

# **STUDY ON SOCIAL INCLUSION OF YOUNG ADULTS WITH INTELLECTUAL DISABILITY**

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University of Calicut for the award of the  
Degree of*

**DOCTOR OF PHILOSOPHY IN PSYCHOLOGY**

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2022**



## **DECLARATION**

I, Raheemudheen.P.K. do hereby declare that this thesis, “**Study on Social Inclusion of Young Adults with Intellectual Disability**” is a bonafide record of the research work done by me under the guidance of **Prof. Baby Shari P.A.**, Professor, Department of Psychology, University of Calicut. I also declare that this thesis has not been submitted by me for any award of a degree, diploma, associateship, fellowship or other similar title or recognition.

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**CERTIFICATE**

This is to certify that this thesis entitled “**Study on Social Inclusion of Young Adults with Intellectual Disability**” is a bonafide record of research work carried out by Mr. Raheemudheen. P. K under my supervision and guidance, and that no part of this has been presented before for the award of any degree, diploma, associateship or fellowship of other similar title or recognition.

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## **ABBREVIATIONS**

YAID	:	Young Adults with intellectual disability
PWD	:	Person with intellectual disability
RPWD	:	Right of person with intellectual disability
ICF	:	International Classification of Function
WHO	:	World Health organization
APA	:	American Psychological Association
UNCRPD	:	United Nation Convention on the Rights of Persons with Disabilities
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
ILO	:	International Labour organization
MMR	:	Mixed Method Research
CFA	:	Confirmatory factor analysis
EFA	:	Exploratory factor analysis
SPSS V 16	:	Statistical Package for the Social Sciences version 16



## **ABSTRACT**

Young adults with intellectual disability are generally considered one of the most marginalized groups among other types of disabilities (WHO & UNFPA, 2009; Hall, 2010). They experience a lack of opportunity for social participation and have limited opportunity to develop meaningful and age-sensitive interpersonal relationships and also experience multi-level barriers to social inclusion. Social inclusion and social life of young adults with intellectual disabilities are significantly neglected and their issues are less addressed. Available literature has shown that very few studies have been conducted to identify how young adults with intellectual disabilities develop and experience community participation, interpersonal relationship, and a sense of belonging during their period of transition to adult life. Hence, there is a pressing need to focus on and explore the subjective and objective elements of social inclusion of young adults with intellectual disabilities. In this context, the aim of the present research was to explore the experience of social inclusion of young adults with intellectual disability and explore various factors that act as facilitators and barriers to social inclusion and also to explore the perceived benefits of social inclusion of young adults with intellectual disability. The understanding of factors facilitating social inclusion and identifying contextual factors that may limit the experience of social inclusion would be useful for rehabilitation professionals, policy-level makers and other service providers to design and implement appropriate intervention programs to enhance the social inclusion of young adults with intellectual disability.

The current study adopts a mixed-method research design, qualitative approaches helped to understand the subjective experience of social inclusion by exploring through tools like interviews, whereas quantitative approaches help to derive objective components of social inclusion such as the level of community participation and details of interpersonal relationships, etc. by using tools like a questionnaire and scales. The method of the study can be elaborated under three broad phases and data were collected from different levels of participants such as; young adults with intellectual disability, their parents/caregivers, teachers, and community members. Phase I attempted to explore the current life status of young adults with intellectual disability and exploration of domains of experience of social inclusion among young adults with intellectual disability. Phase II attempted to

identify the process and facilitating factors of social inclusion, the benefits of social inclusion, and the exploration of barriers to social inclusion of young adults with intellectual disability was also conducted. Phase III involved a detailed exploration of community members' attitudes as a barrier to the social inclusion of young adults with intellectual disability. The result & discussion was discussed in six sections in accordance with the objectives of the study.

### **Major findings**

- Only a very few numbers of young adults with intellectual disability were engaged in age-appropriate activities and the majority of them were involved in age-inappropriate activities. A significant number of young adults were sitting idle at home and not involved in any activities. This unjustified segregation from age-appropriate life activity and lack of choice for young adults with intellectual disability is considered as form of discrimination.
- Young adults with intellectual disability have lower levels of participation in education, employment, and recreational activities. The majority of young adults with intellectual disability were not involved in any form of job or productive activity. They have poor levels of friendship with non-disabled peers. The majority of them were faced with difficulty in utilizing facilities of the community which would facilitate their independent life.
- Social inclusion of young adults with intellectual disability is identified as a multidimensional process and can be influenced by individual, interpersonal, and community-level factors, along with structural factors and policy factors.
- Attitude management towards young adults with intellectual disability, opportunities for social participation, and age-appropriate skill training have been identified as the three core factors that facilitate the social inclusion of young adults with intellectual disabilities.
- Self-empowerment, increased social participation, financial independence, satisfaction among their parents and caregiver, and becoming a productive member are the major identified benefits of social inclusion of young adults with intellectual disability.

**Keywords:** Young adults, Intellectual disability, Social inclusion, community participation

CHAPTER 1  
**INTRODUCTION AND LITERATURE REVIEW**



## **Person with Disability and Social Life**

More than one billion people in the world live with some form of disability, of whom nearly 200 million experience considerable difficulties in functioning. In the years ahead, disability will be an even greater concern because its prevalence is on the rise due to population growth, ageing, and the emergence of chronic diseases (World Health Organization & world bank, 2011). As per the census 2011, in India out of the 121 population, about 2,68 Cr. persons are identified with any form of Disability (Ministry of Statistics, 2016). The Kerala state is also way ahead of the national average in terms of the number of people with various kinds of disabilities. Around 2.32 percent of the population of Kerala is disabled in different domains of their life (KSSM, 2015). As per these censuses, about 75% of person with disability belonged to rural areas with relatively poor access to education and employment and without meaningful social participation. Studies from literatures and official documents evidence that person with disabilities often experiences discrimination, pervasive stigma, and social exclusion. Person with disabilities are generally considered one of the most marginalized groups in the community (WHO & UNFPA, 2009; Hall, 2010a). They experience stigmatizing attitudes from most parts of the community. In addition to this prevailing stigma, inaccessible environments, lack of opportunity for social participation, and systems and institutional barriers, these factors may lead to discrimination and social exclusion of them. Often they are not able to meet their basic human need and right on an equal basis with others (Bathje, 2016). As a cumulative outcome of these discriminative experiences, people with disabilities usually have lower educational achievement, poorer health, lower economic opportunities, poor social participation, and are at increased risk of poverty (White et al., 2018; Crane, 2001).

All people, with and without disabilities, share psycho-social needs ie, the need for affection, and the experience of belongings and acceptance as valued by individuals through presence and participation within a community setting (Brown & Miller, 2016). However, Person with disability continues to face prejudice and discrimination, which limit their social participation and social inclusion. They have

limited opportunities to develop meaningful and age-sensitive interpersonal relationships. Overmars-Marx et al. (2014) reported that, “In different life domains such as work, education and community participation, persons with disabilities face challenges in participating in a manner similar to persons without disabilities and may have fewer meaningful relationships and experience more loneliness”. Rasmussen et al. (2015) also reported that “Persons with disabilities often feel they have no say or power in their own lives. This may be linked to poor social activities, or access to jobs, education, and other services. This can lead to exclusion and poor social participation” (P. 19).

Persons with intellectual disabilities around the world are excluded from mainstream social life from participation in the social, economic, and cultural life of their communities. Reviews of the disability empowerment movement are evident across cultures, they are generally perceived by the public as an object of pity and they are less capable of dignified social life. Historically individuals with intellectual disabilities were abused, shunted, exploited, and margined from all corners of the community. WHO (2010) documented that stigma and discrimination manifest themselves in a lack of social inclusion. Social exclusion and discrimination on the basis of disability mean any distinction, exclusion, or restriction that has the purpose or effect of preventing people with disabilities from having access to their rights. From the available reviews, it could be observed that the experience of social exclusion and discrimination of PWD create potential negative impacts in all aspects and domains of their lives such as education, employability economic, social, cultural, civil, and so on. Mactaggart et al. (2016) reported that people with disabilities also commonly experience stigmatizing attitudes and multiple cynical myths exist about them. These inaccurate perceptions and myths are spread across society and they can often result in and reinforce social exclusion. Jones et al. (2012) also evidence that this stigmatized perception is often one of the driving factors behind discrimination against people with disabilities. Multiple reviews (Simplican et al., 2015; Hall, 2010) reported that, in addition to stigma against individuals with a disability, the family members of people with disabilities are also stigmatized or discriminated against by association.



United Nation and World Health Organization have recognized that “Exclusion of people with disabilities from community participation is a human rights issue”. As advocated by the guidelines of the UN Convention on the rights of persons with disabilities (UNCRPD, 2006) held in 2006, person with disabilities have the right to full participation, non-discrimination, and equality of opportunity in all sectors of Community. International policy documents (such as the UN 2030 Agenda for Sustainable Development Goal), also identified the exclusion of people with disabilities as a potential development issue; the burden due to disability is highest in developing countries and there is strong evidence that poverty and disability are interrelated. The voices and needs of people with disabilities are ignored and they are being ‘left behind in many essential areas of the development process.

However today, to ensure the overall empowerment of person with disabilities there are various right-based legislative measure initiatives by the United Nation (i.e., Convention for Right of Person with Disability – 2005) and Govt. of India (i.e., RPWD Act-2016), These potential legislatives have promised the protection from such discriminative social attitude (Chibaya et al., 2021; Gowda et al., 2019). These Acts declare that people with disability have the right to equal, opportunities for education, career, and social life. They have the right to be part of all social activities without any discrimination (Doyle Guilloud, 2019). These Acts endorse that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms for dignified social life. One of the core principles in these right-based policies and guidelines is that people with disabilities have possibilities for full and effective participation and inclusion in society (Gowda et al., 2019). United Nations (2016) affirms that all social development efforts and policies must be inclusive of all (including people with disabilities) is core to the UN 2030 Agenda for Sustainable Development and achievement of the SDGs. Inclusion of people with disabilities is clearly itemized in five of the goals, including in SDG target 10.2: ‘By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or another status’. (Overmars-Max et al., 2014). Hastbacka et al. (2016)

observed that “Despite these ambitious legislative initiatives to enhance societal participation and to counteract exclusion and discrimination of persons with disabilities, there are many different barriers that stand in the way of a full societal participation, such as discriminating attitudes, lack of opportunity for social participation and stigmatized attitude from fellow beings.” In order to fulfill the promises of UNCRPD and other legislative measures to empower the social life of persons with disability, there is need to have a well coordinated, comprehensive, and sustainable effort in each level of the community such as individual, family, community, and policy level.

### **Person with Intellectual Disabilities; Most Excluded Group**

Available literature review evidence that the majority of the studies conducted in the area of community participation and social inclusion have considered disabled people as a general and as a homogeneous category. But in reality, disability is a heterogeneous group and their need and experience of being disabled are varied in each type of category of disability. Among the various group of disabilities, person with intellectual disability (ID) are the most marginalised category. Due to their lack of social skills and deficit in adaptive skills, they tend to experience a significant level of social exclusion and they have poor interpersonal relationships (Dell’Armo & Tasse, 2019). Individuals with intellectual disability are a group of people experiencing a wide range of challenges in independent functioning. American Association on Intellectual and Developmental defined Intellectual disability as “a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills” which originates before the age of 18” (AAIDD, 2008).

The deficits in social and adaptive skills are the central characteristic of person with intellectual disabilities (Sukhodolsky & Butter, 2007). Persons with intellectual disability have varying degrees of deficits in social skills, which can lead to isolation, lack of coping skills, increased maladaptive behaviors, poor interpersonal relationships and overall social exclusion. These individuals

experience difficulties to meet their day-to-day activities and generally depend on their caregivers. This dependency varies according to the severity of their cognitive deficits and the level of care and training they had undergone.

The general ability of Intellectual disability is varied. Some individuals (i.e., mild level of intellectual with adequate training) function quite well, even independently with minimal support; they have effective individual and social functioning. Others category of intellectual disability (particularly moderate and severe level of intellectual disability) have significant cognitive, adaptive, and social skill deficits and they require constant care and support for day-to-day activities. Most of the intellectual disabilities in the category have a very limited social life. Due to significantly delayed or impaired in many cognitive functions, individuals with ID experience difficulty in learning the required skill and norms for meaningful social life (American Psychiatric Association [APA], 2022; AAIDD, 2010).

In comparing to other categories of disabilities, persons with intellectual disabilities are experiencing a more stigmatized attitude and social exclusion (Pelleboer-Gunnink et al., 2019). They are often considered objects of pity with no chance for a life of dignity, often believed to be a curse or a burden to a family. Also, various cynical myths are attached to their life (Scior, 2011; Werner, 2015). Person with intellectual disability generally experiences functional deficits due to cognitive and/or social deficits that began during early development (Dell' Armo & Tasse, 2019). Studies also reported that they participate less frequently in social activities than other disabled and non-disabled peers, even though they strongly express an aspiration to participate in social activities at both interpersonal and community levels (Verdonschot, 2009). Abbott and McConkey (2006) reported that “adults with intellectual disability shared that their lack of personal abilities and skills are barriers to their social inclusion. These skills may include their lack of self-motivation, lack of knowledge about healthy living, poor literacy and numerical skills, and poor knowledge of their area”. McConkey et al. (2005) described that people with intellectual disability who are more dependent on their self-care are not

as involved with their families and community (Hastbacka et al., 2016). Crane (2001) explained that “people with intellectual disability have been isolated from the mainstream activities of the community and will remain isolated as long as society perceived them as incapable to experience the meaningful social relationships”.

### **Young Adults with Intellectual Disability**

In order to understand the experience and life process of person with intellectual disability, there is a need to explore their age-related life experience and how their specific developmental needs are met through interaction with the environment. Current reviews evidence that researches in the area of intellectual disability, very little attention has given to understand the social life of young adults with intellectual disability. Most of the studies particularly in Indian context conducted on the theme of inclusion of children with intellectual disability particularly in school settings. Social inclusion and social life of young adults with intellectual disabilities are significantly neglected and their issues are less addressed. The period of young adulthood is a critical life period for person with disability, during this period they are undergoing a transition from childhood to adulthood. A young adult is generally a developmental period ranging in age from their late teens or early twenties to their thirties (Arnett, 2000). According to Arnett (2000), “the major developmental goals of this period young adulthood are forming intimate relationships and other major commitments involving career and life goals”. Reviews reported that for young adults with intellectual disability the transition is often a confusing and difficult process as it is not properly planned and in addition, they experience poor support from the family level and community level (Salt et al., 2019). Multiple studies reported that experience or transition of an adult with intellectual disability similar to non-disabled youths (Larkin et al., 2011; Midjo & Aune, 2017). However, there is a notable difference in their experience of social inclusion and social participation. Stewart et al. (2010) observed that this developmental transition process is especially difficult for young adults with intellectual disability. They significantly get worse outcomes after leaving high school than students with other types of disabilities (Grigal et al., 2011).

In Indian context, particularly in Kerala education system, children with disabilities usually get special training in either inclusive setting or segregated settings till the age of 18. After the age of 18 years, despite their skill deficits they have to leave high school without proper plan for how to integrate and adapt to independent adult life. Even while in high school, individuals with intellectual disability are not getting adequate training in the social skills they need to prepare them for adult life e.g., independent living skills, livelihood-based vocational skill, age-related interpersonal relation, and meaningful social relationships etc. (Bouck & Joshi, 2016). While analysing the practices in Kerala, it could be identified that, there is no proper system for ongoing education and support for young adults with intellectual disability. After completing high school, many young adults with intellectual disability hardly get the required age-sensitive support and services both in higher education and social life. Grigal et al. (2011) summarized that, due to these adverse socio-educational situation, young adults with intellectual disability have significant issues to adjust developmental needs of purposefully engaging in social life.

***a. Period of Forming Friendships as a Stepping Stone for Social Inclusion***

Young adults with intellectual disability have significantly poor interpersonal relationships and they participate less frequently in social activities than other disabled and non-disabled peers, even though they express a desire to participate and form intimate relationships (Verdonschot, 2009). In his famous work, Arnett (2000) postulated that “forming an intimate relationship with the same age group is one of the important milestones of young adults. He conceptualized the period of young adulthood as emerging adulthood”. Arnett (2000) discussed “that period of young adulthood is in many respects the age of possibilities for forming intimate relationship, friendships, identity and social roles formation. Forming an intimate relationship is a normal and expected developmental milestone of this transition period”. This friendship provides companionship, social-emotional support which is the known determinants of better social adjustment and well-being (Larkin et al., 2011). This interaction with friends would facilitate their social development specifically their socialization process as valued adult. Most of the time this friends

group act as a major source of social support which is the inevitable determinant of quality of life. However young adults with intellectual disability have a smaller number of available friendships. Also researchers reported that they have limited social network and most of the time they remain dependent on family members (Kamstra et al., 2015). Hall (2010) also reported that even though friendships are an important part of social inclusion for young adults with Intellectual disability generally have limited opportunities to develop and sustain friendship even though they have great desire for spending time with friends. These experience of intimate interpersonal relationships are considered as an important determinate of the well-being of young adultswith intellectual disability (Mattila et al., 2017).

***b. Restricted social participation and social inclusion of young adults with Intellectual disability***

Young adults with intellectual disability experience restricted social participation and social inclusion because they have very few structured opportunities for social participation and very few available appropriate activities. Ainsworth and Baker (2004), in their research, discussed that person with intellectual disability has fewer choices of activities according to their developmental need such as forming friendship with same age groups and independent living. Gaylord and Hayden (1998) reported that individuals with intellectual disability have limited access to higher education and community involvement. In the same line of these findings, Hall (2010) also reported that “Many young adults with intellectual disability are unable to participate in the social and recreational events of a community because they lack supporting friendships, transportation, adequate personal funds, personal assistance, or the knowledge of how to find and navigate recreational activities (Hall, 2010; Ainsworth, & Baker, 2004; Keogh et al., 2004).

Social participation and integration are a vital aspect of life for young adults with ID. Bigby et al. (2007) in their study suggested that young adults with intellectual disability should be able to live like others in the community and fulfill typical social roles. Carroll et al. (2018) reported that participation in community activity is major determinant of health and wellbeing. Bedell et al. (2013) evidence that community participation would promotes health and wellbeing through

pathways such as it provides a sense of belonging, opportunities for physical activity, and networks of social support.

