں۔ ہر بیان کے آگے دیئے گئے جوابات میں سے کسی ایک پر (✓) کا نشان لگائیں۔

بہت زیادہ متفق	زیادہ متفق	معمولی سا متفق	درمیانہ	معمولی سا غیر متفق	زیادہ غیر متفق	بہت زیادہ غیر متفق	
							1. ایک خاص شخص ہے جو ضرورت کے وقت میرے ارد گرد موجود ہے۔
							2. ایک خاص شخص ہے جس کے ساتھ میں اپنی خوشیاں اور غم بانٹ سکتا/سکتی ہوں۔
							3. میرا خاندان واقعی میری مدد کرنے کی کوشش کرتا ہے۔
							4. میں جذباتی مدد اور حمایت ضرورت کے وقت اپنے خاندان سے حاصل کرتا/کرتی ہوں۔
							5. ایک خاص شخص ہے جو درحقیقت میرے لئے سکون کا ذریعہ ہے۔
							6. میرے دوست واقعی میری مدد کرنے کی کوشش کرتے ہیں۔
							7. میں اپنے دوستوں پر انحصار کر سکتا/سکتی ہوں جب چیزیں غلط ہوں۔
							8. میں اپنے مسائل کے متعلق اپنے خاندان سے بات کر سکتا/سکتی ہوں۔
							9. میرے دوست ہیں جن کے ساتھ میں اپنی خوشیاں اور غم بانٹ سکتا/سکتی ہوں۔
							10. میری زندگی میں ایک خاص شخص ہے جو میرے احساسات کا خیال رکھتا ہے۔
							11. میرا خاندان فیصلہ کرنے میں میری مدد کے لئے رضا مند ہے۔
							12. میں اپنے مسائل کے متعلق اپنے دوستوں سے بات کر سکتا/سکتی ہوں۔

**Appendix N**  
**(Depression, Anxiety & Stress Scale (DASS-21))**

نوٹ: عملہ یوزرینوں کے مسائل سے جو کہ پیش آئے ہیں ان کے دوران آپ کو پتہ چلتا ہے کہ ہوتے ہوئے مہینوں ان کے مہینے 0، 1، 2، 3 مہینوں سے کسی ایک بصری پرکھانے کا ہیں۔ اس کے لیے آپ کے جوابات آگے یا خلاصہ نہیں لیا جاتا۔ کسی بھی یوزرین پر زیادہ وقت طبع نہ کریں۔

نمبر شمار	بیانات	تجلی نہیں	تجلی کھار	زیادہ وقت	بہت وقت
		0	1	2	3
1-	میرے لیے پرکھانے کا وقت زیادہ مشکل ہو جاتا ہے۔				
2-	مجھے یہ احساس ہوتا ہے کہ میرا منہ خشک ہو رہا ہے۔				
3-	مجھے کسی قسم کی کیفیت جذبات محسوس نہیں ہوتی۔				
4-	مجھے سانس لینے میں دشواری محسوس ہوتی رہی ہے (بغیر کسی جسمانی مشقت کے)۔				
5-	مجھے کسی کام کے کرنے کیلئے آواز کو مشکل محسوس ہوتا ہے۔				
6-	میں نے بعض حالات میں لیرینڈروزی روگن کا تجربہ کیا۔				
7-	مجھے کھانا کھانے میں دشواری ہے (مثلاً تھوکن میں)۔				
8-	میں نے محسوس کیا کہ میں بہت زیادہ دھاتی ٹھانسی استعمال کرتی ہوں۔				
9-	میں ایسے حالات سے تجرباتی تجربہ کر رہا ہوں جن میں میرے سانس لینے اور میری سانس لینے کا خطرہ تھا ہے۔				
10-	میں اپنا مستقل ڈیپریسڈ محسوس کرتی ہوں۔				
11-	مجھے اپنے آپ میں تھوڑا سا محسوس ہوتا ہے۔				
12-	میں کافی طور پر کوئی محسوس کرتی رہتی ہوں۔				
13-	میں کوئی محسوس کرتی رہتی ہوں۔				
14-	میرے پاس کوئی بھی نہیں ہے اور اس وقت کوئی مسئلہ نہیں ہے جو میرے کام میں رکاوٹ پیدا کرے۔				
15-	مجھے محسوس ہوتا ہے کہ مجھے اور دوسرے لوگوں کے ساتھ۔				
16-	مجھے کسی بھی کام میں دلچسپی نہیں رہی۔				
17-	مجھے محسوس ہوتا ہے کہ میں کسی قابل نہیں ہوں۔				
18-	مجھے محسوس ہوتا ہے کہ میں بہت جذباتی ہو جاتی رہتی ہوں۔				
19-	مجھے بلاوجہ کوئی جسمانی مشقت کے لیے کسی وجہ کی وجہ سے محسوس ہوتی رہی۔				
20-	میں کوئی بھی چیز کو فراموش ہو جاتی رہتی ہوں۔				
21-	مجھے یہ احساس ہوتا ہے کہ کوئی چیز ہے۔				

