

## **3.0 REVIEW OF SCIENTIFIC LITERATURE**

### **3.1 LITERATURE REVIEW ON PSYCHOLOGICAL WELL-BEING**

In the yesteryears, psychological well-being was measured primarily on the concepts of Positive functioning and Life satisfaction. The second concept gained more prominence among the sociallogisits. Those studies were focussed on one's judgement with reference to the state of well-being, state of mood, and the intensity of positive feeling at the time of the responses are considered as a prima facie(Ryff et al., 1995). Later, psychological well-being has been redefined in a much more comprehensive and structured way comprising six distinct dimensions Autonomy, Environmental Mastery, Personal growth, Positive relations with others, Purpose in life, and Self-acceptance(Ryff, 1989). This theoretical framework was tested on differential age, sex, and cultures and consistent with the eudaemonic perspective of happiness. Currently, this theoretical framework has been extensively used in the studies of psychological well-being.

According to the WHO, who are in the transitional period of development from old children to adolescencs with the age range of 10-19 years are defined as adolescents ("WHO | Very young adolescents," 2014). This stage is dominated by the puberty and the hormonal influence on the biological changes of the body, sexual, and brain (Patton et al., 2016). In this developmental phase, meeting the demands with increasing pace of rapid changes, competence in social and emotional skill sets and dispositions are very much required for flexible decision making. At the same time, they are also vulnerable because they step away from the parental influence and get more inclined towards peer relations and society around. At this juncture, the individual tries to crystallise to the complexity of socioeconomic, cultural, and

emotional resources to maintain their health and well-being for their future (Patton et al., 2016). According to the literature findings, the greater extent of potential intervention studies for adolescent health and well-being covered sexual and reproductive health, nutrition, and substance abuse. A meta analysis study pointed out aggression, psychopathy, conduct problems, and the locus of control are positively correlated with the antisocial spectrum of behaviour. Another study discusses the intentions of self-injuring is highly related to the heightened physiological arousal due to the negative and stressful events happened in life. The authors found that skin conductivity is more in the self-injuring adolescents than the non-injurers during a distressing task and poor ability in social problem solving abilities. These results claim that future studies should consider the importance of increased arousal, tolerance, distress, and social problem solving skills (Nock & Mendes, 2008). Further, in a critical review by (Jacobson & Gould, 2007) explained the epidemiology of non-suicidal self-injury among adolescents correlating with regulating the emotions, history of sexual abuse, anxiety, depression, social dissociation, hostility, smoking, suicidal ideation, and suicidal behaviours. A review study stated dysfunctional attitudes may increase the vulnerability of major depression during adolescence in relation to the negative mood and attitudes. Since most studies have used self reported assessments and considering it as a weakness in the studies, the future studies can be proposed with established cognitive models as the measurement of the cognitive vulnerability and the symptoms of depression through emotion priming and information processing models to have a broader understanding (Jacobs et al., 2008).

### **3.2 LITERATURE REVIEW ON PSYCHOLOGICAL WELL-BEING IN ORPHANS**

Adolescents staying in the orphanages have more challenging life and prone to negative life events and catastrophic behaviour perpetuated with social negligence, abuse, and trauma. These adversities sometimes even lead to psychological distress, depression, impulsivity, suicidal tendencies, and aggressive behaviour (Salifu Yendork & Somhlaba, 2014). Children growing up in the poverty have related socioemotional difficulties triggered by physical and psychosocial stressors (Evans & English, 2002). To subjugate this, support should not be restricted to providing the basic materialistic needs like food, clothing, and shelter. But also needs to provide the psychosocial support and counselling sessions along with the training to the care givers and teachers (Makame et al., 2007). The well-being of the care takers plays a vital role in maintaining the quality of life among the children staying in the orphanages. A study on mental illness in orphanages have shown that violence in the house and exposure to traumatic stress is positively correlated with aggressive behaviour (Hermenau et al., 2011). Further, a study examined emotional support, quality of life, and depression in orphaned children when their parents were alive and after their demise. Most of the children felt sad, depressed, angry when they were in that helplessness situation. It is very much important that the caregivers and the teachers need to be trained in diagnosing the psycho-social problems of the children and skillsets to deal with (Sengendo & Nambi, 1997). A cross sectional study on the children staying in the orphanages has reported that 16% of the 298 children were found to have behavioural and emotional problems. They predict that age, sex, and the reason for being in the institution might be the influencing factors for the persistent problems (Kaur et al., 2018). A similar study in Pakistan has reported the

behavioural problems are more with the children staying in the orphanages (Lassi et al., 2011).