However, Cobigo et al. (2012) discussed that, “young adults with intellectual disability have limited opportunities for mobility and participation in community activities than their same age people without disabilities”. Similarly, Brown and Gordon (1987) and Maher et al. (2007) also found that “participation in community activities remains low for young adults with disabilities compared to peers without disabilities”. They also found that “young adults with disabilities participated in less varied activities, more sedentary activities, spent less time with peers, and participated in more activities at home”. Keogh et al. (2004) and Hall (2010) also observed that many of the recreational and social interactions of young adults with Intellectual disability have been limited to their families.

There are multiple barriers imposed by the environment that limit the achievement of age-related social participation of young adults with intellectual disability (Hall, 2010). Hall (2010) observed that Young adults with ID are isolated from the rest of community through various activities that are designed specifically for them such as segregated educational and vocational setting and lack expectation from them. Ainsworth and Baker (2004) reported that, few of them are placed in jobs that may not even be considered true work and no scope of valued social life. Due to lack of adequate opportunity for social interaction and community participation, most of them remain isolated in their home or neighbourhood (Hall, 2016). This has serious consequences for their overall wellbeing (Wilson et al., 2016).

There is some latest developmental initiative for the empowerment of person with disability, it is very evident that most of the young adults with intellectual disability are living in a community setting and the community has started giving at least little attention for their voice and specific needs (Esteban et al., 2021). However, living in a community setting could not promise the experience of acceptance and inclusion in different domains of their life (Amado et al., 2013b). In the same line, Salles and Barros (2013) also discussed that “The fact that a young adults lives in the community setting does not mean that he or she is included and is integrated to be a part of that community.” To ensure the social inclusion,

engagement in meaningful and satisfactory social roles is necessary, in which community members from different sectors also to be ready to accept young adults with ID as a contributing member of community with full rights for dignified social life.

In a review conducted by Stewart et al. (2010) reported that most of the studies emphasized the role of adaptive behaviour and social skill are important factors for the successful social participation of young adults with ID. Interventions studies conducted to enhance social inclusion is strongly recommended to suggest that people who live or work with young adults with ID should be prepared to support them in various phases of life to social life in a way that enhances their adaptive and social skill (Louw et al., 2019b; Verdonschot et al., 2009b). Studies also evident that adaptive behaviour is a significant predictor of social participation and meaningful interpersonal relationship (Kenworthy et al., 2009). However it could be an augmentative state that, as social inclusion is a dynamic and bidirectional process, along with the skill level of individuals with disability, opportunities that exist in the community, readiness and the non-discriminatory attitude of community also act as important determinants of social inclusion. Research has not given significant attention to these community factors. In order to make balanced and comprehensive understating of experience and expression of social inclusion among young adults with intellectual disability, there is a need to explore subjective and objective elements of individuals as well as community factor along with structural and attitudinal factors. In addition to exploitation of experience of social participation and inclusion from the perspective of young adults with intellectual disability, it would be socially and academically important to explore how other community members perceive this social inclusion and to explore prevailing attitude and practices regarding community participation of young adults with intellectual disability.

### **Social Inclusion of Young Adults with Intellectual Disabilities**

The concept of inclusion is a commonly discussed topic in the disability research, however most of the studies and documents limit inclusion into the education policy-related area. Most of the reviews particularly from the Indian context focused only on the inclusion of children in the education settings such as



how curriculum can be adapted to their specific needs and the physical inclusion of child into class room settings. Researchers are not given much attention to the concept of social inclusion. Social inclusion is a complex and often misunderstood concept, particularly in the case of young adults with intellectual disability (Van Bergen et al., 2018). Globally social inclusion is considered as a key principle and obligation of all Social empowerment mission and policies for person with disabilities. It is also an obvious aim of affirmative doctrine of UN Convention on the Rights of Persons with Disabilities and also central components of community-based rehabilitation services and supports in many countries (UNCRPD-1996). However, there is a significant level lack of consensus as to what constitutes social inclusion (Cobigo et al., 2012). In the literature social inclusion, social participation, and social integration are interchangeably used both in research literature and policy documents. From the available reviews, it could infer that even though there are multiple studies and reviews on social inclusion there is a lack of consensus on conceptual understanding of social inclusion. In recent conceptual reviews, both Cobigo et al. (2012) and Bigby (2012) reported poor consensus on the conceptual understating of social inclusion. Overmars-Marx et al. (2014) observed that the concepts such as social inclusion, community inclusion, and social participation are interchangeably used.

### **Review of Literature on the Definition of Social Inclusion**

There are multiple definitions of social inclusion but most of them are not comprehensive and not related to the experience of intellectual disabilities. In the upcoming session, an attempt is made to review available definitions, and identify current key components and conceptual understanding of social inclusion.

Cobigo et al. (2012) discuss that social inclusion is a dynamic process involving complex interactions between personal and environmental factors. Koller et al. (2017) explained that that social inclusion' is a multifaceted and largely subjective concept. He discussed that "social inclusion is often described in opposition to 'social exclusion', which refers to the stigmatisation or marginalisation of certain groups based on particular characteristics, such as socioeconomic status,

race, gender or disability.” Department of Health of London (2001) define social inclusion as a process of enabling as many disabled young people as possible to participate in education, training or employment. Enabling people with disabilities to make use of mainstream services and be fully included in the local community. According to Bollard (2009) social inclusion is full and equal access to health care, social roles and relationships that are equal to their non-disabled partners. Schneider and Hattie (2016) in their work, define social inclusion as “greater participation in community-based activities and a broader social network, although in wider society it also embraces other dimensions such as acting as consumers of goods and services or participation in economic and socially valued activities, such as employment and child-rearing”. Similarly a UN report on the World Social Situation defines social inclusion as the ‘process of improving the terms of participation in society, particularly for people who are disadvantaged, through enhancing opportunities, access to resources, voice and respect for rights (United Nations, 2016). Partington (2005) defined “social inclusion for people with ID is having full access to activities, social roles, and relationships”. Lemay (2006) explained social inclusion as having meaningful social roles that may take place in the family, workplace, at activities, and in community. She emphasizes more on ‘having valued presence and participation in society. Jaeger and Bowman (2005) described that “social inclusion is equal access to physical places and equal opportunity to access and understand intellectual content. Similarly, the definitions of Lemay (2006) and Crane (2001) also emphasis that, having positive interactions as well as developing and maintaining a network of friendships is a key aspect of social inclusion. Schneider and Hattie (2016) defined social inclusion as greater participation in community-based activities and a broader social network or participation. According to Overmars □Marx et al. (2014) “social inclusion can be described as not only being present in a community, but also having meaningful social connections and participating in fulfilling social activities”. Simplican et al. (2015) have defined social inclusion as the interaction of two major documents one is interpersonal relationships and second is community participation. They have proposed a model with this two domains. These two domains are mutually supportive and overlapping.

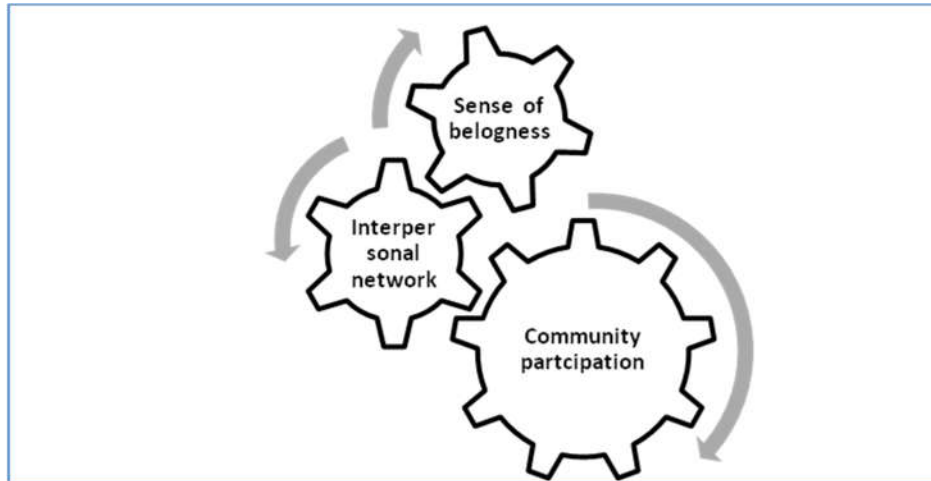
Further in his seminal review work Simplican et al. (2015) discussed social inclusion through “the ecological framework, each domain covers categories of relationships (e.g. family and friends) and participation (e.g. employment and religious), functions of relationships (e.g. emotional and instrumental), degree of community participation (e.g. presence and encounters), structures of relationships (e.g. length and reciprocity) and structures of participation (e.g. segregated and mainstream).

From these reviews we could not identify one consensual definition of social inclusion, however, it is evident that most of the definitions share a few common factors and processes of social inclusion. Such as community participation, access to community resources forming a social network, have a meaningful social role, and also feeling belongingness. From these common factors we could infer that, social inclusion is a multidimensional concept, it has individual, interpersonal and community level process. Also the process of social inclusion is interaction between individual factors and environmental opportunities. Similar to this inference, in the one of notable conceptual review work of Cobigo et al. (2012), they argue that a concept of “inclusion is comprehensively defined as (1) a series of complex interactions between environmental factors and personal characteristics that provide opportunities to, (2) access public goods and services, (3) experience valued and expected social roles of one’s choosing based on his/her age, gender and culture, (4) be recognized as a competent individual and trusted to perform social roles in the community, and (5) belong to a social network within which one receives and contributes support. In this definition Cobigo et al. (2012) conceptuality summarize social inclusion as dynamic and synergic interactions between the environment factors and individual abilities, in which an individual can be viewed as competent. Also, the environment must include opportunities for the person to (a) access community resources and facilities, (b) experience valued roles and identity, and (c) engage in reciprocal interpersonal. However, this definition didn't include the subjective feeling of a sense of belongingness and feeling of acceptance. It ignores the experiential aspect of individual as community members”.

In another conceptual review by Hall (2010) proposed that the concept of social inclusion has three major components i.e., being involved in the community, second maintaining reciprocal relationships, and third having a sense of belonging. Hall (2010) elaborated that these components are 1) “Involvement in the community; it includes the participation in major social activities use of public facilities and participation in structured recreation, leisure, and volunteer activities. 2) Developing and maintaining reciprocal interpersonal relationships with others such as friends with or without disability, family members and co-workers. 3) A sense of belonging is developed when a person is accepted by others, seen as an individual, has positive interactions with others, and is not excluded through marginalization in a different setting. This definition of social inclusion encompasses both subjective experience and objective process of social inclusion. Hall (2010) argued that the subjective feeling of a sense of belongingness, acceptance, and value is the key element of social inclusion. She also discussed that along with this feeling of belongingness to complete the social inclusion there should be objective evidence of meaningful social and participation activities. In nutshell, Hall (2010) conceptualize social inclusion as full and fair access to community facilities and activities, having meaningful and reciprocal relationships with family, friends, and acquaintances, and having a sense of belonging to a group. In this context social inclusion is more than mere physical presence and integration, it is a meaningful and bidirectional participation and engagement in the mainstream community. This conceptual model of Hall (2010) is comprehensive and coherent which provide conceptual clarity of social inclusion which would help researchers, policymakers, and service providers for developing efficient services, programs, and policies for ensuring the social inclusion of person with disabilities. By considering this conceptual lucidity in the definition, in this study we adopt this three-dimensional model of definition of Hall (2010).

**Figure 1**

*Components of Social Inclusion*



### **Review Literature on Components of Social inclusion**

From the above-discussed reviews of definitions and conceptual understanding, we have identified three core components of social inclusion i.e., community participation, reciprocal interpersonal relationship and sense of belonging. In addition to these three elements they experience social inclusion influenced by the contextual factors in which person with disability live. The experience of social inclusion varies according to different community settings and how community members perceived and valued the need of social of inclusion (Hall, 2010). These contexts could act as barriers as well as contexts that facilitate the social inclusion of young adults with ID. This section of the review attempt to discuss each three components of social inclusion with respect to how this elements contribute to the process of social inclusion of young adults with intellectual disability.

#### ***a) Community Participation***

Multiple studies have recognized participation in community activities of life is one of the key elements of social inclusion. It is also vital determinants of social wellbeing and it provides the opportunity for forming social networks and

also acts as an opportunity for physical activity (Louw et al., 2019; Tint et al., 2016; Amado et al., 2013).

According to Abbott and McConkey (2006), participation in the community means having opportunities and using community resources such as having access to facilities, venues, and mainstream services such as education, employment, transport, recreation, and cultural activities. International classification of functioning and disability (ICF) published by WHO defines community participation as “involvement in life situations” (World Health Organization, 2001). ICF explained the nine domains of participation include learning and applying knowledge, general tasks and demands, communication, mobility, self-care, domestic life, interpersonal interactions and relationships, major life areas, and community. The ICF model also highlights five external barriers which may influence participation: products and technology, natural and manmade environments, support and relationships, attitudes, and services, systems and policy (Boudos & Mukherjee, 2008; World Health Organization, 2001). For young adults with intellectual disability community participation takes place in a variety of domains of their life such as mainly post school education/ vocational training, employment and recreation activities with same age group. McConkey(2007) identified various community activities (1) productive activities, like employment or education (2) recreational activities, such as leisure activities, arts, and sports, (3) consumption, or access to goods and services; and (5) religious and cultural activities. While comparing with non-disabled peer group young people have lower levels of mobility and participation in, education and employment recreational activities (physical, social and cultural). This has implications for their health and wellbeing and life course opportunities. (Carroll et al., 2018). Borland et al. (2020) reported that person with intellectual disability face a number of barriers to participation in sport and physical activity and level of participation in these activities is lower rates than the general population. Similarly, Robertson et al., (2018) also reported that sport/exercise participation rates were consistently lower among young adults with intellectual disability than for their non-disabled peer. Bota et al. (2014) reported participation on that sports activities have the potential

positive effect among people with intellectual disability such as it helps to enhance self acceptance, self-confidence, sharing, and friendships, Bezyak et al. (2019) report that person with intellectual disability experience barriers to use public transportation facilities. Holwerda et al.(2013) reported that individuals with developmental disability experience vary challenges to work participation as shown by their low employment rates. This study found that young adults with intellectual disabilities are three to four times less often employed compared to their non-disabled peers.

In the conceptual review Simpican et al. (2015) had classified these community participation activities of young adults with intellectual disabilities into three categories i.e., 'segregated', 'semi-segregated', and 'integrated activities'. They illustrate Segregated activities involve only people with disabilities and it take place in isolated settings, such as separate class room, vocational training centre and sheltered workshops specifically designed for person with disabilities. They have very limited opportunities for interaction with other non-disabled group. As evident by multiple studies, majority of young adults with intellectual disability live with their parents and only involved in sedentary activities, therefore this sedentary life with immediate family members also could considered as segregated activities. Hall (2010) reported that young adults with intellectual disability are segregated from the rest of society through various activities that are designed specifically for them. Many of them work in sheltered workshops or work activity programs where they are isolated from people without disabilities in jobs that may not even be considered true work. Similarly, multiple studies (Ainsworth & Baker, 2004; Gaylord & Hayden, 1998). Also, evident that, young adults with intellectual disability have limited choices of activities, they have limited opportunities to interact with same-aged non-disabled friends. Many young adults with intellectual disabilities are entrapped in segregated activity in their limited family situation because they lack supporting friendships, access to transportation, adequate personal funds, and the knowledge and training to form age-specific community participation. Power (2008) reported that parents are often discouraged to the community participation of young adults with intellectual disability due to their

perceived stigma about their ward such as they perceived their child not capable of social life and he or she could not lead an independent life. Therefore, limited their activities in their own home or day care centers. King et al. (2013) also reported that parental awareness, available social support, and lower socio-economic status may also restrict community participation of young adults with intellectual disabilities.

In the semi-segregated activities, group of person with disability involved with their group with the support they get from community members. In this semi-segregated activities also, person with disabilities are considered as not capable for independent social life. Simplican et al. (2015) described three forms of semi-segregated activities. The first is an activity that involves vocational trainer or family members and people with intellectual only, but which takes place in community settings, it facilitates opportunity to interact with community members and facilitate their visibility and presence in community setting. Examples of this type of semi-segregated activities supported employment such coffee shop run by person with intellectual disability, small production units and drama groups. The second type of semi-segregated activity takes place within segregated facilities, but includes community members, such as facilitated production unit run by NGOs. Third type of semi-segregated activity is cyber communities, person with disability for social networks and virtual relationships through various social media. It provides immense opportunity to form relation with both disabled and non-disabled friends despite their restricted opportunity of mobility and physical engagement. Simplican et al. (2015) reported that although this type semi-segregated activity is viable and easily pragmatic, little research has explored this type of community activity for people with intellectual disabilities. Hall (2013) discussed that semi-segregated activities often provide opportunities for developing a sense of belonging, confidence, and group identity, which may reinforce a person's ability to transition to and participate in integrated settings

The third type of community activity proposed by Simplican et al. (2015) is 'integrated activity'. In the integrated setting person with disability activity involved



in various mainstream settings in the community with well accepted social role and identity. In this type of social participation people with intellectual disabilities get acceptance and their contributions are valued. They have more potential opportunity to create positive awareness about disability and inclusion. But in reality, to create an integrated setting is challenging effort, it requires collective effort from community members both in system level and attitudinal level. One of goal of social inclusion is integrated community participation, the major challenges for creating the integrated social situation would be the conscious or unconscious attitude and stigma prevailed in the community towards the person with intellectual disability. Integrated community participation needs to be the central theme in all affirmative initiative and policies for person with disability.

***b) Reciprocal Interpersonal Relationship***

Developing and sustaining reciprocal relationships is the second component of social inclusion for young adults with ID. Participants with ID identified meeting and talking to people in the community as an important component of social inclusion (Abbott & McConkey, 2006). Simplican et al. (2015) have observed that “these reciprocal interpersonal relationships and network facilitate bonding and bridging. Bonding relationships are between people who share a common bond or a common identity, and offer opportunities to build trust reciprocity, and confidence. Bridging relationships bring diverse people into contact and these relationships may be especially important in improving their social outcomes for people with disabilities”. For young adults with intellectual disabilities, this interpersonal relationship generally develop in the context of family, education and vocational training units and this situation provide opportunities to establish a variety of interpersonal relationships.