**Appendix O**  
**(Positive Psychotherapy Inventory)**

نمبر شمار	تفصیل	میری طرح بلکل نہیں	میری طرح نہیں	غیر جانبداران	میری طرح	بہت زیادہ میری طرح
1	میں خوشی محسوس کرتا ہوں۔					
2	میں اپنی صلاحیتوں / خوبیوں کو جانتا / جانتی ہوں					
3	میں ان لوگوں سے (بڑا ہوں / منسلک ہوا) محسوس کرتا ہوں جن کے ساتھ میں باقاعدگی سے بات چیت کرتا / کرتی ہوں۔					
4	میں کیا کرتا / کرتی ہوں معاشرے کے لیے اہمیت رکھتا ہے					
5	میں بلند حوصلہ شخص ہوں۔					
6	دوسرے کہتے ہیں کہ میں خوش نظر آتا ہوں۔					
7	میں ایسی سرگرمیوں پچھا کرتی / کرتا ہوں جو میری صلاحیتوں خوبیوں کا استعمال کرتی ہیں۔					
8	میں اپنے پیاروں کے قریب محسوس کرتا ہوں / کرتی ہوں۔					
9	میں محسوس کرتا / کرتی ہوں کہ میری زندگی کا ایک مقصد ہے،					
10	دوسروں کی کامیابی مجھے اپنی ذاتی مقاصد کے حصول لیے اقدامات کرنے کی ترغیب دیتی ہیں					
11	میں اپنی زندگی میں موجود اچھی چیزوں پر غور کرتی / کرتا ہوں اور شکر گزار محسوس کرتا / کرتی ہوں					
12	میں اپنے مسائل کو حل کرنے کے لیے اپنی صلاحیتوں / خوبیوں کا استعمال کرتا / کرتی ہوں۔					
13	مشکل وقت میں ہمیشہ کوئی ایسا ہوتا ہے جس سے میں مدد کے لیے رجوع کر سکتا / کر سکتی ہوں -					
14	میں مذہبی یا روحانی سرگرمیوں میں حصہ لیتا / لیتی ہوں					
15	میں نے اپنی زندگی میں بہت سے کام اچھے طریقے سے کیے ہیں					
16	میں پرسکون محسوس کرتا / کرتی ہوں۔					
17	ان سرگرمیوں کے دوران جن میں میری صلاحیتوں کا استعمال ہو، میری توجہ اچھی ہوتی ہے۔					
18	میرے ایسے رشتے ہیں جو بڑھنے اور بھلنے پھولنے میں مدد کرتے ہیں					
19	میں ایسے کام کرتی ہوں / کرتا ہوں جو کسی بڑے مقصد کے حصول میں حصہ ڈالتا ہے۔					
20	جب میں نے ایک مقصد مقرر کیا، میں اسے پورا کرنے کے قابل ہوں۔					
21	میں دل سے ہنستا / ہنستی ہوں					
22	جب میں اپنی صلاحیتوں کو استعمال کرنے والی سرگرمیوں میں مصروف ہوں تو وقت تیزی سے گزر جاتا ہے۔					
23	میری زندگی میں کم از کم ایک شخص ایسا ہے جو مجھے اور میرے احساسات کو سمجھنے کے لیے اچھی طرح سنتا ہے					
24	میں دوسروں کی مدد کے لیے اپنی صلاحیتوں کا استعمال کرتا / کرتی ہوں۔					
25	اپنے مقاصد / اہداف کو حاصل کرنا مجھے نئے اہداف حاصل کرنے کی تحریک دیتا ہے					