Loneliness is common among left behind children like orphans (Jia & Tian, 2010) and it may be due to a poor relationship with the staff, caregivers, lack of love from community or memory of parental loss (Sebsibe et al., 2014). Orphan and vulnerable children suffer both disturbed social interaction and peer relationship problems (Bruce et al., 2009) and have a negative impact on social development due to loss of parental care ( Killian, B. & Durrheim, K. (2008); Crenshaw & Garbarino, 2007). Parental support was inversely related to baseline levels of loneliness (Spithoven et al., 2015).

A cross sectional study done in economically deprived area children have shown personality variables like impulsiveness perpetuated with aggressiveness and anxiety may lead to the problematic gambling behaviour (Vitaro et al., 1999). It is a personality trait that influences one's behavior and predispose the decision making (Franken et al., 2008; Zermatten et al., 2005)and the development of several psychiatric diseases (Moeller et al., 2001). Few studies reported contributions of personal, family, and peer resources were helpful in protecting them from psychophysiological symptoms associated with negative life events. A comparative study found out that there is a significant difference between children from intact family and children who are orphans on the scales of self-esteem, general self, extraversion personality, and academic achievement. A study done on the orphans from Rwanda on the trauma recovery process have seen that originally isolated, silent, and sad have shown a positive change of attitude and greater happiness with an activity based intervention(Perrier & Nsengiyumva, 2003).

### **3.3 LITERATURE REVIEW ON EMOTIONAL REGULATION, MENTAL WELL-BEING, AND HAPPINESS**

According to WHO, there is no distinct definition of mental well-being. It has different connotations based on the divergent groups and cultures. On a larger construct, it is defined as the state of well-being in which one realises his own abilities. A larger spectrum of research defined mental well-being as an individual's response based on their cognitive, emotional, and behavioural capacities. In a global scenario, 10-20% of children and adolescents are affected by mental problems (Sawyer et al., 2012). These disorders will burden the young people and later in their life. A systematic review reported that social and community based interventions along with the behavioural therapies are effective in reducing the symptoms of depression and other comorbidities (Das et al., 2016).

Few studies have also reported positive psychology interventions will ameliorate the well-being and reduce symptoms of depression. In a cross sectional study, better mental health is positively correlated with higher levels of happiness, self-efficacy, and academic performance and life satisfaction with better peer relations and less perceived stress (Heizomi et al., 2015). Another study tried to find the association between happiness and life satisfaction through relationship style and self concept. The results have shown self esteem and purpose in life are associated with higher levels of happiness and life satisfaction. However, having more friends is related to happiness but not the life satisfaction. Life satisfaction might be characterised by more comprehensive and profoundness in life than happiness (Chui & Wong, 2016). In a meta-analysis review, findings depict the primary prevention programs help children negotiate stressful transitions and substantially reduce their behavioural and social problems and also helps in increasing the competencies (Durlak & Wells,

1997). A longitudinal study implicated self efficacy, interpersonal relationships and belief to manage emotions promote happiness and satisfaction in life (Caprara et al., 2006).

Emotion regulation is the ability to respond to the demanding situations both intrinsically and extrinsically for evaluating and monitoring the reactions. The research literature demonstrated that emotion and behavioural regulation, emotional intelligence are linked to better psychosocial functioning (Zeman et al., 2006). Emotion regulation encompasses the components of neurophysiological, cognitive, and social interactions. (Extremera et al., 2007) suggested that adolescents with high perceived emotional intelligence tend to show the high satisfaction and quality of life and lower perceived stress.

### **3.4 LITERATURE REVIEW ON BEHAVIOURAL INTERVENTIONS**

Cognitive Behavioural Therapy (CBT) is effective in addressing a wide range of psychiatric disorders like panic disorder, social phobia, stress disorders, and childhood anxiety and depression (Butler et al., 2006) . CBT can be a firstline of treatments with anxiety and depression disorders(Tolin, 2010). When compared to the other treatments, CBT is having a higher response to aggression, criminal behaviours, and anger management (Hofmann et al., 2012). In a systematic review, CBT and other psychological models with both short and medium term follow-up have shown positive results on the outcomes of anxiety, depression, social, and general functioning among children and adolescents (Hetrick et al., 2016). A meta-analytic review of the effects of interventions on psychological well-being using RCT's has resulted in small but still significant effect size of the interventions

(Weiss et al., 2016). Further, a review of the adolescent health and well-being, with intervention specific to the socioeconomic and gender discrimination for sexual and reproductive health, nutrition, mental health, and substance abuse have depicted that it is important to recognise the ideal platform that can augment the scope of the effectiveness of the intervention (Salam et al., 2016). A meta-analysis on computer based CBT has revealed that the symptom score of Anxiety and depression has reduced and the effect size is more prominent with the therapist support (Spek et al., 2007). Another study reiterated the enduring effects of CBT in anxiety and depression symptoms (Hollon et al., 2006). A systematic review of the CBT for childhood and adolescent anxiety disorder has signified remission rate in the CBT group than the control. This has worked for the children six years and above (Cartwright et al., 2004).