In the case of young adults with intellectual disability, forming and maintaining intimate relation with peer is considered one of the major developmental goals. Multiple studies emphasise that friendship as major a source of social support during the period of young adulthood. For young adults this intimate friendship would act as a major source of companionship, and emotional support and

which would foster self-esteem and well-being. Sullivan et al. (2016) discussed that for young people with intellectual disability these close relationships are considered as 'feeling safe', having a 'secure base' and 'functional usefulness' in a relationship. According to Sullivan et al. (2016) "A number of studies have reported that people with intellectual disability feel that the development of intimate friendships was only ever likely to be with another person with intellectual disability. Similarly, due to a lack of appropriate opportunities for social networking, majority of young adults with intellectual disability did not have close friends. Even if they have friend in neighbourhood or vocational training centre, relationship might be superficial"

Arentt (2010) suggested that friendship with the same age is the major kind of social network young adults with intellectual disability of Matheson et al. (2007) reported that "young adults with intellectual disability often face more difficulties in finding and keeping friends during their transition period". Heiman (2000) also reported that "young adults with intellectual disabilities tend to have simpler notions of what constitutes a satisfying friendship, and their relationships may be marked by less complex expectations of friendships, such as playing together in a shared context, being entertained and being close together as part of a group". According to Tipton et al. (2013) interpersonal relationship particularly friendships of young adults with intellectual disability often characterized by less warmth/closeness and less positive reciprocity than the friendships of non-disabled peers.

In the research on people with intellectual disabilities and their social networks, the functional characteristics of their networks. Van Asselt-Goverts et al. (2013) found that, the average number of interpersonal relationship of person with intellectual disability varied from 4 to 28 members (mean 14.2), they also found that 42.65% of the network members were family members, 32.84% acquaintances, and 24.51% professionals. Van Asselt-Goverts et al. (2013) also highlighted the role of professionals such as special educators, vocational instructors and individual therapist for forming interpersonal relationships. Professionals help to strengthen and expand the social networks of young adults with intellectual

disability. Lippold and Burns (2009) discussed that “despite recent initiative for social inclusion young adults with disabilities, their social networks are often largely comprised of family, support staff/professionals, and other people with disabilities”. In another work on social networks of people with mild intellectual disabilities. An Asselt-Goverts et al. (2013) discussed that a supportive interpersonal relationship is vital for facilitating social inclusion. They reported that the social networks of people with intellectual disabilities are generally small and they have very few functional relationships with same-age group non-disabled friends and acquaintances.

Van Asselt-Goverts et al. (2013) have done extensive work of the structural and functional aspect of reciprocal interpersonal relationships with in context of person with intellectual disabilities. They have identified and proposed “structural components of specific interpersonal relationships such as the length of the relationship, the origin of the relationship, frequency of contact, and who initiates contact. Another structural dimension is the location of social interaction, whether it occurs in the home, the community, or online”. In addition, these four structural aspects of interpersonal relationship, Heaney and Israel (2009) also found four additional structural characteristics i.e., reciprocity, intensity, formality, and complexity. They described that “reciprocity is the level of mutual support and resources, and intensity is the level of emotional closeness.”

This interpersonal relationship play a vital role for social inclusion and it could be act as a major source of social support. House (1983) identified four broad function of social support such as emotional, instrumental, informational, and appraisal. Emotional support consists of the provision of empathy, love, trust, and caring. Instrumental support consists of the provision of tangible aid and services that directly assist a person in need, Informational support is the provision of advice, suggestions, and information that a person can use to address problems. Lastly, Appraisal support involves the provision of information that is useful for self-evaluation purposes—in other words, constructive feedback and affirmation. People

with disabilities have reported that they need each kind of these supports for developing and maintaining interpersonal relationship (Abbott & McConkey, 2006).

***c) Sense of Belonging***

Feeling a sense of belongingness is the third component of social inclusion. This subjective feeling of being part of a community with valued roles and identity would facilitate their integration and inclusion. Belonging means acceptance as a member or part. A sense of belonging is generally considered as a human need like other social needs. Multiple psycho-social theories have recognized that belongingness is the human emotional need to be an accepted and valued member of a group and able to share many common interests of that group. The famous theory of Abraham Maslow on human needs, he proposed that the need to belong is a major source of human motivation. Similarly, in his renowned theories on psychosocial development, Erikson (1968) identified forming a sense of belonging is central for the psychosocial development of young adults. Baumeister and Leary (1995) argue that young adults with intellectual disabilities also tend to have an 'inherent' desire and need to belong and be an important part of community activities. Generally, they experience the sense of belonging in the relationship with their immediate family members and rarely with non-disabled friends.

Vaccaro et al. (2015) define the sense of belonging “as a subjective feeling of value and respect derived from a reciprocal relationship in which they have shared experiences, beliefs and personal characteristics. Baumeister and Leary (1995) defined sense of belonging as “a feeling that one is an integral part of a system or experiencing a fit between one’s self and others around him/her. The feeling of belonging consists of becoming an insider within a group, organization, or a somewhat less structured network of people with common attributes or beliefs (Crisp, 2010; Raver et al., 2018). Crisp (2010) reported that the feeling of sense of belonging is positively correlated with overall well-being for young adults with intellectual disability and may reduce the negative consequences of discrimination. They tend to experience from community. This sense of belongingness to particular group would determine their sense of identity. There are

very few researchers have attempted to explore this connection between a sense of belongingness and identity formation among adults with intellectual disabilities.

Very little researches have been conducted to identify how young adults with intellectual disabilities develop and experience a sense of belonging during their period of transition to adult life. Even though the feeling of belonging is the integral component of social inclusion of young adults, many studies have shown that young adults with disability often experience barriers to feelings of belonging. Researches on young adults with a disability have reported that most of the young adults with intellectual disabilities face rejection by peers and experience difficulty to be part of the social group. Hausmann et al. (2007) in their study conducted in African American college students argue that constant and sensitive peer support is the significant determinants for developing sense of belongingness among young adults with intellectual disabilities. Bramston et al. (2002) observed that young adults with intellectual disabilities reported more feelings of social rejection and a lower sense of belonging than peers without a disability. They also reported that “despite attending the same schools and living in the same neighbourhoods, intellectually disabled students felt significantly lower level belonging and significantly less control over their choices than their matched counterparts” (Bramston et al., 2002). Young adults with intellectual disability develop sense of belongingness when they are perceived as they are accepted by other community members and when they share social facilities.

### **Review of Factors Influencing Social Inclusion of Young Adults with Intellectual Disability**

Young adults with intellectual disability often experience social exclusion and inclusion in a variety of contexts and situations. They experience social inclusion mainly in vocational training centres, day care programs, in their family and in community settings etc, Their experience of social inclusion is influenced by various factors from personal levels, interpersonal levels and community level. These experiences in each level are mutually interactive. Multiple reviews suggested that social inclusion is a complex and multi-level process that shows a series of constant and dynamic interactions between environmental, interpersonal and

personal factors to provide opportunities for people with an intellectual disability (Cobigo et al, 2012; Overmars-Marx et al., 2014; Simplican et al., 2015). Similarly Simplican et al. (2015) “proposed factors from different level may act as facilitating factors of social inclusion and also barriers of social inclusion. According to Simplican et al. (2015) various factors from individual, interpersonal, organizational, community and socio-political variables influence each other in the process of social inclusion. Following section makes an attempt to review the various factors influencing the process of social inclusion on the basis of available literature and studies with special reference to young adults with intellectual disability.

***a) Individual Level Factor for Social Inclusion***

In order to understand individual level of enabling and disabling conditions for social inclusion, it is required to analyze individual specific elements of young adults with disability. These factors can be the severity of their intellectual impairment, level of adaptive behaviour, co-morbid medical conditions, level of training and exposure, etc. To get a clear conceptual understanding of how individual factors are influencing social inclusion, Bio-psychosocial model is adopted. Through this framework, it could analyze the biological social and psychological dimensions of the specific conditions of intellectual disability could be analyzed.

**i. Neuro-developmental Deficit.** Neuropsychological studies reported that the functional deficit in intellectual disability is often correlated to impairment of specific areas of brain cortex (Fletcher & Grigorenko, 2017; Harvey, 2012). However, neuropsychological researches have not given much attention to exploring and identifying these correlates of brain impairment and the social functional profile of persons with intellectual disabilities. Exploration of this neuro-developmental factor would help to understand various regulatory systems of social behaviour in the brain and how this impairment would lead to poor social skills and difficulty in emotional regulations which are known to be important elements of social relationships and social inclusion of young adults with intellectual disabilities. Executive functions of frontal lobe are the major area of brain for regulating and managing social behaviours, emotions regulation and impulse control (Chayer & Freedman, 2001). They are important for problem-solving, self-awareness and

directive functions. In summary, Executive system is vital for determining the social life and desirable social interaction (Blair, 2016). According to Costanzo et al. (2013) “deficits in executive functions are frequently evident in person with intellectual disabilities, which are characterized by maladjusted adaptive behaviour. However, executive functional deficit are not widely examined in individuals with intellectual disability”. Neuro-Psychology research on executive functions in those with intellectual disability and behavioural challenges has shown that significant executive function deficits in individuals with intellectual disabilities, such as inhibition, emotional regulation and working memory are significantly affected (Luna et al., 2007). They infer that this deficit would lead to significant impairment of socio-adaptive function of individual with intellectual disability.

According to Rao (2012) “In normal development, the brain, having ‘pruned down’ to a smaller adult size by puberty, goes through another phase of frenzied development. This involves intense activity of the neurons connecting with each other through their dendrites. They form highly connected networks that multiply the brain’s computing power. In the case of intellectual disability and autism, there is a significant failure in the maturity of such circuitry, leading to the emergence of new or intensified deficits in frontal lobe skills. Executive functions, working memory and social communication skills are negatively affected. This leads to poor adaptation to community demands as they grow into their adulthood.” Baglio et al. (2014) found abnormal cortical development in brain areas of person with intellectual disabilities that have a crucial role in motor, learning, and behavioural processes.

However, similar to these evidence of domain-specific deficits (i.e., executive functional deficit), it cannot identify the similar studies which attempted to explore other deficit domain in the brain of young adults with intellectual disabilities. Also, researchers haven’t given required attention to identify general cognitive profiles of individuals with intellectual disabilities both in the deficit and asset frame work. Edgin et al. (2010) argued that, “there is no one set of shared deficits that may explain cognitive impairment across different subtype of intellectual disabilities. This profile has heterogonous nature and showing discrepant patterns of relative deficits across a different group of people with intellectual disabilities.

**ii. Comorbid Illness and Syndrome.** Adults with intellectual disabilities generally experience multiple co-morbid medical and psychiatric illnesses among intellectual disabilities compared with the general population (Cooper, et al, 2015; Muskens et al., 2017)). Many neuro-developmental, psychiatric, and medical disorders co-occur with ID, especially communication disorders, learning disabilities, cerebral palsy, epilepsy, and various genetically transmitted conditions (American Psychiatric Association [APA], 2013; Markovic-Jovanovic et al., 2019c). Estimates of the rates of psychiatric coexisting conditions vary. For many years there was an underestimation of the increased risk for the development of comorbid conditions.

Individuals with intellectual disability have higher risk of psychiatric disorders than individuals with intelligence in the normal range: prevalence is as high as 40.9% based on clinical diagnosis (American Psychiatric Association [APA], 2015). According to Kendall and Owen (2015) most common comorbid psychiatric disorders are problem behaviour (18.7%), affective disorder (5.7%), autism spectrum disorder (4.4%), psychotic disorder (3.8%), and anxiety disorder (3.1%). Gillberg et al. (1986) reported that 57 percent of subjects with mild and severe “intellectual disability” met diagnostic criteria for affective, anxiety, conduct, schizophrenia, and somatoform disorders and attention deficit hyperactivity disorder. Similarly, Rutter et al. 1970 reported rates of 30 to 42 percent of psychopathology in children with “intellectual disability” compared with 6 to 7 percent in children without the disability (Rutter et al., 1970).

In another study, Tye et al. (2019) reported that individuals with intellectual disability and ASD have significantly higher proportion of sleep problems compared to general population. They estimate the prevalence are range between 50 and 80%. These sleep disturbances not only affect daytime functioning but impact on the quality of life.

Studies have reported that symptoms of these comorbid conditions are often unidentified or it may inappropriately attributed to their condition of intellectual impairment and delay in adaptive function rather than treated as a separate condition (Goyal et al., 2018). Due to lack of communicational skill some time they are unable to communicate there is a problem and communication deficits present a challenge



to diagnosis. Often this condition is noticed, in result, it creates adverse effect in their overall life. Cooper et al. (2015) reported that due to higher rates of these co-morbid illnesses, for example, epilepsy, gastrointestinal disorders, and sensory impairments, and higher rates of a range of mental health conditions, morbidity burden is higher in the population with intellectual disabilities than in the general population. In the intuitive for empowerment of quality of life of personal with intellectual disability specific intervention would be required to address these additional burden morbidity and otherwise it may act as negative mediating or moderating variable.

While summarizing findings from these studies which explore the major co-morbid medical conditions, it could be inferred that in addition to individual-level deficit in limitation to social functioning, this associated medical condition act as additional disabling factor. Most of the co-morbid conditions create significant problems for social interaction such as co-morbid anxiety disorder, depression, etc. In conclusion, these co-morbid medical conditions, and accompanying disabilities of person with disabilities, can have significant impacts on broader development outcomes, social functioning, and education/employment outcomes which are integral part of social inclusion.

#### ***b) Psychological - Level of Intellectual Deficit and Social Life***

The level of cognitive deficit plays a vital role in how young adults experience the quality of their social inclusion. Ability to form interpersonal relationship and level of community participation of young adults with intellectual disability is determined by severity of their intellectual deficit. This level of intellectual deficit may result in the impairment involves social reasoning, planning, solving problems, thinking abstractly, learning, and adapting to new social situations (AAIDD, 2010). Historically, on the basis of severity of their intellectual deficit, intellectual disability is categorized into four level i.e., mild, moderate, severe and profound. This category has been used to describe the severity of the condition (Maulik et al., 2011). This categorization on the basis of their IQ score would help us understand expected level of general social functioning, which would also help us

to baseline level of outcome for the design of the intervention to enhance the social inclusion of young adults with intellectual disability.

According to Boat et al. (2015), among the total population with intellectual disability more than 85% of persons are classified as having mild level intellectual disabilities. Individuals with mild intellectual disability have deficit in conceptual development and delay in social skill. They are able to learn practical life skills, which allow them to function in ordinary life with minimal levels of support. They often achieve elementary academic levels with sufficient supports. People with this degree of severity are mostly self-sufficient with sufficient supports. In many cases, they can live independently within their communities with a minimal level of additional supports (Bittles et al., 2002). These supports might include assistance with life decisions. Additional time, instructions, and reminders may be needed for other life skills such as finances, nutrition, shopping, and transportation. Young adults with mild level intellectual disability could form functional interpersonal relationships and with required training they could be socially independent (Arnett, 2000; Sattler, 2002).

**i. Deficit in Emotional Regulation and Social Life.** Individual ability to regulate emotions and express appropriate emotions are known to be the key components of forming social life. Multiple studies have reported that young adults with intellectual disability have significant deficit in emotional regulations. They also have limited ability to understand others' emotions in social situations. According to Gross (2002) "emotion regulation refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions". Emotion regulation includes the mobilization of various strategies that individuals use to modify the course and the expression of emotional experiences. This emotion regulation ability consists of the utilisation of various strategies that individuals use to manage the process of emotional experiences in social situations (Baurain & Nader-Grosbois, 2012). It is known as a vital skill for establishing and maintaining social relationships. According to Gratz and Roemer (2004), "emotion dysregulation refers to deficits in one's ability

to recognize, understand and accept emotions, engage in goal directed behaviours while experiencing negative emotions modulate the intensity and/ or duration of emotional responses through a variety of contextually appropriate methods.”

Multiple studies (Maliepaard et al., 2014; Dekker et al., 2002; Abbas, 2016) evident that prevalence of emotional problems is common among person with intellectual disability. These studies consensually reported that disabled children are more vulnerable to emotional distress. Baurain, and Nader-Grosbois (2012) reported that person with intellectual disabilities did not express or regulate their emotions as similar to the typically developing person.

Reiss et al. (1982) conducted a study on special children they found 20% to 30% risk of emotional disturbance in children with special needs. Abaas (2016) argues that these emotional disturbances express through acting out behaviors, impulsivity and immaturity and poor judgments and these are the manifestations of psychological problems like paranoid ideation and psychosis. As early cognitive and communicative deficits in children due to less opportunities of social interactions, poor interpersonal relationships with peers and person with intellectual shows difficulty to regulate their positive, negative emotions and to exercise skills of social adjustment (Ogundele, 2018). These poor emotional regulatory skills restrict understanding social cues and assessing situations from different cognitive and affective perspectives (Eisenberg et al., 1997). This problem in emotion regulation may act as person specific hindering factor of social inclusion of person with intellectual disabilities.

**ii. Deficit in Adaptive Skill and Social Skill.** The level of adaptive behaviour of young adults with intellectual disability is widely recognized as an important contributor of social life and community participation. Limitations in adaptive skills are central characteristic of deficit in the social functioning of young adults with intellectual disability. According to Dell’Armo and Tasse (2016) adaptive behaviour is defined as the conceptual, social, and practical skills that a person has learned and performed in their everyday lives. Dell’Armo and Tasse (2016) described those conceptual skills consisted of language abilities, reading and writing, number, time, and money concepts. Conceptual skills may act as prerequisite skill for interpersonal relationships. Social skills include interpersonal

skills, friendships, social participation, and social problem-solving. Practical skills also include self-care skills, activities of daily living, health and safety, ability to use transportation, etc (Jacob et al., 2022).

All three dimensions of adaptive skills, particularly social skills are potentially related to positive outcomes in community participation and social inclusion in young adults with disabilities. In their systematic review, Test et al. (2009) identified social skill as an evidence-based predictor of better interpersonal adjustment, community engagement, pre-vocational training, participation and employment in young adults with intellectual disability. Social skills are behaviors that help people interact with others. Adequate social behavior and other adaptive skills are the foundations of personal and social adjustment in life (Mathur & Rutherford, 1996). Impairment of social skills are known to be central elements of poor social adjustment and social withdrawal. Hosseinkhanzadeh (2014) reported that person with intellectual disability generally shows varying degrees of deficits in social skills, which can lead to isolation, stigmatization, lack of coping skills, increased maladaptive behaviours, and decreased level of community participation.