**Appendix P**  
**(Positive Psychotherapy Sessions)**



## Sessions Format (Positive Psychotherapy)

### Positive Psychotherapy Sessions Description

Sr. No.	Session Number & Title	Content	Main practices
Phase One			
1	Positive Introduction and Gratitude Journal	In this session client learn how to think about positive events in life. This session also teaches how to start the ongoing practice of cultivating gratitude through journaling positive experiences and appreciating the impact of gratitude.	1. Positive Introduction (Positive Story of Life) 2. Gratitude Journal writing 3 good (big or small) things that happened in whole day)
2	Character Strengths and Signature Strengths	Identification of Character Strengths & signature Strengths (positive traits that can be developed through practice and can contribute to personal growth & wellbeing	Assessment of Character Strengths & signature strengths

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3	Session Three: Practical Wisdom	This session presents the skills of practical wisdom. These skills teach us how to adaptively apply the signature strength in a balanced way to solve the problems	Know-how of strengths (learning application of 4 wisdom strategies, specificity, relevance, conflict reflection, reflection & calibration) t resolve three specific scenarios.
4	Session Four: A Better Version of Me PHASE II	Written plan based on positive, pragmatic & persistent self development	A better version of me: writing self development Plan
5	Session Five: Open and Closed Memories	<ul style="list-style-type: none"> <li>● Client recall, write &amp; process memories</li> <li>● Developing skills of dealing open and closed memories</li> </ul>	<ul style="list-style-type: none"> <li>☐ Relaxation</li> <li>☐ Memorizing bitter memories and explore for ways to deal adaptively.</li> </ul>
6	Session Six: Forgiveness	Clarifying the concept of forgiveness, as it's a process of change, rather than an event.	☐ REACH process

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			□ Letter of forgiveness
7	Session Seven: Maximizing versus Satisficing	Focus on the concept of Maximizing (aiming to make the best possible choice) and Satisficing (making a good enough choices)	□ Focusing on satisficing as compared to maximizing
8	Session Eight: Gratitude	Thanking a person in life who helped the client in past but at that time client didn't say thanks.	1. Gratitude letter 2. Gratitude Visit
	PHASE III		
9	Session Nine: Hope and Optimism	Learn to see the best possible realistic outcomes. They learn that challenges are temporary & to develop sense of hope	One Door closes, another door open
10	Session Ten: Post-traumatic Growth	Exploring deep feelings about any traumatic event that are bothering them.	Expressive writing of traumatic event in life
11	Session Eleven: Slowness and Savoring	Client learn that how to slow down oneself in different tasks in life and how to savor oneself. Mindfully focusing on positives	Slowing & savoring practices in life
12	Session Twelve: Positive Relationships	Identification & recognizing the strengths of their family members	Tree of Positive Relationship

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13	Session Thirteen:	Client learn how for style of responding a	Active constructive
	Positive	good news and which of these predicts	Responding
	Communication	relationship prediction	
14	Session Fourteen:	Client learn that how being Altruistic help	Gift of Time
	Altruism	both themselves and others	
15	Session Fifteen:	The focus of this session is to search and	Positive Legacy
	Meaning and	pursuit of meaningful endeavors for the	
	Purpose	greater good.	