### **3.5 LITERATURE REVIEW ON YOGA & MINDFULNESS**

Yoga is an ancient science having a lineage of more than 5000 years. Regular practice of yoga gives a therapeutic benefit and promotes health (de Barros et al., 2014). In the recent past, there are a number of studies explored the benefits of the yoga and mindfulness in the field of modern medicine. In a systematic review of yoga, they found that the practice of yoga has yielded better results than the conventional exercise groups in general health (Patel et al., 2012) along with that it also controls the central nervous systems which propogates the benefits of mental health(Ross & Thomas, 2010). A survey study in the USA has reported that yoga has benifitted across all the ages and has shown improvement with the scores of energy, sleep, happiness, social relations, and body weight (Ross et al., 2013) and also reduces stress and anxiety and improves the autonomic functions (Sengupta, 2012) when compared baseline and after the intervention with the exercise group and yoga

group. Yoga has significant changes in tasks related to executive functions and cognition (Gothe et al., 2013). A comparative study on the stress and academic performance showed better results with the practice of yoga (Kauts & Sharma, 2009).

Mindfulness is defined as the principle teachings of Buddhist Meditation and it refers to “being aware in the current moment in a non-judgemental manner”(Brown et al., 2007). According to an MRI study, mindfulness has a profound influence on the brain activity and also in controlling other psychometric covariates (Ludwig & Kabat-Zinn, 2008). In a meta-analytic review, Mindfulness studies are primarily concerned with the clinical studies. Some studies with mindfulness have documented improvements in attention, intelligence, social skills, positive and negative emotions, emotion regulation, self-control and self-realization, well-being (Eberth & Sedlmeier, 2012), and improvement of behavioral regulation (Keng et al., 2011). It also plays an important role in reducing maladaptive impulsive behavior (Peters et al., 2011), substance abuse (Brewer et al., 2009) social anxiety, managing stress (Kabat-Zinn, 2004) and depression in adults (Jazaieri et al., 2012).

### **3.6 LITERATURE REVIEW ON YOGA AND MINDFULNESS INTERVENTIONS FOR CHILDREN**

There is an increasing trend of interest in the potential benefits on the applications of yoga for children at schools. According to the current literature, there is a clear increase in the stress levels and performance pressure and concerns about the behaviour, health, and well-being among children (Galantino et al., 2008; Stueck & Gloeckner, 2005). Yoga practices comprising asana, pranayama, and meditation have documented increase levels of academic performance (Kauts & Sharma, 2009) and increased performance in the cognitive assessments and executive functions

(Gothe et al., 2013). A study on the physiological parameters and yoga have shown improvement in the hand grip strength, muscular strength, and grip endurance (Mandanmohan et al., 2003). The practice of suryanamaskara and pranayama has shown better pulmonary functions (Dinesh et al., 2015) and muscular endurance (Bhavanani et al., 2011). In a systematic review of fear of fall, balance, and proprioception, yoga has shown positive results with the balance (Jeter et al., 2014). These days children experience more stress and mental health challenges because of the expectations and demanding situations when compared to the past. Currently, yoga is becoming popular with the problems related to the mental health. A recent study on adolescents evaluated with a self-reported measure yoga can be a feasible option for controlling anxiety, mood, perceived stress (Khalsa et al., 2012). A review article on nurturing the mindfulness in children and adolescents combining with yoga and meditation has produced better results with the problems of mental health (Greenberg & Harris, 2012). In a review on yoga for children, the article discussed the emphasised the potential benefits how yoga helps in coping up with the stress and bring positivity to the well-being and mental health. Similarly, in a school setup yoga helps in improving the resilience, mood, and self-regulation (Hagen & Nayar, 2014).

Mindfulness based interventions are rapidly growing in dealing with the psychiatric conditions. Applications of mindfulness based approaches with adults have shown significant results and it is still in the premature stage of applications in children (Burke, 2010). A study assessed the mindfulness through a self reported measure and found positively correlated with quality of life, academic competence, and social skills (Greco et al., 2011) in an 8 week. Mindfulness based intervention on ADHD children have shown positive results in behavioural and neurocognitive impairments

(Zylowska et al., 2008) in a 6 week trial on children with anxiety disorder with mindfulness has shown promising improvements (Semple & Miller, 2005). Integrating mindfulness in the education system for teachers and students has reported practices of mindfulness has enhanced attention, self-regulation, and well-being (Meiklejohn et al., 2012). In a meta-analytic review, studies with mindfulness have examined the variables of attention, emotion regulation, personality traits, stress, and well-being. The results have shown varied effect sizes across the variables and the variables with mindfulness meditation have reported larger effect sizes when compared to MBSR (Eberth & Sedlmeier, 2012).