In the case of young adults with intellectual disability, formation and maintenance of effective interpersonal relationship requires a range of social skills and the ability to use these skills at the right time and place to meet the daily demands of expected developmental process of transition , post school adjustment and employment (McCausland et al., 2017). However they experience specific difficulties in social functioning such as initiating social activities engaging in cooperative activity, poor ability to resolve interpersonal conflict (Sullivan et al., 2015).

For individuals with intellectually disability, identification and measuring deficit in social skills is important because deficit in social skill often varies according to their level of cognitive impairment, also depends upon kind of specific training and support they received. As level of deficit in social skill is a strong predictor of social inclusion of young adults with intellectual disability (Arini et al., 2019).

Adults with intellectual disabilities may not have an inherent deficit with social skills this deficit may have occurred due to deprivation ofadequate

opportunities to learn appropriate social conduct. Reiff (2019) observed that children with intellectual disability may have attended school in largely segregated settings. In this segregated setting they have limited opportunity for social contact with their nondisabled peers, or they may have been socially rejected, they rarely get opportunity to participate in many social activities. Multiple studies reported that young people with intellectual disability living in setting which have adequate support and have access to community facilities shows better community participation, sustainable interpersonal relationship and they tend to have feeling of belongingness (Fullana et al., 2021; McCausland et al., 2021; Verdonschot et al., 2009).

**iii. Gender Difference in the Experience of Social Inclusion.** While analysing individual factors determining social inclusion, it would be more significant to explore the gender differences in the experiences of social life of adults with intellectual disability. It would be both significant to understand how gender difference operates in the context of social inclusion of person with disability. Gender analysis within the intellectual disability research literature has typically focused on issues faced by women and girls with intellectual disability. This gender-based analysis is generally derived from paradigm of feminist theory (Wilson et al., 2010). Literature has shown gender and disability can simultaneously operate as variable of oppression for both men and women with intellectual disability. Both men and women with disabilities will tend to experience a struggle between their identities as masculine/feminine and their constructed identities as disabled (Holland-Hall & Quint, 2017). Collins and Valentine (2003) argue that women with intellectual disability face both gender-related and disability-related discrimination, often referred to as a 'double disadvantage. Girls and women with intellectual disability face more level of discrimination than boys/men. They are more vulnerable for victimization of abuse and exploitation. They have very restricted opportunity for community participation (Rosen, 2006). Number of studies reported that many of girls/ women with intellectual disability are experiencing significant level of social isolation and physical and sexual abuse (Mailhot-Amborski et al., 2021; Plummer & Findley, 2011). Carter et al. (2012) identified that gender type difference in the parent's expectation in employment and vocational rehabilitation of young adults with intellectual disability. They reported that after

school the boys are encouraged for vocational training but in the case of girls parents are not considering vocational rehabilitation and employment option for their empowerment. Williams et al., (2018) reported that young women with intellectual disability often confine their life with household responsibilities under the entrapping supervisions of parents.

Personal right and choice of young women with intellectual disability for social participation has generally been denied and oppressed. Their autonomy and decision regarding interpersonal relationship are not at all recognized. This gender based discrimination of person with disability is not exclusively specific to women and girl with disability. Nario-Redmond (2010) reported that man with disability also experience gender based stereotypes that is man with intellectual disability generally stereotypically viewed as person with aggression. Their age specific psycho- sexual needs are considered as sexual offence and hyper sexuality. These negative stereotypes would reinforce discrimination of them from the nature, community space and activities. On the basis of prevailing attitude in community about them, it could be assumed that they experience significant level of stigma and discrimination compared to other gender counterpart. This experience of double disadvantage and oppressed situation would cumulatively restrict their opportunity for community participation and also deny their age specific desire for forming intimate relationship (Ledingham et al., 2022). In a recent study on gender difference in social inclusion of youth with autism and intellectual disability, Moran et al. (2019) found that female obtained lower score in most of the item of social inclusion.

### **c) Interpersonal Level Factor for Social Inclusion**

According to the ecology system model of social inclusion second level of enabling and disabling factors or agent of social inclusion is interpersonal relationship of an adult with intellectual disability. Generally young adults with intellectual disabilities have limited number of interpersonal relationship (McCausland et al., 2017). The area of social network often limited to their family members, siblings and professional in vocational training centre and

colleagues. social network has seminal role for determining the level of their social participation and experiencing sense of belongingness in community. These components synergically enable or disable the process of social inclusion. The seminal review work Simplican et al. (2015) had identified positive and negative interpersonal outcome with respect to the social inclusion of person with intellectual disabilities.

Simplican et al. (2015) reported that “positive interpersonal outcomes consist of respect and trust between people, perceived social support, experience of sense of belongingness and increased social capital. The negative interpersonal relationship outcomes are discrimination and neglect in various interpersonal situation, physical abuse and negative perception dependency and incompetency”. Multiple studies have attempted to understand how these interpersonal factors influence social inclusion of adults with intellectual disability. From the review of research studies key interpersonal level variables of social inclusion have been identified. The factors are.

- i. Attitude and involvement of family members*
- ii. Experience from parents*
- iii. Attitude of sibling*
- iv. Social demography details of family*
- v. Availability of intimate friend.*

***i. Attitude and Awareness of Family Members particularly Parents***

Family members particularly parents are known as primary agent of socialization of any individual. In the case of person with intellectual disability role of parents became more significant and inevitable because of their inherent dependency on parents in all the areas of their biopsychosocial development. Even for young adults with disability, parents are continued to be a major source of support and care (Hall, 2010).

Researches on social inclusion of intellectual disability have constantly reported parental variables such as parents' attitudes, parental expectation, economic status, education level and experience are important predictors of positive outcome of social inclusion (Boer et al., 2010). Simplan et al. (2015) and Dell'Armo and Tasse (2019) has identified parents attitude and expectation as the key factor of social inclusion. Parent expectations is understood as what parents believe and wish about their child's future such as post school achievement, vocational relational, community participation and life after parents life. Kausar et al. (2013) discuss that parent concerns, desire and expectation become a dynamic guideline for young adult's successful transition and expected social participation. Sometime parental over concerns and entrapping caring would limit their social inclusion. They were fearful for their young adults' safety, health, and social life. Parental expectation may not be realistic always, due to parental perceived fear of discrimination and abuse from community members parents often limit community participation of young adults with disability (Babik & Gardner, 2021). Parent's negative perception of community attitude towards their ward may create conflict with inherited desire for forming intimate relationship with non-disabled peer group (Peck et al., 1992). These findings suggest that any interventions for enhancing the social inclusion of young adults' intellectual disability should consider parental expectation as a key determinant factor for social inclusion.

Few researches has been conducted to explore the positive parental factors and to explore how this factor would promote social inclusion. In a study of parents of children with disabilities. Scorgie (1996) discussed that parents were reported to feel a greater determination to achieve their goals, feeling of competency to and more involved in advocacy for the right of their children. Scorgie (1996) argue that these positive experiences appeared to enable parents to better meet the needs of their children with disability and become potential agent of their socialization.

Studies also reported that many parents individually and collectively engaged in advocacy process. They often become effective advocacy agent for institutional



and policy level affirmative action to ensure social inclusion. Wright and Taylor (2014) reported that parent advocacy is a critical form of involvement by parents for the empowerment of their children with disability disabilities. In the case of intellectual disability, Parent advocacy crucial for young adults with intellectual disability as they cannot articulate and advocate their own needs, there parents became their voice. Meta-analyses work by Jeynes (2003) on effects of parent involvement on student achievement of youth with disability evidence that parent involvement correlate with increased student achievement or growth. In the case of advocacy, parents can take collaborative role with policy makers and practitioners. They could often work as pressure force to ensure overall empowerment of person with disabilities in different domains. The recent implementation process of RPWD act 2016 by Govt India, also recognised the contribution of parents for shaping legislative action of the state (RPWD Act-2016). Even though there are number of parental advocacy group working with the goal of social inclusion of children, very few researches has been conducted to identify the effectiveness and reliability of this collective interventions. The lack of research works and policy initiation is itself a evidence that professionals and policy makers have failed to acknowledge the potential role of the parental initiative and their lived expertise in providing enabling intervention in improving the process of social inclusion of young adults with intellectual disabilities.

## ***ii. Experience from Parents and Influence of Social Inclusion***

In the review work (Koller et al., 2017) reported that early experiences with parents and parent's competency are important predictors of later social inclusion of young adults with intellectual disabilities. In accordance with this observation the Soref et al. (2012) found that high maternal self-efficacy, or a mother's sense of being able to handle difficulties, was a strong predictor of increased social participation for children. Similarly Guralnick et al. (2006) reported that early baby-mother communication predicted more peer involvement later in life. Peer involvement and social participation is known as key elements of social inclusion and can be may not be positive predictors of social inclusion in late life. Soref et al.

(2012) and Koller et al. (2017) report parental anxiety and worries is a possible barrier to inclusion. It may create over dependency and poor social interaction in children with disability. Even after the school period, parents often treat or care their ward as child who need constant care and supervision.

### ***iii .Role of Sibling for Social Inclusion***

Siblings of children with intellectual disabilities are known to be important agent of social development. In family context brothers and sisters have a lifelong relationship which tends to continue during the entire life. According to Powell and Gallagher (1985), siblings are recognized as first social network of children with disabilities. Number of studies (e.g. Lobato, 1990; Davidoff, 2006). identified sibling relationship as one of the potential precursors of later interpersonal relationships and this peer relationship is recognized as one of the most powerful bonds and human interactions as siblings act as surrogate parents, informal teachers, source for social learning and some time friends too. Siblings are lifelong friends, role models, and support systems for their siblings with disabilities. Heller and Arnold (2010) found that female siblings were more involved in the life of their sibling with disabilities than the male sibling.

However, studies also reported the negative attitude of sibling of children with intellectual disability. De Caroli and Sagone (2013) reported that “compared to other siblings, they expressed a more negative representation about their disabled brothers or sisters’ life as well as their own.” These sibling tend to have cynical perception about their siblings as a “burden” for both their family and social community in which they live. This negative representation and perception would limit opportunity for healthy involvement of sibling with their sisters and brothers with disability. It results in undesirable effect on socialization process of children with disabilities. These findings evidence that sibling has seminal role in the social inclusion process of their sisters and brothers with disability.

### ***iv. Socio Demographic Factors of Family and Social Inclusion***

In addition to the role of parental and sibling attitude and expectations reviewed in previous section, number of researches have consistently reported

various socio- demographic characteristics related to social inclusion of young adults with intellectual disabilities. These factors include family financial status, parental education, and ethnic minority status are discussed below,

**a. Family Financial Status.** Multiple studies have reliably reported a significant association between poverty and the community participation of intellectual disabilities. Emerson (2007) suggests that this association operate in two different processes. First, poverty tends to causes intellectual disabilities this possible etiological connotation mediated through the association between poverty and exposure to a range of environmental and psychosocial hazards such as lack of nutrition, poor accessibility, health care and preventive measures. Second, family low income and poverty may lead to poor opportunities for education and unemployment. Also poverty is associated with poor social support and social inequality. Hunt et al., (2021b) reported that the experience of low family income is generally to be linked with high parental stress and poor well-being and consequently poorer parenting practices and support for children with intellectual disabilities.

Soref et al. (2012) and Koller et al. (2017) reported that financial status of parent of children with intellectual disability is positively correlated with their interpersonal relationship and community participation. Studies explained that poverty increases the stigma and negative effects of disability through a variety of pathways such as limiting access to services and programmes, education and social influence (McCoy & Banks, 2012; Trani et al., 2013). Similarly, the review by Dell'Armo and Tasse (2019) is also evidence that family income also play as a strong predictor of participation of young adults with intellectual disability in postsecondary education and vocational rehabilitation, which is known as prerequisite of social inclusion.

**b. Parental Education Level.** Parental education level is considered as another important social demography factor enabling and disabling the process of social inclusion of young adults with intellectual disability. Education status of parents often support parents' attempts to promote post school training and

vocational rehabilitation of young adults with intellectual disabilities, (Masino & Hodapp, 1996). Caldwell (1979) reported that maternal education is a critical determinant of child health outcome and social participation. From the analysis of the cultural context of childcare practice; it is observed that maternal education is more relevant than parental education. It may be illustrated that mothers generally play the role of primary caregiver. Findings of Cochrane et al. (1982) also supported this observation. Even though multiple studies have been conducted to understand the association between education and health outcome of children with intellectual disability, there are very few intervention studies with the focus of parental educational level and social inclusion.

**c. Ethnicity and Minority Status.** Ethnicity and Minority status of family are considered as important demographic factors which enable or disable social inclusion of young adults with intellectual disabilities. Ethnicity is conceptualized as a group of people who share certain background characteristics e.g. language, geographical origin, customs and history, which provide the group with a distinct identity as seen by themselves and others. Dell' Arno and Tasse (2019) reported that meta-analysis studies on social participation and transition of young adults with intellectual disability evidence that being part of minority ethnic group was associated with greater social discrimination, stigmatization and also outcome of community participation. Minority identity of person with intellectual disability double their disadvantage, i.e., they became minorities within the minorities (Blakey et al., 2006). They tend to experience double level of marginalization. While analysing the impact of being part of a minority group poverty and low level of parental education exist together.

Hatton, (2002) reported that person with intellectual disability from a minority ethnic group experience double disadvantage in their social participation, one from having deficit in age appropriate social skills and second is being from an ethnic minority group who generally experience social inequality and poor accessibility to social activities and amenities. Policy makers, practitioners and researches largely neglected this doubling disadvantage. Affirmative policy initiative

has been designed exclusively for common social welfare measures for person with disabilities. This should be questioned as experience of being part of a differently abled group is heterogeneous, their personal and public experience vary according to their deference demographic factors. This conceptual gap also demands more potential researchers to examine how disability practice and minority status synergically or independently influence social inclusion of young adults with disability. Most of the studies conducted in this area are in the western cultural context. This could not be generalized to the Kerala population of young adults with intellectual disability, as experience of minorities is an exclusive cultural dependent variable.

***v. Availability of Opportunity for Social Network***

Availability of positive interpersonal relationship has been considered as important enabling factors of social inclusion of young adults with intellectual disability (Hall, 2010). However due to multiple personal and situational factors young adults with disability have a limited social network. Personal relationships of YAID have confined to the family members, siblings and professionals in the care centres. Researchers have identified numerous factors that act as a barrier for availability of interpersonal relationships in this group. Forrester- Jones and Grant (1997) has discussed that in the case of an adult with intellectual disability, social network typically involves the context of family post school education system and neighbourhood. Tipton et al. (2013) reported that young adults with intellectual disability had limited opportunity for making friendship. They tend to have poor cohesive group of friendship. Poor availability and friendship for young adults with individual disabilities may be associated with their limited social contact, limited structured opportunity to form in relationship (such as post school educational settings, and poor accessibility to social amenities). In order to improve the availability of interpersonal relationship for young adults with intellectual disability, an evidence-based policy and intervention has to be designed, it should address individual and community level barriers for forming interpersonal relationships.

### **Community Member's Attitude towards Person with Intellectual Disability**

Person with disability represent a significant minority group across the world, however, their issues are less discussed among academic as well as in public discourses. They often experience discrimination and social exclusion (e.g. Bonaccio et al., 2020). Multiple studies (Gill et al., 2002; Sharac et al., 2010) reported that negative attitude towards person with disability is one of the main potential barrier for empowerment of young adults with intellectual disability. Society's negative perception towards person with disability can lead to social isolation (Ali et al, 2008), stigmatization, marginalisation and studies often report negative health outcome (Zheng et al.,2016; Mitter et al.,2019). These negative attitudes towards person with disability create barriers to their participation in social activities, such as, access to public services, education, recreation and employability. Thereby reducing their opportunities for social integration. Olkin et al., (1994) reported that negative attitudes are linked to behaviors such as social rejection and maintenance of higher levels of social distance toward persons with disabilities. In another study by Voh, (1993) discussed that "People with disabilities regularly identify societal attitudes as the most negative stressor in their lives. The presence of positive attitudes towards person with disability undoubtedly helps to promote social inclusion and encourage the integration and participation of person with disability in the social activities, overall it improves the quality of life of person with intellectual disability". According to Deal (2017) "negative attitudes may be due to misconceptions, lack of awareness or knowledge, and can be manifested in the form of direct or indirect discrimination". These negative attitudes often can be rooted in a lack of knowledge about life capacity of people with disabilities, as well as the perpetuation of erroneous stereotypes about them (Sharac et al., 2010).

According to Fazio and Olson (2003) "attitude towards the person with intellectual disability has three components: (i) the affective component (involves the person's sentimental part); (ii) the cognitive component (involves personal beliefs and knowledge); and (iii) the behavioural component (the way the attitude influences the action or behaviour) (p-4-6)". Attitudes are learned pre-dispositions to

respond in a favourable or unfavourable manner to a particular person, behaviour, belief or thing (Wood, 2000).

Attitude is one's judgment about a person, group, object or an idea that how he evaluates things (Katz, 1960). Attitude can create or remove barriers to the life of persons with disabilities. So, conclusion is that there is no commonly accepted definition of the concept of attitudes. According to Wood (2000) An attitude is an idea (cognitive component) charged with emotion (affective component) which predisposes a class of actions (behavioural component) to a particular class of social situations. According to Noe (2002) attitudes are a combination of beliefs and feelings that predispose a person to behave in a certain way". Zheng et al. (2016) define attitudes toward disability "as the cognitive and behavioural processes that involve judgment and favourable/unfavourable reactions to aspects of disability". Hannon and NDA (2007) reported that "Cognitive, affective and behavioral evaluations are key to the concept of the of attitudes. Cognitive evaluations refer to thoughts people have about the attitude object. Affective evaluations refer to feelings or emotions people have in relation to the attitude object. Behavioural evaluations refer to people's actions with respect to the attitude object". From the above discussed definitions it is summarized that attitudes are frequently defined in terms of affective thought processes, behavioral propensities and evaluation. Hannon and NDA (2007) described that "Attitudes are generally formed through modelling and social learning. Once formed, they are relatively stable due to people being more likely to incorporate evidence that supports their current attitudes than that which contradicts them.