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**Table 5.1**  
**POSITIVE PSYCHOTHERAPY: SESSION-BY-SESSION DESCRIPTION**

Session Number and Title	Content	Main Practices
<b>Phase One</b>		
1: Positive Introduction and Gratitude Journal	This session orients clients to the clinical milieu and clarifies client and clinician roles and responsibilities. This session also teaches how to start the ongoing practice of cultivating gratitude through journaling positive experiences and appreciating the impact of gratitude on well-being.	<p><i>Positive Introduction:</i>            Client recalls, reflects, and writes a one-page <i>Positive Introduction</i> sharing a story with a beginning, middle, and positive end, in concrete terms that called for the best in the client.</p> <p><i>Gratitude Journal:</i>            Client starts an ongoing journal to record three good things every night (big or small) and also writes what made these happen.</p>
2: Character Strengths and Signature Strengths	This is the first of three sessions focusing on Character Strengths and Signature Strengths, which are positive traits that can be developed through practice and can contribute to personal growth and wellness.	<p><i>Character Strengths:</i>            Client compiles his signature strengths profile by collecting information from multiple resources including self-report, an online measure, a family member, and a friend.</p>
3: Practical Wisdom	This session presents the skills of practical wisdom. These skills teach us how to adaptively apply our signature strengths in a balanced way to solve problems.	<p><i>Know-How of Strengths:</i>            Client applies four practical wisdom strategies (specificity, relevance, conflict, reflection and calibration) to resolve three specific scenarios.</p>
4: A Better Version of Me	This session looks at articulating and implementing a written plan of positive, pragmatic, and persistent self-development.	<p><i>A Better Version of Me:</i>            Client writes a self-development plan called <i>A Better Version of Me</i>, that uses her strengths adaptively through specific, measurable, and achievable goals.</p>
<b>Phase Two</b>		
5: Open and Closed Memories	In this session, clients recall, write, and process memories, and they learn to develop skills for dealing with open or negative memories.	<p><i>Positive Appraisal:</i>            After practicing relaxation, client writes bitter memories and explores four ways to deal with them adaptively.</p>
6: REACH	This session teaches that the process of REACH for Client Learning and for Client Empowerment and for Client Resilience and for Client Transformation.	<p><i>REACH:</i>            Client learns about REACH—a process of Resilience and for Client Empowerment and for Client Transformation.</p>

Session Number and Title

Content

Main Practices

8. Gratitude

This session expands the concept of gratitude by having the client recall and write to someone who is alive now and who in the past did something positive but who the client has never fully thanked.

*Gratitude Letter*  
Client reflects and writes a letter of gratitude to someone who helped in a time of need and who has not been thanked properly.

*Gratitude Visit*  
Client invites the person for whom he wrote the *Gratitude Letter* for a one-on-one meeting. Without explaining in advance, client reads the letter in person.

Phase Three

9. Hope and Optimism

In this session, clients learn to see the best possible, realistic outcomes. They learn that challenges are temporary and how to develop a sense of hope.

*One Door Closes, Another Door Opens*  
Client reflects and writes about the doors that closed and those that have opened.

10. Posttraumatic Growth

This session invites clients to explore their deep feelings and thoughts about a traumatic experience that continues to bother them.

*Expressive Writing*  
Client can complete an exercise of transporting troubling experiences to a place of assurance that this writing is seen by client's eyes, to be kept safe. The practice is completed and develops healthy coping skills, not overwhelmed by trauma.

11. Slowness and Savoring

In this session, clients learn how to deliberately slow down and develop an awareness of how to savor. In so doing, they learn to attend mindfully to the positives.

*Slow and Savor*  
Client takes one slow breath and one savoring moment of personality and life.

12. Positive Relationships

In this session, clients learn the significance of recognizing the strengths of their loved ones.

*Flow of Positives*  
The client shares with the session his/her strengths. Then on a large piece of paper, client shares the strengths of others, including himself.

13. Positive Communication

In this session, clients learn about four styles of responding to good news and which of these predicts relationship satisfaction.

*Active Listening*  
Client explores the most significant relationships in his/her life.

14. Altruism

In this session, clients learn how being altruistic helps both themselves and others.

*Gift of Time*  
Client plans to give time doing something that brings meaning.

15. Meaning and Purpose

This session focuses on the search and pursuit of meaningful endeavors for the greater good.

*Positive Legacy*  
Client writes how he/she is remembered, especially positive footprints.



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