### **3.7 LITERATURE REVIEW ON YOGA-BASED INTERVENTIONS ON PSYCHOLOGICAL WELL-BEING:**

In this current generation, onset of mental health problems can be seen from the childhood onwards. Yoga and Mindfulness have gained more prominence in the field of complimentary and alternative medicine and used widely to address the psychological issues. An RCT on yoga and psychological well-being included in to the high school curriculum has reported improved scores in the mood disturbances (Noggle et al., 2012). A study with astanga yoga for obese children has reduced the weight for 2kg and improved in their self-esteem and psychological well-being (Benavides & Caballero, 2009). A study on the stress, anxiety, pain, and other psychological variables with mindfulness based stress reduction program for 8 weeks has shown significant results on the decreased symptoms of perceived stress, anxiety and increase in the well-being (Carmody & Baer, 2008). Further, in a systematic review on meditation programs has documented moderate level of increase in the scores of anxiety, depression, and quality of life (Goyal et al., 2014). Furthermore, an RCT they tried to document the data on state and trait anxiety and

subjective well-being among college going students with yoga as an intervention. The data was collected at the starting of the academic year and again with a gap of one year and second year showed significant reduction in the state and trait anxiety scores and increase in the subjective well-being (Jadhav & Havalappanavar, 2009). Another study with a 10 day intervention on lifestyle modification has resulted in increasing the subjective well-being and reduction in stress (Sharma et al.,2008). In a 4 year qualitative study on college students by teaching hatha yoga, meditation, and qugong along with mindfulness based stress reduction program has reported poitive physical, emotional, mental, spiritual, and interpersonal skills (Schure et al.,2008). In a comparative study on mindfulness, self-compassion, and psychological well-being is postively correlated with the expereinced meditators than non-meditators (Baer et al., 2012). A randomized control trail on patients with menstrual irregularities with yoga nidra has shown reduction in the anxiety scores, depression, general health, and well-being (Rani et al., 2011). A recent systematic review on psychological well-being and behavioural functioning in prisoners with yoga and mindfulness meditation have reported positive effects (Auty et al., 2017). In a contrlled pilot study on university students meditation awareness program has significant influence on the psychological well-being and dispositional mindfulness (Van Gordon et al., 2013).

### **3.8 LITERATURE REVIEW ON YOGA BASED INTERVENTIONS FOR ORPHANS**

Emperical evidences show that there is a dearth of data in the research of yoga and mindfulness for orphans. In a study on yoga for children in orphanages for a three months of intervention have reported there is an improvement in the executive functions and physical fitness paramenters and reduction in the scores of loneliness

(Purohit et al., 2016; Purohit & Pradhan, 2017). Further, a study on trauma related distress among children living in orphanages with an 8 week of yoga intervention shown improvements with the trauma and well-being (Culver et al., 2015). Furthermore, a study by (Costello & Lawler, 2014) has shown reduction in stress levels for children with low socio-economic background. A study on the emotionally disturbed adolescents undergoing mindfulness based cognitive behavioral therapy have shown effective results in the self-reported and teacher reports with anxiety, depression, hopelessness, and perceived stress (Sinha et al., 2010).

### **3.9 CONCLUSION**

Children are the most vulnerable individuals receiving the ill effects of the crisis and conflicts happening around the world. Many children are orphaned due to war, invasion, natural disasters, chronic poverty, diseases etc. According to the United Nations Children's Fund (UNICEF), a child below 18 years of age who has lost one or both parents to any reason of death considered as an orphan. According to the recent statistics, there are 153 millions of children considered as orphans worldwide and 61 million in Asia alone. Out of which, there are around 20 million orphans in India. This number remaining on the higher side is because of the ratio of adopting an orphan is far less in India when compared to the global scenario. In India, the majority of orphans are either because abandoned by deprivation of parents or who lost their parents by death. Geographically, there is a larger percentage of orphans in Central and Eastern India when compared to the North and South.

Orphaned children and teens who are living on their own have a very low quality of life and other health related issues. Orphan children staying in the orphanages have multi-dimensional problems which encompass the domains of psychophysiological and social well-being. The catastrophic adversities are major because of poor

infrastructure, hygiene, and malnutrition. Social stigma, social negligence, abuse, and trauma faced in their childhood have a very strong influence on their psychological and emotional well-being. Many studies have shown that orphans are more prone to developmental changes in the adolescence including disengagement from school, vulnerability to the peer influence, and the pressure to engage in participation in antisocial or risky behaviours.

Review of empirical evidence enumerates that Yoga and Meditation practices are promising in addressing these challenges. Further, yoga is a viable tool to address the symptoms of psychiatric problems. Furthermore, studies show yoga helps in reducing the symptoms of depression, anxiety, anger, and also it helps in improving the psychophysiological and emotional well-being. A recent study shows increased Mindfulness could improve behavioural and neurocognitive impairments among the adolescents.