As disability is heterogeneous group of minorities, attitude towards specific group of persons with disabilities differ. Many studies (Verdonschot et al., 2009; Asman et al., 1996; Buttimer et al., 2015) have reported that person with intellectual disability often experience high level of social exclusion and poor participation in community activities compared to other type of disabilities; it may be due to prevailing negative attitude towards person with intellectual disability. Compared to other type of disability, person with intellectual disability often experience social

isolation and loneliness, as they require constant support to access social opportunities and face both physical barriers and attitudinal barriers (Gilmore et al., 2014). One of the common barriers for people with intellectual disability is lack of regular access and inability to socialize with friends, which can be due to lack of social skills, communication skills and travelling skills (Wilson et al., 2016). Negative attitude towards people with intellectual disabilities create multiple disadvantages for them, such as access to healthcare, admission in appropriate education system, skill training and opportunity to competitive employment, difficulty to make and maintain reciprocal interpersonal relation with non-disabled friends, make family roles, making independent adult life, or participation in mainstream socio-political activities (Limaye et al., 2016; Ali et al., 2013). Due to negative attitude and stigma, people have very poor level of knowledge and familiarity about the person with intellectual disability. Public often fail to recognize range of capabilities of individuals with intellectual disabilities, and therefore community has low expectations from person with intellectual disability (Hayes et al., 2017). So, people carry a discriminative attitude towards person with intellectual disability, i.e., that individuals with intellectual disabilities should learn and work in separate settings, apart from people without disabilities.

Above discussed reviews indicate that social inclusion of person with disability is influenced by multilevel factors, such as personal, interpersonal and community factors. These factors may individually and collectively contribute to the process of social inclusion. It is observed that most of the studies considered disability as a general group. These factors may also be influenced by various cultural and contextual factors. Reviews shows there is research gap for studies on category and age specific exploration on 'experience' of social inclusion of person with disability. Social inclusion of young adults with intellectual disability and factors influencing their social inclusion is still gray area and it demands more research in this area.



## **NEED OF THE STUDY**

Among the various group of disabilities, person with intellectual disability are the most marginalized group in society and they tend to experience a significant level of social exclusion and they have poor interpersonal relationships (Dell'Armo & Tasse, 2019). Studies also reported that they participate less frequently in social activities than other disabled and non-disabled peers, even though they strongly express an aspiration to participate in social activities at both interpersonal and community levels (Verdonschot, 2009). Most of the studies particularly from Indian context have been conducted mainly on the theme of the inclusion of children with intellectual disability in school settings. Studies on social inclusion and the social life of young adults with intellectual disabilities are significantly neglected and their issues are less addressed. In Indian context, particularly in the Kerala education system, after the age of 18 years, despite their skill deficit they have to leave high school without a proper plan for how to integrate to the community and adapt to independent adult life, and their need for social inclusion is largely neglected. While analyzing the practices in Kerala, it could be identified that there is no proper system support for young adults with intellectual disability. Available literature has shown that very few studies have been conducted to identify how young adults with intellectual disabilities develop and experience community participation, interpersonal relationship, and a sense of belonging during their period of transition to adult life. Hence, there is a pressing need to focus on and explore subjective and objective elements of social inclusion of young adults with intellectual disability. It would be socially and academically important to explore various factors that act as a barrier and facilitators of social inclusion of young adults with intellectual disability. Through this study, factors facilitating social inclusion and barriers for social inclusion of young adults with intellectual disability in the Kerala cultural context would be identified. The understanding of factors facilitating social inclusion and identifying contextual factors that may limit the experience of social inclusion would be useful for rehabilitation professionals and other service providers to design and implement appropriate intervention programs to enhance the social inclusion of young adults with intellectual disability. This would be also helpful for disability

advocacy workers and policymakers to take effective community-based policy-level initiatives to remove identified barriers to social inclusion and to create an inclusive social situation for young adults with intellectual disability.

## **STATEMENT OF THE PROBLEM**

The aim of the present research was to explore the experience of social inclusion among young adults with intellectual disability and explore various factors that act as a barrier and facilitators of social inclusion. Also, to explore the perceived benefits of social inclusion of young adults with intellectual disability.

So, the current study is entitled as “***STUDY ON SOCIAL INCLUSION OF YOUNG ADULTS WITH INTELLECTUAL DISABILITY***”

### **Objectives**

1. To understand the current life status of young adults with intellectual disability
2. To explore domains of social inclusion of young adults with intellectual disability
3. To identify the process and factors facilitating social inclusion of young adults with intellectual disability
4. To identify the perceived benefit of social inclusion of young adults with intellectual disability
5. To identify the barriers to social inclusion of young adults with intellectual disability
6. To explore the community member’s attitude as a barrier to social inclusion of young adults with intellectual disability

## **Working Definitions of Key Words**

### ***Intellectual Disability***

Intellectual disability is a condition characterized by significant limitations in both intellectual functioning and adaptive behavior that originates during the developmental period. Intellectual disability is identified by problems in both intellectual and adaptive functioning. Intellectual functioning is measured with individually administered and psychometrically valid, comprehensive, culturally appropriate, psychometrically sound tests of intelligence. Adaptive functioning is assessed through standardized measures with the individual and interviews with others, such as family members, teachers, and caregivers (AAIDD, 2010; APA, 2013).

### ***Young Adulthood***

Young adulthood is a phase of the life span between adolescence and full-fledged adulthood. It is a developmental transitional period to adulthood (i.e., the ages of 18yrs to 25yrs) with unique tasks and expectations (Arnett, 2000).

### ***Social Inclusion***

For this study researcher adopt the Hall's (2010) definition of social exclusion i.e., social inclusion is full and fair access to community facilities and activities, having meaningful and reciprocal relationships with family, friends, and acquaintances, and having a sense of belonging to a group.



## CHAPTER 2

### **METHOD**



This chapter describes the method adopted in this research. It describes the research philosophy and approach used by the researcher to derive knowledge about the research problem and also presents different phases in the research process like the research design and plan, population frame and sampling techniques, the procedures followed, data used, and the techniques of analysis employed by the researcher in the conduction of research to address the research problem.

### **Research Philosophy & Paradigm**

Research philosophy provides a framework of thoughts or understandings within which theories and practices operate. It deals with a function of how a researcher thinks about knowledge development. In simple words, a research paradigm is a process of creating a blueprint of research. In this background, to frame this research process, it is necessary to present and discuss the paradigm/philosophical position taken by the researcher. Considering the nature and ontological characteristics of topics, research problems, and objectives, the researcher adopted pragmatism philosophy as a paradigm for the present study. A pragmatic approach also referred to as a mixed approach, allows the researcher to utilize more than one research method or technique, simultaneously (Amos & Pearse, 2008). It is a problem-oriented philosophy, rather than focusing on single methods, it emphasizes the best research methods which are those that help to most effectively answer the research question. It uses all available approaches and pluralistic methods to derive knowledge about the research problem. Pragmatism is not connected to any single system of philosophy and reality. Pragmatism uses multiple methods but the use of the methods should always be guided by research problems (Creswell & Plano Clark, 2011). It values both objective and subjective knowledge to meet research objectives (Dawadi et al., 2021). According to Feilzer (2010) “Pragmatism brushes aside the quantitative/qualitative division and ends the paradigm war by suggesting that the most important question is whether the research has helped to find out what the researcher wants to know”.

The researcher here presents philosophical position in detail through the ontological and epistemological direction and the research method is chosen to collect and analyze the research data.

This research used both objective and subjective data simultaneously. To explore and understand the participants' current life status, activities, the different aspects of social life, and community participation the researcher used an objective/positivistic approach to enquiry. At the same time, the researcher also used a subjective/constructive approach of enquiry for the exploration of personal experience of social inclusion and dynamics of enabling and disabling factors of social inclusion. In this, the researcher combines the data from the personal experience of participants and the contextual factors in the different phases of the study. To collect and analyse both subjective and objective data, the researcher adopted different quantitative and qualitative research methodologies. In this study, qualitative approaches helped to understand the subjective experience of social inclusion by exploring through tools like interviews whereas quantitative approaches helped to derive objective components of social inclusion such as level of community participation and details of interpersonal relationships, etc. by using tools like a questionnaire.

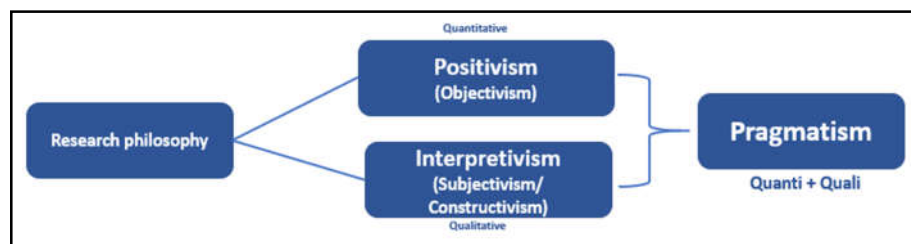
In this view, the researcher adopted the pragmatic research philosophy view, which would provide freedom to combine both, positivism and interpretive positions within the scope of single research according to the nature of the research question. In addition, the researcher adopted the pragmatist position as this approach provides the liberty to choose various research methods or strategies that can best answer the research questions. Also, in this approach researcher could mix quantitative and qualitative methods used to evaluate different aspects of a research problem. Therefore, the main reason for adopting a pragmatist position in this study is to permit a pluralistic stance of collecting all types of data to best answer the research problem (Kelly & Cordeiro, 2020).



In essence, under the pragmatist research philosophy, researchers used a mixed-methods design to follow one or multiple combinations of the best suitable research methods to answer the research questions.

## Figure 2

*Diagrammatic Representation of Philosophy & Paradigm of this study*



## Research Design

This study employed the mixed method design which is a combination of qualitative and quantitative approaches to collect and analyses data. As the literature review described, social inclusion has objective and subjective components (Hall, 2010). The quantitative approach helps a researcher to collect and explore objective components of the life status of the young adults with intellectual disability and their social inclusion from a large number of participants; thus, increasing the possibility of generalizing the findings to a wider population. The qualitative approach, on the other hand, helps to explore subjective components of social inclusion from participants' experiences which would provide a deeper understanding of the experience of social inclusion. Doyle et al. (2009) presented eight benefits or rationales for using mixed methods, namely, "triangulation, completeness, offsetting weaknesses and providing stronger inferences, answering different research questions, explanation of findings, illustration of data, hypothesis development and testing and instrument development and testing".

### ***Typology - Convergent Parallel Mixed-Methods design***

Various typologies of mixed methods designs have been proposed. The mixed-method research design used in this study most closely resembles the convergent parallel mixed-methods design as described by Creswell and Plano Clark (2018). According to them, “the researcher might mix two different approaches namely qualitative and quantitative methods to obtain the triangulated results. In this model, the quantitative and qualitative strands of the research are performed independently, and their results are brought together in the overall interpretation”. In this model, initially, two types of data sets are collected concurrently, and later, they are analyzed separately using appropriate quantitative and qualitative analytical techniques (Schoonenboom & Johnson, 2017; Creswell & Plano Clark, 2011). In this method, the researcher gives weightage to each method equally (Creswell & Pablo-Clark, 2011). In a convergent design, the integration of both data will help a researcher gain a complete understanding of the one provided by the quantitative or qualitative results alone (Dawadi et al., 2021). It is an approach in which two data sets are combined to get a complete picture of the issue being explored and to validate one set of findings with the other (Creswell & Plano Clark, 2018).

### ***The salient feature of Mixed Methods approach used in this study***

In the mixed-methods study, to select the proper design researcher carefully adopted three major aspects while planning an MMR design such as weighing, timing, and point of integration. Each of these three considerations has been discussed in detail below.

**A. Weighing.** Weighting refers to whether the priority is given to the quantitative or qualitative design that depends on factors such as the researcher’s interest, the type of participants, and the objective of the study. A study can have three priority options: quantitative priority, qualitative priority, or equal priority (Plano Clark & Ivankova, 2016). In this present study, equal priority was given to qualitative and quantitative methods across the three phases of the study.

**B. Timing.** Timing refers to determining when to conduct the qualitative and quantitative data collection, and whether to proceed with sequential or concurrent phases. In a sequential design, the quantitative component precedes the qualitative component or vice versa. In a concurrent design, both components are executed (almost) simultaneously. Timing also has two aspects: simultaneous and dependence (Guest, 2012). Phases-1 and Phase-2 of this study used concurrent designs and independent timing, while Phase-3 used sequential and dependent timing.

**C. Mixing and Point of Integration.** In the analysis phase findings obtained from these two different data sets and different phases were converged or integrated according to the objective of the study. Integration of the finding from different strands is crucial for any mixed methods study. There are different identified purposes for integration/mixing findings in the mixed method of study, however, in this study, the main purpose of the mixing was triangulation and complementarity. In triangulation, the purpose was to use both quantitative and qualitative methods to investigate identical aspects of the same phenomenon to evaluate the extent to which the findings converge or do not converge. Through complementarity, one method elucidates, enhances, illustrates, or clarifies the results from the other method (Goldrick et al., 2016). Morse and Niehaus (2009) identify two possible points of integration i.e., the results point of integration and the analytical point of integration. In this study, the results point of integration was applied. In the results point of integration, the results of the one part/phase are added and integrated into the results of the second part/phase and each point of integration is presented in the summary table of the mixed model of this study.

There are many ways to depict the integration of data analysis of mixed method, among these the researcher uses the joint displays approach for integration and convergence of findings at different phases of the research process (Guetterman et al., 2015). Joint displays are visual displays that are used to integrate quantitative and qualitative methods (such as the nature of data, participants, collection procedure and analysis) in different phases.

## **Phases of the Research Process**

In the present study, the researcher examined the experiences and expression of social inclusion of young adults with intellectual disability. To obtain the objective of the study, along with the convergent parallel method, the researcher designed the study in multi-phase and multilevel strategies, i.e., the data collection was completed in three main phases as mixed methods and also data collected in different levels of participants such as; young adults with intellectual disability, their parents/caregivers, teachers, and community members.

**Phase 1:** Exploration of the current life status of young adults with intellectual disability and exploration of domains of social inclusion.

**Phase 2:** Exploration of process and facilitating factors of social inclusion, and benefits of social inclusion, and exploration of barriers to social inclusion of young adults with intellectual disability.

**Phase 3:** Exploration of community member's attitude as a barrier to social inclusion of young adults with intellectual disability was conducted.

Each phase is further divided into different parts based on participants' groups. Parallel samples were selected for each part which was proposed by Onwuegbuzie and Collins (2007). This approach was chosen as a result of the researcher's own experience whilst conducting the pilot study when it was difficult to get the same participants in another phase later. In this study, the phase-1 and phase-3 researcher collected quantitative data by using different survey questionnaires, and the Phase-2 researcher collected qualitative data through interviews in various participant groups. In the integration stage, findings from each phase are mixed to achieve the objective of the study. To meet the objective the study adopted different phases as well as sequential stands (different time periods) which can be called a multiphase mixed method. The research phases been demonstrated in Table 1 given below.

**Table 1**  
**Phases of research -Joint display**

<b>PHASE-1:</b>										
<b>Objective:</b> Exploration of the current life status of a young adult with intellectual disability and exploration of domains of social inclusion										
Phase	Part	Research design	Participants (Group)	Sample number	Sampling techniques	Data collection (tool used)	Data analysis	Timing	Weighing	Point of integration (Result)
Phase-1	Part-1	QUAN	Care giver/ parents of YAID	500	Purposive sampling	Survey questionnaire on the life Status of YAID	Descriptive analysis	Concurrent & Dependent	Equal	Session-1
	Part-2	QUAN	YAID and their parents	150	Purposive sampling	1. Survey Questionnaire on community participation of YAID 2. Freindship status questionnaire 3. Perceived social support questionnaire	Descriptive analysis	Concurrent & Dependent	Equal	Session-2
<b>PHASE-2:</b>										
<b>Objective:</b> Exploration of process and facilitating factors of social inclusion, and benefits of social inclusion, and exploration of barriers to social inclusion of young adults with intellectual disability										
Phase	Part	Research design	Participants (Group)	Sample number	Sampling techniques	Data collection (tool used)	Data analysis	Timing	Weighing	Point of integration
Phase-2	Part-1	QUAL	Care giver/ parents	50	Purposive sampling	Semi structured interview	Thematic analysis	Concurrent & Dependent	Equal	Session-3
	Part-2	QUAL	Community members	100	Purposive sampling	Semi structured interview				Session-4
	Part-3	QUAL	Professional group	30	Purposive sampling	Semi structured interview				Session-5
<b>PHASE-3:</b>										
<b>Objective:</b> Exploration of community member's attitude as a barrier to social inclusion of young adults with intellectual disability was conducted.										
Phase	Part	Research design	Participants (Group)	Sample number	Sampling techniques	Data collection (tool used)	Data analysis	Timing	Weighing	Point of integration
Phase-3	Part-1	QUAN	Community members (group-A)	360 for EFA & 400 for CFA	Purposive sampling	Test construction process (Scale development through psychometry process including factor analysis -EFA& CFA)	Descriptive & inferential	Sequential & Dependent (Emerged)	Equal	
	Part-2	QUAN	Community members (Group-B)	350	convenient sampling	Attitude towards person with intellectual disability scale	Descriptive & inferential			Section-6

Note: YAID: Young Adults with intellectual disability; QUAN: Quantitative ; QUAL: Qualitative ; EFA: explorative factor analysis; CFA: Confirmative factor analysis

## **Validity and Reliability**

Several strategies can be used to enhance the validity and reliability of mixed method research design (Creswell & Plano Clark, 2018). Many researchers support that the combined use of quantitative and qualitative methods in the same study (mixed methods design) provides more robust and reliable results than a single approach design. Combining the two types of data would benefit from both the detailed, contextualized insights of qualitative data and the generalizable, externally valid insights of quantitative data

The following sections discussed the various strategies adopted to establish the validity and reliability of the study. This research had used four strategies to establish the validity and reliability of the study i.e., triangulation, member checks, reflexivity, and researcher's biases reduction.

### ***1. Triangulation***

Triangulation is a technique to analyze the results of the same study using different methods of data collection. It is used for three main purposes: to enhance validity, to create a more in-depth picture of a research problem, and to interrogate different ways of understanding a research problem (Noble & Heale, 2019). For the present study, for triangulation, multiple methods of data collection, through three different phases and levels of participant groups were used. The study used different methods of data collection (such as semi-structured interviews and questionnaire-based surveys) and/or from different sources (i.e., young adults with intellectual disability, parents, professionals, and community members).

### ***2. Member Checking/ Respondent Validation***

Member checking has also known as respondent validation. It's a technique for exploring the credibility of results. Data or results are returned to participants to check for accuracy and resonance with their experiences (Birt et al., 2016). In this study, after the data transcription and analysis selected participants were asked to check the accuracy of their own data and related findings. The researcher discussed and verified the data collected and analysed with participants in different stages.

### ***3. Reflexivity***

It is a strategy used to understand the potential biases through the researcher's self-reflection so that the researcher becomes more aware of subjective and objective elements of the interpretation of data (Dodgson, 2019). Reflexivity generally refers to the examination of one's own beliefs, judgments, and practices during the research process and how these may have influence the research. All research is contextual; it occurs within a specific time and place between two or more people. Thus researcher should clearly discuss the contextual interconnecting relationships between the participants and themselves (reflexivity). Reflexivity not only increases the creditability of the findings but also deepens our understanding of the work (Dodgson, 2019). Through this approach researcher engaged in self-reflection as a researcher, the human as an instrument. To ensure reflectivity, the researcher constantly explained his biases, identify, intellectual dispositions, assumptions regarding the research question, and findings that emerged from the study. Reflexivity also helped to reduce the researcher's biases in each stage of the study.

### ***4. Peer Examination/ Peer Review***

Peer examination and review are used commonly across science as a tool to evaluate the merit and potential impact of research projects and make funding recommendations (Combes, 2004). In this study, the periodical review has been conducted by peers who have experience and knowledge in the field of research topics and methodology. The peer group has reviewed the research design, data collection tools, analysis processing, and reporting of findings from time to time. Review and scrutiny of the process and finding from the study by colleagues and peers had been welcomed at every stage. Feedback offered at review presentations that are made over the duration of the researcher's work had been incorporated into the study. The peer review helped the researcher to refine his research design, develop a greater explanation of the research design and strengthen his understanding in the light of the comments received. Peer review also helped to reduce the researcher's biases and increase inter-rated validity.

## **Ethical Consideration of Study**

Research ethics matters for scientific integrity, human rights and dignity, and collaboration between science and society. Creswell (2007) stated that “ethical research practice involved much more than merely following a set of static guidelines, the researcher need to anticipate and prepare to address any ethical dilemmas that may arise in process of research”. In this line, the researcher reviewed various ethical guidelines published by professional associations and institutions (e.g., the American Psychology Association) on the basis of the literature review and expert consultation. At the very beginning of the research, the researcher had prepared a synopsis of the research and presented it to Institution's Research Ethical Committee, of Calicut University and received approval. Research has used the following strategies to address major ethical issues related to this mixed method of research informed consent, confidentiality, data management, and safety.

### ***1. Informed Consent:***

Informed consent is an important way of ensuring that prospective participants are well-informed about the project in which they are being invited to participate (Stadnick et al., 2021; Gupta, 2013). Informed consent consists of three critical and essential elements including voluntarism, information disclosure, and decision-making capacity (Gupta, 2013; Fleming, 2018). For the present study, informed consent from each of the participants was obtained through the use of information and consent sheets prepared by researchers. The information and consent sheets were prepared in simple language and jargon was not used. The first part of this consisted of the information about the all information about research, the data collection method and how the data would be used, benefits and risks of participating in the study. Participants were also informed that their participation is completely voluntary and they have the right to not to answer or to withdraw from the interview process at any level of the study with guaranteed anonymity. If, after reading the information sheet, the respondents agreed to be interviewed; their



consent was obtained by asking them to sign the consent sheet. Informed consent sheet used in this study is attached as Appendix -1.

## ***2. Confidentiality:***

The ethical duty of confidentiality includes obligations to protect information from unauthorized access, use, disclosure, modification, loss, or theft (Stadnick et al., 2021). In this research to fulfilling the ethical duty of confidentiality researcher removed all identifying information of participants from all data, and restricted data access to the researcher and supervisor only.

## ***3. Data Management and Protection:***

Data management involves the organization, storage, preservation, and sharing of data collected and used in a research project. The research adopted standard data protection strategies in accordance with existing rules of the university which specified protocols around when to whom and how to access data, and clear and well-defined data management plans (Stadnick et al., 2021; Fleming & Zegwarrt 2018). The researcher assigned pseudonyms for each participant's data to keep confidentiality. It was assured that the appropriate device would be used for recording the interview and the written data would be kept securely with the researcher which can be accessible at any point of time until the data analysis starts.

## ***4. Protection from Harm:***

From the planning state itself, the researcher had apprehended and prepared to address all possible sources of harm to participants. The researcher expected two forms of harm i.e., the first is psychological harm (sensitive questions or tasks may trigger negative emotions such as shame or anxiety) and the second is social harm (participation can involve social risks, public embarrassment, or stigma). To mitigate these harms and ensure the safety of participants' research has avoided the direct and sensitive questions and probes that may trigger negative emotions in them. Also, to address the social harm mentioned above, research has taken all measures for the confidentiality and anonymity of participants throughout the study.

## **PHASE-1**

Data on the status of intellectually disabled young adults are not available in Kerala, specific to their demographic features and other statistics. In phase 1, researchers were trying to understand the current life status of young adults with intellectual disability and to explore how far social inclusion happens in their living surroundings. Phase I is divided into two parts. Part 1 dealt with the objective of understanding the current life status of young adults with intellectual disability, Part2 tried to focus on the objective of exploring domains of social inclusion of young adults with intellectual disability.

### **Research Design**

Quantitative approach was used in their phase being majority of the data sought were measurable in numbers. Survey method was suitable here. Parent of the participants supported to derive the data.

### **Part- 1: Current Life Status of Young Adults with Intellectual Disability**

#### **Participants**

The population is all young adults with intellectual disability residing in Kerala in the age group 18-25 years. The participant consists of 500 young adults with intellectual disability in the age group 18-25 years, from different parts of Kerala. The participant was selected through the purposive sampling technique. The researcher identified the first few participants from the pre-vocational rehabilitation centre, CDMRP, Department of Psychology, University of Calicut, and from various BUDS rehabilitation centres of Kerala. Through them, parent's advocacy groups and community workers were contacted, and more young adults with intellectual disability were identified. Each participant was collected based on referrals from others' parents or community workers.

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

- Young adults with intellectual disability who has disability certificate from competent medical board under the category of intellectual disability.

- Age between 18-25 years.

### ***Exclusion Criteria***

- Diagnosed with multiple disabilities.
- Those who are bedridden and with profound intellectual disability.

### **Data Collection Tool**

#### *Tool - Survey questionnaire on life Status of Young Adults with Intellectual Disability*

Since, the target group, here young adults with intellectual disability often experience difficulty to comprehend questions and respond accordingly, responses were given by caregivers or parents. The questions were also framed in such a way that it addresses caregivers and they must respond about their child with intellectual disability. The content of the questionnaire was based on the researcher's clinical experience and review of the literature. Questionnaires consisted mainly of closed-ended questions, where respondents had to make a choice in responding, and the options were already predetermined by the researcher. In open-ended questions, respondents can answer in their own words. The questionnaires were in regional language i.e., Malayalam. These questionnaires had three parts and each one would be discussed in detail below.

Part 1 of the questionnaire included age and gender of young adults with intellectual disability and age, education, and employment status of caregivers or parents. The aim was to gather background information of the participants. The part 2 included disability specific details, such as the type and level of disability and associated conditions. The part 3 area questionnaire was developed by the researcher, based on the developmental goal of young adults suggested by Arentt (2010). It includes only one item "for the past six months, what are your ward doing?" The sample must select anyone options from the three choices given. The first being age-inappropriate activity, with different sub-options, 'attending general school', 'attending special school,' the second item was age-appropriate activity

with different sub-options of ‘attending higher education’, ‘attending pre-vocational skill training’, ‘undergoing training at the job training center’, and doing small jobs. And the third item is ‘sitting at home doing nothing’. Tool is attached as Appendix No.2.

### **Pre-test**

A pre-testing of the questionnaire was done in order to find out feedback regarding the comprehension, phrasing, and design of the questionnaire. First, the questionnaire was distributed among 5 rehabilitation professionals who had experience in dealing with young adults with intellectual disability. They were asked to comment on the structure of questions, content, wording, and overall use of language. Based on their feedback, it was revised and restructured. The draft questionnaire was also discussed among a parent group of 10, who took regular therapy from CDMRP, Department of Psychology, and University of Calicut. This was done in order to make sure the questions were comprehended properly and they could understand instructions properly and the relevancy of questions.

### **Data Collection Procedure**

The first few participants were collected through pre-vocational training centre, CDMRP, and also from BUDS rehabilitation centres across Kerala. Through them, parent supporting groups were introduced, from which participants were identified. Also, some were obtained by referral of community workers.

Each participant along with their caretaker was approached individually, if the young adults with intellectual disability followed the inclusion criteria, then they were briefed about the study, and informed consent was obtained from parent or caregiver. Young adults with intellectual disability usually face difficulty in reading and writing, so the whole questionnaire was addressed to caregivers/parents, who filled out the form on behalf of the minor.

### **Administration**

Instructions were read out to them, majority of questions were closed-ended and they should choose from predetermined options that best fit the sample. Most questionnaires were individually administered and took almost 45 minutes to one hour. The parents were given prompts and also given the freedom to ask any queries.

### **Data Entry and Coding**

Obtained responses from the samples were entered into excel sheet. Each question was regarded as columns and rows determined by individual samples. Data was checked for duplication, missing, and errors. Nominal data were coded into numerical data respectively.

### **Data Analysis**

As the objective of the study was to find out the present life status of young adults with intellectual disability, history of therapy and education received and level of community participation, mainly the descriptive statistics were found. Summary statistics were found out and charts were drawn using EXCEL and SPSS V 22 software.

## **PART 2: Exploration of Domains of Social Inclusion**

### **Participants**

The population was all young adults with intellectual disability residing in Kerala in the age group 18-25 years. Participant consisted of another group of 150 young adults with intellectual disability, from different parts of Kerala. The participant was collected through purposive sampling technique. The researcher identified participants from pre-vocational rehabilitation centre, CDMRP, Department of Psychology, University of Calicut and from various BUDS rehabilitation centres of Kerala that meet the inclusion and exclusion criteria.

### ***Inclusion Criteria***

- Young adults with intellectual disability who has disability certificate from competent medical board under the category of intellectual disability.
- Age between 18-25 years.

### ***Exclusion Criteria***

- Diagnosed with multiple disabilities.

- Those who are bed ridden and with profound intellectual disability.

### **Data Collection Tool**

The three questionnaires were developed by the researcher that was used to collect data. The content of the questionnaire was based on the researcher's clinical experience and reviewing of literature. The questionnaire consisted of closed-ended questions, where respondents had to select options that are most suitable for them respectively for each item. Each one will be discussed in detail below.

#### ***Tool-1: Questionnaire on Community Participation of Young Adults with Intellectual Disability***

Community participation of participants was explored through this survey questionnaire developed by the researcher. This questionnaire consists of 4 areas of community participation, proposed by the international classification of functioning and disability (ICF) published by WHO (WHO, 2001). Respondents must choose whether they engage in different activities or not. Four areas are,

**1. Productive activity (Age appropriate).** This included activities like, attending pre-vocational skill training, attending training at a job training centre, doing minor jobs, higher education

**2. Recreational/ Interpersonal.** This includes activities such that they are generally expected to come out of the care of their parents and establish their own identity and be involved in interpersonal relationships with peers. Specifically, the activities asked in the questionnaire are, sharing friendships with the non-disabled peer, playing with peer, involved in public with peers (park, movies & hangout, etc.)

**3. Consummation of facilities (domestic).** This activity includes activities that make use of different resources in the community and the utilization of facilities. So, this area included questions that are majorly needed for independent living and community participation, specifically, purchase/shopping and travel using public transport.

**4. Cultural/Social activity.** The last activity is the involvement in cultural/social activities which facilitate their community participation. It includes

questions on joining local, public, cultural activities, like clubs, and participating in volunteer activities in the area.

***Tool-2: Friendship Status Questionnaire***

This part of the questionnaire was used to understand the nature of interpersonal relationships among young adults with intellectual disability. This includes four factors the details of friendship, whether they are individuals with disability or not, the place of meeting, and the kind of activities they are involved in. Respondents had to select the options provided.

The first factor of friendship included 4 questions, for the first two questions they had to respond yes or no, i.e., they have friendship with the same age group and they have friendships with non-disabled. The third question asked about how many friends they had. Fourth question was a detailed explanation for question third, who their friends were and they had provided options classmates, relatives, and neighbours. The next question was about the type of activity engaged with friends and they had to tick mark if they do the activity or not. The activities are talking and chit chatting, playing mobile, games & sports and travelling. The third question was about the place of meeting with friends and the choices were school, vocational center, playground & clubs.

***Tool-3: Perceived Social Support Questionnaire***

This part of the questionnaire assesses the perceived social support and sense of belongingness from friends among young adults with intellectual disability. It included questions like perceived availability of friends, perceived help from friends, and perceived support from friends during difficulty time, and perceived readiness to share joy and sorrow. The response anchors were ‘not at all’, ‘sometimes’, and ‘always’. Above mentioned three tools are attached as Appendix No., 3, 4, & 5.

**Pre-test**

A pre-testing of the three questionnaires was done in order to find out feedback regarding the conceptual clarity, wording, and design layout of the questionnaire. This was done along with pre-test of the questionnaire of phase I.

### **Data Collection Procedure**

Samples were collected through pre-vocational training center, CDMRP, and also from BUDS rehabilitation centers across Kerala. Each participant selected based on inclusion and exclusion criteria were approached in person.

First, was a debriefing about the importance of the study, that is understanding the life experience of young adults with intellectual disability. Similarly, to part-1, Caregiver/parents were asked to sign the informed consent, as the person with intellectual disability came under 'minor'. The informed consent sheet consists of briefing of the study and ethical considerations such as confidentiality, voluntary participation, and freedom to withdraw. Young adults with intellectual disability usually face difficulty in reading and writing, so the whole questionnaire was addressed to caregivers/parents, who filled out the form by discussing with young adults with intellectual disability.

### **Administration**

Instructions were read out to them; majority questions were closed ended and they should choose from pre-determined options that best fit the sample. Most questionnaires were individually administered, and took almost 15-30 minutes. The parents were given prompt and also given freedom to ask any quires.

### **Data Entry and Coding**

Excel software was used to do the data entry. Data was cleaned for duplication, missing and error.

### **Data Analysis**

As the objective of the study was to find out the nature of the interpersonal relationships and perceived social support, mainly the descriptive statistics were found. Summary statistics were found out and charts were drawn using EXCEL and SPSS V 16 software.



## **PHASE-2**

The objective of the phase 2 was to explore the various enabling and disabling factors (process, benefit and perceived barriers) of social inclusion young adults with intellectual disability. For fulfilling this objective, qualitative approach was used. Data was collected from three groups, i.e., (1) Parents and caregivers (2) Rehabilitation professionals (3) Community members. The data collected through interviews of these three levels of participants would give a more holistic and in-depth understanding of the experience of social inclusion. The three groups was selected based on Bronfenbrenner's ecological systems framework. The model postulated that each individual is situated in a complex system bidirectional of relationships and influenced by multiple levels of agencies and systems such as from immediate settings of family and school to broad community members. Participants from each level inevitably interact with and influence the process and experience of social inclusion of young adults with intellectual disability and they also collectively create the context for inclusive social situations (Simplican et al., 2015). Another reason for collecting data from different groups is that it facilitates triangulation purposes, the triangulation is integrating data from different sources about a single problem of the study which would enhance validity, to create a more in-depth picture of a research problem, and to interrogate different ways of understanding a research problem (Carter et al., 2014).

Each group has different sample size and sampling criteria. But semi-structured interview technique was used for data collection and thematic analysis was used for data analysis of all groups. Even though, data collection and analysis process of each group was done independently, in the final mixing stage 'Result point integration' approach was used i.e., findings from each group has been integrated and analyzed. Data was collected as three levels which is elaborated below.

### **Participant & Sampling**

#### ***Level-1: Parent/caregiver of Young Adults with Intellectual Disability***

Participants' group consist of parents and caregivers of young adults with intellectual disability. Parents/caregivers play the most crucial role in the overall

empowerment and mainstreaming of young adults with intellectual disabilities. As a primary agent of socialization, parents often spent more time with young adults with intellectual disability thus they would be able to provide a detailed account of the process and experience of social inclusion of young adults. Multiple studies have reported that parents' attitudes, behavior, and readiness play a huge role in preparing young adults with intellectual disabilities for community participation and social relationship.

Participants of this level were selected through purposive sampling. Participants were obtained initially from the vocational rehabilitation unit of CDMRP. Then through them different parent's advocacy groups were contacted, and more participants were identified. Each participant was selected based on a referral from others parents or community workers. Around 62 participants were obtained through the purposive sampling technique. Participants were further filtered based on the inclusion criteria. Thus, a total of 50 parents and caregivers of young adults with intellectual disability were selected based on inclusion criteria. The final sample consists of 50 parents/caregivers of young adults with intellectual disability. All participants belong to Kerala and speak Malayalam language, demographic details of participants show participants were of 41 to 60 years of age. The majority of the participants hadn't completed their SSLC and were daily wage workers.

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

- Parents or immediate caregivers of young adults with intellectual disability.
- Currently staying with young adults with intellectual disability.
- Participation was on self-choice.

#### ***Exclusion Criteria***

- Parents/caregivers of young adults with intellectual disability who has multiple level disability, a significant level of neurological psychiatric illness.

***Level-2: Professional Working in the Field of Rehabilitation***

Participants group consist of 30 professionals working in the field of rehabilitation of young adults with intellectual disability. Purposive sampling technique was adopted. Professionals were selected from different rehabilitation centers of across the Kerala based on inclusion criteria. All participants were qualified for rehab mainly from two professional categories; Special Educators and Rehabilitation Psychologists. These groups of rehabilitation professionals are closely working with young adults with intellectual disability and they have wide experience on the process of socialization of young adults with intellectual disability. They collaborate with teachers, other professionals, and administrators to foster the specific skill and opportunities required for desirable community participation and interpersonal relationships. They often work with different policymakers to design activities and schemes that will facilitate community participation and social inclusion of young adults with intellectual disability.

***Inclusion Criteria***

- Qualified Rehabilitation Professionals.
- Minimum five years of professional experience.
- Involved in the training of young adults with intellectual disability.

***Level-3: Community Members***

Participants group consist of 100 community members and public groups of Kerala and they were selected through purposive sampling technique. Community members mean a group of people who reside in a particular area or place. They often share a common belief and attitude about particular concepts and they share common environmental contexts and practices. The community members clearly play a seminal role in the overall process of experience of social inclusion of young adults with intellectual disability. Hence their belief about the social inclusion of young adults with intellectual disability would help to get an outsider and contextual

perspective on the core research question. The initial data was collected from 156 community members, after reviewing their responses 100 participants were selected on the basis of inclusion criteria and incomplete responses were excluded. Demographic details of participants are given in Table 2.

**Table 2**

*Demographic details of Participants group of Community Members in Phase-2*

		Frequency	Percent
Age	19 to 25 (Young adult)	47	47
	26 to 40 (Adult)	21	21
	40 to 60 (late adult)	32	32
Gender	Male	19	19
	Female	81	81
Education	SSLC&+2	36	36
	Graduation	54	54
	Above Graduation	10	10
Job/ area of work	Community worker	27	27
	College students	50	50
	different Professionals	8	8
	Business & other semi skilled workers	15	15
Relationship with YAID	No direct experience/contact	20	20
	Not directly acquainted but met them in community	49	49
	Family members	16	16
	Works in an organization for the promotion of disability	15	15

### **Data Collection Technique/ Measures:**

In phase 2 of the study researcher attempted to make in-depth understanding of various enabling and disabling factors of social inclusion of young adult with intellectual disability, for this, the researcher explored three domains of social

inclusion i.e., 1) Process and 2) Perceived benefit 3) Perceived Barriers of social inclusion. A semi-structured interview method was used to gather the data. On the basis of the objective of the phase, the researcher has developed interview guidelines. This schedule consists of only three questions as given below.

1. *In your opinion, what methods should be taken to ensure the social inclusion of young adult with intellectual disability?*
2. *Can you explain the benefits of social inclusion of young adult with intellectual disability?*
3. *Can you explain the barriers for social inclusion of young adult with intellectual disability?*

“The aim of developing an interview schedule is to facilitate a comfortable interaction with the participant which will, in turn, enable them to provide a detailed account of the experience under investigation” (Smith et al., 2009). The questions were phrased in a manner that was open and allowed for the participant to talk at length (Smith et al., 2009). In addition to the given interview schedule, the participants had all the freedom to share their narrative freely and the researcher also facilitated participants to share the deep account of their narrative in a way that is useful for the present purpose.

Semi-structured interviews are less time-consuming to analyse compared to unstructured interviews. Semi-structured interviews allow interviewers to have greater flexibility when asking required questions for further exploration. Semi-structured interviews provide high validity because researchers can gather first-hand detailed accounts of perceptions, attitudes, and experiences about the focused issue. Throughout the interview process, the researcher also asked open questions to “generate data which give an authentic insight into participants' experiential account of the topic (Palinkas et al., 2013).

Semi-structured interviews were conducted separately for each group of participants with the same interview schedule. The aim of collecting data from three group of participants through semi-structured interviews by using the same

interview schedule was to get a comprehensive view of the problem and also consider a means of triangulation of the required data of the study.

### **Procedure of Data Collection**

Interview of level-1 (Parent and caregiver) and level-2 (Rehabilitation Professional) sample groups conducted by researcher through face-to-face meeting. However, interviews of participants of Level-3 (community members) have been done online due to covid-19 related restrictions. The researcher invited the level-1 (Parent and caregiver) sample group to the vocational rehabilitation center or community center or BUDS school, which ever was convenient to them. The researcher met participants of Level-2 (Rehabilitation Professional) individually at their clinic or any convenient meeting place. In the opening phase, the researcher discussed the purpose of the study. A rapport was established between the researcher and the participants. Informed consent was obtained from each participant. The interview procedure was anonymous in the sense that interviewees were not asked to give their names or to provide any other information that would establish their identity. However, their general demographic details were collected such as age, education, job, and years of contact with young adult with intellectual disability.

Each interview took around 30-45 minutes. The participants were encouraged to freely share their own experiences of the topic of the study. The audio recording of all interviews was done with the consent of the participants. The voice recording was chosen because the method made it possible to have continuous conversations, whereas writing notes would have disrupted the flow of the interview. In addition, it provided an accurate representation of what was said. Without voice recording, only the basics of any conversation could be captured and might possibly be misinterpreted. It was very convenient for the researcher to listen to the voice recordings repeatedly for data transcription purposes. All voice recordings of interviews were transcribed individually.

The researcher transcribed the interviews himself so that researcher would have the opportunity to understand the data deeply and it would make the analysis process easy. In a few cases, some verbatim were difficult to transcribe because of

many repeated words or sounds or changes in the topic. In this case, certain words were excluded if the words were repetitive, less meaningful, or would cause confusion. Interview transcripts of each sample group were done separately for analysis purpose. Each of the transcribed data was checked for accuracy against the audio tape recordings once the transcription has been completed. The final interview transcription consists of a total of 82 pages. It took one year to complete the interview and its analysis, both were done simultaneously.

### **Data Analysis - Thematic Analysis**

The thematic analysis method was used for the data analysis. Thematic analysis is a method for systematically identifying, organizing, and offering insight into, patterns of meaning (themes) across a dataset. Thematic analysis is a widely-used tool for interpreting qualitative data in psychology disciplines. The goal of thematic analysis is to identify themes, i.e. patterns in the data that are important or interesting, and use these themes to address the research or say something about an issue. Thematic analysis may be conducted in a variety of ways and it is sufficiently flexible to allow for the inductive, latent, and interpretive qualities desired in the study (Ryan & Bernard, 2003), another important strength of the thematic analysis is its use of web-like diagrammatic networks from the derived themes and subthemes, it provides a valuable graphic representation of the themes and the relationships between them (Attride-Stirling, 2001). These diagrams would help and become a tool for reporting the findings of the study, allowing the reader to understand how the text was interpreted (Walters, 2016).

In this study, the researcher adopted the six-stage method for conducting thematic analysis proposed by Braun and Clarke (2006). Interview transcripts obtained from three levels of participants were analysed separately and in the final stage of the result point integration was used for analysis and discussion. Each stage of the analysis process is discussed below,

*Stage-1: Initial reading of texts to gain familiarity:* the aim of this stage is to familiarize by reading and re-reading the data, and noting down initial ideas that emerged (Braun & Clarke, 2006; Walters, 2016). In this initial stage, the researcher

reread the transcripts at least twice to begin to identify patterns and meaning, and take reflective notes in this process. In this stage, significant language, patterns, and common themes were discovered throughout the participants' interview transcripts.

*Stage-2: Generating initial codes:* This second stage was focused on reducing the data and the production of initial codes (Braun & Clarke, 2006; Walters, 2016). Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code (Braun & Clarke, 2006). The data was coded into meaningful and manageable chunks of text, such as passages, quotations, single word (Attride-Stirling, 2001). Coding reduces lots of data into small chunks of meaning. A total code was identified from transcribing the interview of three participants groups. Open coding and axial coding were done by the investigator and selective coding was done by two researchers for ensuring inter-rater reliability. Further, these codes were arranged into three pre-fixed domains, i.e., codes were (1) Process, 2) perceived benefit of social inclusion and (3) perceived barriers. The number of codes derived from each three group of participants across the above discussed domain is given below,

**Table 3**

*Number of code derived from interview transcribe of each three group of participants across the domain by using thematic analysis*

Participants	Domain			Total
	Barriers	Process	Benefits	
1.Parents/caregivers	229	275	162	666
2.Professionals	47	127	54	228
3.Community members	127	115	101	343
Total	403	517	317	1237

*Stage-3: Searching for themes:* This third stage was focused on collating codes into potential themes, gathering all data relevant to each potential theme" (Braun & Clarke, 2006). The codes were consolidated into basic themes by collating together all codes that seemed similar. In this stage, the researcher analysed and



sorted the codes into broader themes that seemed to say something specific about this research question.

*Stage-4: Reviewing themes:* This stage was focused on refining the draft themes identified in phase three using a two-level analysis of the codes. The first level involved reading through the codes for each theme and determining if a coherent pattern has developed (Braun & Clarke, 2006). The basic themes were clustered into coherent groups and condensed into higher-level themes that shared similarities. The organising themes and subthemes were then clearly defined. Each organising theme was checked for coherence and consistency by reviewing the data extracts and examples for each code that made up the theme. Further internal homogeneity was checked and the theme was revised if required.

*Stage-5 “Defining and naming themes:* The goal of this stage clearly define the themes and name them appropriately” (Braun & Clarke,2006; Walters & Trudie, 2016). To meet this goal, researcher focused on defining each theme, identifying the conceptual understanding of the theme, and determining what aspect of the data and research questions the theme fits under. The resultant organising themes and subthemes were then clearly defined and named. Further separate tables which show all the themes and subthemes under each domain along with the codes that are associated with them are prepared. Thematic network for each domain was also prepared in this stage; it is diagram in which the basic themes, subtheme organising themes and global theme under each domain were visually depicted. It is presented and discussed in respective section of results..

*Stage -6: Report writing:* This is the final stage which focused on analyzing the data and writing a narrative about each theme derived. This research discussed each theme in depth and made argumentative and conclusive inference research questions. In this stage, researcher used insight from his reflective journal which he maintained throughout the research, especially in the data collection and data analysis. The researcher also had prior clinical experience with young adult with

intellectual disability and experience also incorporated the process of analysis and this meaning-making stage.

### **Trustworthiness of Thematic Analysis**

In order to ensure the validity and reliability of Phase 2 i.e., the qualitative approach of research the concept of trustworthiness was used, Trustworthiness is considered a more appropriate criterion for evaluating qualitative studies. For this study, the researcher utilized a model of trustworthiness specific to qualitative studies. In order to ensure the process is trustworthy, Guba and Lincoln (1989) proposed that the research should satisfy four criteria. They are credibility, transferability, dependability, and conformability. This is referred to in this article as “the Four-Dimensions Criteria” (FDC).

#### ***1. Credibility (Internal Validity):***

Credibility ensures the study measures what is intended and is a true reflection of the social reality of the participants. There are many strategies to address credibility that include “prolonged engagement” and member checks (Forero et al & 2018 Maher et al, 2018). Establish credibility in a less invasive manner, the researcher mainly used member checks strategies for that researcher's regular discussion and review of each stage of data collection and analysis with the research supervisor, and colleagues in the concerned field. The interview protocol was tested at two induction meetings and using 1–2 pilot interviews. In addition, the researcher shared the interview transcript and findings with selected participants and these participants reviewed their transcript and necessary additional modifications were made based on their feedback.

## **2. Transferability:**

Transferability relates to the ability of the findings to be transferred/ applied to other contexts or settings (Maher et al.,2018). It is thus equivalent to or a replacement for the terms generalizability and external validity. As a qualitative method, in this study it was important to keep in mind that even though a person's experiences are theirs alone, there may be some transferability, being that the participants were purposefully selected. Meaning the participants share some commonalities such as they have shared experiences from the community about the social inclusion of young adult with intellectual disability.

## **3. Dependability:**

Dependability ensures the process is described in sufficient detail to facilitate another researcher to repeat the work. This requires a detailed audit trail. During the entering process of planning and implementing the study, the researcher adopted appropriate approaches and techniques. And accordingly, the researcher prepared detailed drafts of the study protocol throughout the study (Forero et al., 2018; Maher et al.,2018). All the steps are documented in detail which could be applicable for external audit and review. The present study which is , highly descriptive in nature have detailed the presentation of the setting and findings with adequate evidence has been presented. To ensure the dependency, the researcher developed a detailed track record of the data collection process and also measured coding accuracy and inter-coders' reliability of the peer research scholars in the department.

## **4. Conformability:**

Conformability is comparable to objectivity in quantitative studies ( Maher et al., 2018). The goal is to minimize investigator bias by acknowledging researcher predispositions (Forero et al., 2018). To reduce researcher biases, the researcher made efforts to represent participant experiences accurately and honestly throughout the study. The researcher implemented reflexive journals and regular member checks. Researcher was adopted self-reflective approach which would facilitate this process.

### **PHASE-3**

Phase 2 consists of two parts, Part 1 is the construction and standardization of scale – Attitude towards person with intellectual disability. The rationale and standardization procedure are explained in detail in Chapter 3. Part 2 is discussed in detail.

#### **Part-2: Community Members Attitude Towards Person with Intellectual Disability**

Phase III explored community members' attitude towards the person with intellectual disability. The main objective was to assess the attitude of various groups toward the young adult with intellectual disability.

#### **Research Design**

Quantitative approach was followed as data was collected using a standardized questionnaire and scores were comparing across different groups. Thus, difference in the attitudes of different groups was found.

#### **Participants**

**Population:** Community members or public groups in Kerala.

**Sample:** The participant included 350 community members, obtained through convenient sampling technique. Socio-demographic details of sample is given below in Table 4

Table 4 shows the frequency and percent of the sample according to different demographic details like age, gender, education, job, and relationship with YAID. In the age group, 19-25 year participated more in number, i.e., 34.3% and below 18 years and late adult participated less, i.e., 19.4. There were more males than females (64.6 %). Most of the participants were graduated (38.3%). 39.4% of students were college students and only 9.7% were rehab professionals, the rest being community workers(11.7%), teachers (18.6%), business and semi-skilled (19.4%). The majority of participants didn't have direct experience with the disabled (40.3%).

**Table 4***Socio-demographic details of participants of part-2 of phase-3 of the study*

	Frequency	Percent
Age		
below 18 years	68	19.4
19 to 25 ( Young adult)	120	34.3
26 to 40 (Adult)	94	26.9
40 to 60 (Late adult)	68	19.4
Gender		
Male	124	35.4
Female	226	64.6
Education		
SSLC&+2	116	33.1
Graduation	136	38.9
Above Graduation	98	28.0
Relationship with YAID		
No direct experience/contact	141	40.3
Although they were not directly acquainted, I had met them in community	112	32.0
Family members	43	12.3
Rehab professionals	54	15.4

**Data Collection Tools*****1. Sociodemographic Details***

Different demographic details like age, gender, education, job, and relationship with YAID were collected in this part.

***2. Attitude towards Person with Intellectual Disability Scale (AT-PID Scale)***

The aim of this was is in getting an overview of the general population of Kerala's attitudes toward individuals with intellectual disability. The scale consisted

of 18 items. AT-PID scale is a 3-point scale with the categories ranging from Agree to Disagree. Items are written in both regional language and English language

**Factor Structure.** AT-PID has four-factor structure. The four factors are Factor-1: Inclusion, Factor-2: Expectation, Factor-3: Independency, and Factor-4: Acceptance. CFA confirms that F-1, F-2, F-3 & F-4 are the first order factors, and Attitude towards person with intellectual disability is the second-order factor.

**Reliability.** The scale had good internal consistency with Cronbach's alpha 0.79 for the overall scale. Domain coefficient of alpha is Inclusion: 0.701, Expectation: 0.702, Independency: 0.62, Acceptances: 0.6

**Scoring.** Each anchor is given a score of Agree (1), undecided (2) Disagree (3). The Sum of all item scores constitutes the attitude of an individual subject towards a person with intellectual disability. Calculating the *dimension-wise* score calculation is as follows,

Add score of item 3,6,10,14 and 16= Inclusion

Add score of item 1,2,7,11 and ,13 =Expectation

Add score of item 4,8,12 and 17=Independency

Add score of item 5,9,15 and18=Acceptances

### **Data Collection Procedure**

Online survey software, Google forms was utilized for data collection, as it was lockdown in Kerala due to Corona pandemic. All 18 items in the scale and socio-demographic details were entered into Google form. As an introduction of a brief description was given about the study and ethical considerations like confidentiality, volunteer participation, and anytime withdrawal was included. Informed consent was obtained by ticking a respective column, i.e., if they were willing to participate, they can tick in a column and then proceed. Phone number and details of the researcher were provided and asked to contact freely for further doubt clearance and clarification. At the beginning of the scale, instructions were clearly added, and they can choose/click any option they feel suitable for each item. At last,

they must submit the form for successful completion. The link for the Google form was circulated among students, teachers, community workers, and professional groups. This tool attached as Appendix No-7.

### **Data Entry and Coding**

As the data was collected through electronic form, data entry will be automatically available in excel sheet. Then the data was coded. Duplicates were deleted. Errors and missing data were deal with.

### **Data Analysis**

Descriptive statistics was found to describe the data about mean, median, mode, percentage, standard deviation, skewness, kurtosis. In order to compare different groups inferential statistics such as ANOVA was utilized. All the analysis was done in SPSS V 16 or excel.





CHAPTER 3

**TEST CONSTRUCTION –  
ATTITUDE TOWARDS PERSON WITH INTELLECTUAL  
DISABILITY SCALE**



*Test Construction Development Attitude towards Person with Intellectual Disability scale*

Attitude towards persons with intellectual disability can vary across cultures (Yazbeck et al., 2004). The exploration of various factors influencing the formation of the attitudes towards the person with intellectual disability could help to design required intervention strategies to address the negative attitude. Attitudes towards person with intellectual disability result from the interaction of various factors such as level of knowledge and existing belief about them and one's personal experience with them, it may vary across the culture (Wang et al., 2021). Better understanding of the effects of negative attitude on person with intellectual disability is essential for their empowerment in terms of the health, social and economic costs. This situation demands an exploration to understand various negative attitudes toward person with intellectual disability, which would help to define the factors that hinder empowerment and social integration of person with intellectual disability. Hence, there is urgent need to design appropriate strategies to identify and measure prevailing attitude towards person with intellectual disability. One of the easiest and relevant strategies would be, through self tests. Thus, present tool to measure attitude towards person with disability would act as guiding steps to design various community based intervention to challenge existing stereotyped beliefs about person with intellectual disability which would be the key to change prevailing negative attitudes among community members.

From reviewing of literature in the area of attitude measure, it was evident that, there is multiple attempts to develop tool to measure attitudes towards person with intellectual disability and all are based on various definition or theoretical concepts. Findler, et al. (2007) reported that "there are two type of attitude measurement techniques: direct, self-describing or explicit, in which the person is asked directly what his/her attitude towards a given object is, and indirect or implicit, in which the attitude is measured based on an indicator other than the response. Hannon and NDA (2007) had conducted an extensive review on existing tool to measure the attitude towards disability, they had reported that "To date attitudes to disability have most commonly been investigated through direct means and typically involving self-report surveys. Instruments widely used to examine attitudes towards persons with disabilities as a group include the attitudes towards

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

Disabled Persons Scale (ATDP) developed by Yuker et al. (1960) and the Scale of Attitudes toward Disabled Persons (SADP) developed by Antonak and Livneh (2000). These assess attitudes from a social perspective as opposed to a personal one with questions centring on how persons are, or should be, treated at the societal level (White et al., 2006 citing Gething et al., 1994). All these measures are subjected to concerns about the influence of socially desirable responses and false positive scores.

Lam et al. (2010) had conducted a review of validity of existing instrument to assess the attitude towards person with disability, he has reported that “instruments are all at least two decades old and the majority was developed in the 1970s and 1980s. In the decades that have passed, there have been changes in societal views of people with disabilities as well as changes in legislation and public policy. As such, the identified instruments might not cover aspects relevant to today's norms or culture (e.g., using the internet, social networking to interact with disabled individuals)”. Lam et al. (2010) also reported that some of the identified instruments used a terminology that is not relevant or socially accepted today. The vast majority of these instruments have been developed to measure the attitude of specific population to measure the attitude towards person specific category of disability, mainly, person with physical disability (Yuker et al., 1960; Antonak & Livneh, 2000). This tool may be inappropriate for use to measure the attitude towards person with intellectual disability as these group experience more negative attitude from non disabled group. In literature only very few attempts can be seen to develop tool to assess the attitude towards person with intellectual disability.

All available instruments were developed for non-Kerala cultural context. For present study researcher was in need of an instrument which incorporate various factors which contribute for the formation of attitude towards person with intellectual disability form cultural, political and educational ethos of Kerala. In this situation there is high demand for development of new instruments mainly by considering the cross-cultural adaptation and different language versions. This above discussed studies highlight that there is a need to develop standardized,

cultural specific tool to measure the attitude towards person with intellectual disability in regional language (i.e., Malayalam). Hence, the researcher decided to construct and standardise an instrument to assess the attitude towards person with intellectual disability using the principles of psychometrics and psychological measurement in Malayalam language.

### **Preparation of Items**

In psychology, the questionnaire, rating scales, inventories are often used as measurement tools. A good tool consists of valid statements and it would measure what it intend to measures. Based on the existing literature review and theories and definitions, the operational definition and various domains of attitude towards the person with intellectual disability have been described. Most discussed domains are inclusion, discrimination, rejection, acceptance, marginalized and expectation (e.g. Findler et al., 2017; Power & Green, 2010). It is also observed that existing tools assess attitudes from a social perspective or personal perspective.

In this study researcher adopted the protocol of self-report inventory as designing, administration, scoring and interpretation will be relatively easy. According to Warner et al. (2011) “self report is inexpensive and can reach many more test subjects. It can be used relatively quickly, so investigator can gain results in days or weeks rather than observing a population over the course of a longer time frame. Another advantage of self-reports is, it can be made in private and can be anonymized to protect sensitive information and perhaps promote truthful responses”.

Based on the definitions and review of literature, investigator had prepared items in regional language (Malayalam). The response category of the instrument is 3 point Likert type (Agreement format). Initially the investigator had prepared 48 items. Every item has been provided 3 response categories namely ‘Agree’, ‘Neutral’ and ‘Disagree’, and score of each category was 1,2,&3 respectively.

In order to assess the exact content of item, investigator designated the items as clearly as possible. Redundancy was established to capture the precise construct

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

by attempting to capture the phenomenon of interest by developing set of items that reveal each domain in different ways. In the initial draft investigator limited the total number of items to 36 as in the view a large pool of items will be difficult to administer on a single occasion and it would affect the validity of the test. In order to improve the quality of the item lengthy items were avoided and simple language was used to reduce reading difficulty as this tool would be used by general public with varying literature ability. Ambiguous items and doubled barrelled items (items consist to two or more ideas/meaning) and were not included in draft scale.

After writing items, there was 48 initial items in the item pool, which were reviewed with experts, from the field of psychology (i.e. 3 Nos. of faculty members, 3 Nos. Rehabilitation professionals and 3 Nos. of researchers who are well experienced in psychometry) and also to disability advocacy volunteers working in the area of disability empowerment and rehabilitation. Experts evaluated the item to check how relevant each item is and to what it intends to measure and to include any phenomenon that researcher failed to include. Experts were contacted by person and introduce the concepts of attitude towards disability. All experts had done mock filling of draft inventory at first. Experts were requested to review the statements and evaluate its content, accuracy, and suitability, test item evaluation performa was used for the same. In this performa, expert had to review each item against given criteria's such as language, meaning, psychological construct, double barrelled statements, ambiguity, difficulty level, clarity of idea. With the suggestions and recommendations of subject experts, many items were cancelled, modified, and even rewritten. Since it is in regional language (Malayalam) the draft scale was given to experts both in English and Malayalam languages for validating the language structure and appropriateness of each item. Finally the draft scale consisted of 36 items.

After the expert review 36 items draft with a good set of item pool which had concept clarity and appropriate language structure were obtained. Initial draft scale with 36 items is attached as Appendix No 8

## **Method of Scale of Development**

### ***Participants***

Initial draft of the test had 36 items. In order to concentrate on adequacy of items and to eliminate subject variance, considering the general rule 1:10, data was collected from total 360 participants for 36 items. Participants consisted of public population from Kerala and included both male and female with varying socio-demographic characteristics. Brief description of sample is given in Table 5

**Table 5**

*Demographic details of Participants for test construction*

Gender		Educational status			
Male	Female	Below SSLC	SSLC to +2	Graduation	Above Graduation
155	205	19	136	121	84

Table 5 shows that participants included 155 males and 205 females. 84 participants had completed education above graduation, while highest number of participants had SSLC to +2 (136 Nos.) as their education status. Least number of participants had education below SSLC (19 Nos).

### ***Instruments***

1. *Attitude towards person with intellectual disability scale (AT-PID)* consisted of 36 items in Malayalam language. Instructions and informed consent were clearly printed on the top of the scale. Using a 3-point Likert scale, participants have to indicate the extent to which they agree with statements describing their attitude towards person with intellectual disability.
2. *Personal data sheet*: Personal data sheet was used to collect information like Age, sex, educational status, Relationship with person with intellectual disability.

### ***Try Out***

The prepared draft of attitude towards person with intellectual disability scale (AT-PID) was ready for first try out. To know how will the participants receive, perceive, and respond to each item and to find out if there is any difficulty in responding to the items in the scale; it was administered among 40 participants by using Google form and feedback of participants were obtained. Almost all respondents reported that they have no difficulty in understanding the meaning of the statements or marking the responses.

### ***Procedure and Administration***

By considering the covid-19 related protocol and to avoid personal contact, responses had collected through online by using standardized 'Google form'. It was a self-administrative test and typically can take 15 minutes to fill-up. Google form had three parts,

Part- 1: Informed consent sheet and general instructions

Par-2: Socio-demographic details

Par-3: Test items (Participant could mark their response in respective space provided.)

Online link of Google form was shared to targeted participants through group email, WhatsApp groups along with general instructions. Participation was voluntary and anonymous. After completion of test, participant had to submit their response and data were stored in Google drive of the researcher. All responses sheet stored in Google drive were converted to Excel sheet.

Data collection was completed within one month. After completion of instruments each response were checked for omission. Then scales was scored and coded as per the previously prepared scoring key for further statistical analysis.

### ***Method of Scoring***

For every item, items are scored 1, 2, and 3, respectively for responses 'Agree', 'Undecided' and 'Not Agree'. Negative items were reverse scored. Total score for test was obtained by adding scores of respective items. Maximum total score would be 108.



## **Results and Discussion of test construction**

This study aims at the construction and standardization of a valid instrument on Attitude towards person with intellectual disability scale. In order to establish its psychometric properties, the investigator used following standardized statistical methods.

### ***Item Selection***

Individual performance of each item was evaluated, so that appropriate items can be identified. At first, total of 360 samples were arranged in ascending order. 27% of low scorers and 27 % of high scorers were selected as low and high group respectively. 97 participants ended up as low scorers and another 97 participants were ended up as high scorers. Then, items were eliminated based on below criteria.

**i. Mean.** It is assumed that for each item low scorers mean would be less than high scorers mean. For Item number-4, low scorers got mean equal to high scorers. For 24<sup>th</sup> item, low scorers got higher mean than high scorers. Hence, this two items (4, and 24) were rejected from the test. Details of mean scores are given in Table 6

**ii. Item Discrimination.** For finding out if an item could discriminate between a low scorer and a high scorer, independent sample 't' test was administered. The 't' value obtained for each item is provided in Table 6. Assumption of homogeneity of variance is tested using Leven's test of equality of variance. Output is given by SPSS V.16 statistics when independent 't' test is run. If the significance value is greater than 0.05, group variance is treated as equal. All most all items have significance value greater than 0.05. So 't' value for equal variance assumed is taken to consideration. The 't value' greater than 2.58 indicate a good discriminating power and such items are selected. Thus, based on above result items with *t* values less than 2.58 were rejected. Rejected item numbers are 18, 26 and 30.

**iii. Corrected Item Total Correlation.** Corrected item-total correlation (Point Biserial Correlation) was also calculated. The best criteria for including an item in the test are that it should have a corrected item total correlation of 0.25 or above. Based on above criteria, items 5,6,10,12,15, 16, 22, 27 and 35 were rejected.

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

Thus, a total of 14 items were marked for deletion in this stage. The item numbers were 4, 5, 6, 10, 12, 15, 16, 18, 22, 24, 26, 27, 30 and 35. Thus a total of 22 items were accepted in this stage.

**Table 6**

*Mean, SD and t value, Corrected tem total Correlation of items in the AT-PID Scale by Low scorers' and High Scorers' Group.*

Item No	Low score group		High score group		t value	Corrected item total correlation
	Mean	SD	Mean	SD		
Item 1	2.13	.902	2.92	.269	7.900	.404
Item 2	1.60	.845	2.74	.628	9.929	.381
Item 3	2.23	.808	2.74	.628	7.602	.396
Item 4*	2.98	.148	2.98	.211	-	-
Item 5*	2.71	.640	2.92	.308	3.003	.155
Item 6*	1.21	.571	1.80	.877	-5.336	.180
Item 7	1.63	.827	2.68	.650	8.790	.353
Item 8	2.49	.811	3.00	.000	6.025	.360
Item 9	2.02	.936	2.80	.545	7.223	.350
Item 10*	2.64	.724	2.87	.479	2.534	.149
Item 11	2.80	.502	3.00	.000	3.762	.234
Item 12*	1.64	.798	2.16	.748	3.847	.139
Item 13	2.30	.800	2.84	.394	6.038	.271
Item 14	1.39	.665	2.52	.722	11.664	.426
Item 15*	2.64	.724	2.94	.313	3.212	.137
Item 16*	1.01	.105	1.22	.595	3.297	.166
Item 17	1.99	.828	2.82	.488	8.508	.460
Item 18*	2.94	.275	2.98	.211	.912	.035
Item 19	2.50	.783	2.89	.316	4.490	.262
Item 20	2.32	.832	2.96	.207	7.154	.379
Item 21	1.52	.622	2.50	.604	10.951	.402
Item 22*	1.84	.806	2.51	.797	5.199	.175
Item 23	1.39	.730	2.54	.796	9.464	.350
Item 24*	1.41	.634	1.31	.533	-	-
Item 25	2.18	.773	2.91	.356	8.062	.356
Item 26*	2.38	.815	2.62	.646	1.901	.041

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Item 27*	1.44	.705	2.04	.792	5.167	.193
Item 28	2.06	.879	2.88	.392	7.943	.393
Item 29	2.22	.818	2.93	.328	7.488	.443
Item 30*	2.70	.644	2.88	.392	2.353	.114
Item 31	2.27	.884	2.96	.207	7.163	.482
Item 32	2.02	.779	2.88	.362	10.009	.471
Item 33	1.59	.701	2.54	.656	9.467	.412
Item 34	2.12	.805	2.72	.520	6.806	.279
Item 35*	2.72	.600	2.90	.337	2.710	.068
Item 36	1.88	.934	2.79	.551	8.135	.337

*Note:* \* Items which were rejected based on different criterion.

### **Factor Analysis**

Factor analysis is a statistical technique for identifying which underlying factors are measured by a (much larger) number of observed variables. By using factor analysis fewer numbers of factors are extracted from large number of variables, thus reducing the number of variables. Analysis is carried out by extracting maximum common variance from all variables and puts them into a common score (Statistics solutions, 2021). A major aim of factor analytic methods is that the information gained about the interdependencies between observed variables can be used later to reduce the set of variables in a dataset. Most common method used for extraction of factor from the data set is Principal component analysis: PCA starts extracting the maximum variance and puts them into the first factor. After that, it removes that variance explained by the first factors and then starts extracting maximum variance for the second factor. This process goes to the last factor (Bryant & Yarnoid, 1995; Dunteman, 1989). There are two types of factor analysis- Exploratory factor analysis (EFA) and Confirmatory factor analysis (CFA).

**a) Exploratory Factor Analysis (EFA)** is commonly used to explore the factor structure of a measure and to identify its internal reliability. This is the most common factor analysis used by researchers and it is not based on any prior theory and generally used when researchers have no hypotheses about the nature of the underlying factor structure of their measure. Exploratory factor analysis has three

basic decision points: (1) decide the number of factors, (2) choosing an extraction method, (3) choosing a rotation method (Snook, & Gorsuch, 1989).

**b) *Confirmatory Factor Analysis (CFA)*** helps to determine the factor and factor loading of measured variables, and to confirm what is expected on the basic or pre-established theory. CFA allows the researcher to establish whether a pool of observed variables, underlying broader theoretically derived concepts, can be reduced into a smaller number of latent factors. CFA assumes that each factor is associated with a specified subset of measured variables (Statistics solutions, 2021). Confirmatory factor analysis (CFA) starts with a hypothesis about how many factors there are and which items load on which factors, CFA is part of a larger analysis framework, called structural equation modelling (SEM), which combines CFA with path analysis (regression slopes) SEM can use factors (or “latent variables”) in regression analysis to predict other variables or be predicted by other variables, with the advantage of estimating and eliminating measurement error from correlation and regression estimates (Bentler & Lee, 1979).

### ***Exploratory Factor Analysis***

Initially the factorability of 22 AT-PID items was examined through Kaiser Meyer Olkin measure of sampling adequacy and from Table 7. The Kaiser-Meyer-Olkin Measure of sampling adequacy is a statistic that indicates the proportion of variance in variables that might be caused by underlying factors. High values (close to 1.0) generally indicate that a factor analysis may be useful with data. If the value is less than 0.50, the results of the factor analysis probably won't be very useful (SPSS Statistics -IBM., 2021). The value of this test was found to be 0.747 and above the commonly recommended value of 0.6. Bartlett's test of sphericity also done. Bartlett's tests the hypothesis that correlation matrix is an identity matrix, which would indicate that variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful with data. Bartlett's test of sphericity found significant.

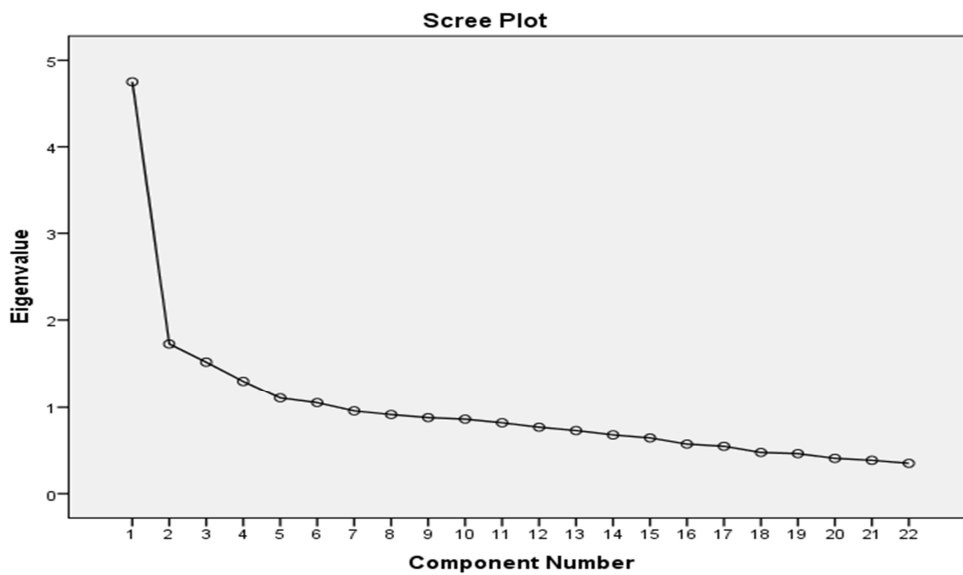
**Table 7**

*KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	2617.742
	Df	630
	Sig.	.000

**Figure 3**

*Screen Plot for 22 AT-PID scales*



*Test Construction Development Attitude towards Person with Intellectual Disability scale*

**Table 8**

*Exploratory Factor Analysis of AT-PID Scale*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.114	14.206	14.206	5.114	14.206	14.206	3.746	10.406	10.406
2	2.570	7.139	21.345	2.570	7.139	21.345	2.849	7.913	18.319
3	2.133	5.925	27.270	2.133	5.925	27.270	2.591	7.196	25.515
4	1.792	4.977	32.247	1.792	4.977	32.247	2.423	6.732	32.247
5	1.489	4.135	36.383						
6	1.358	3.771	40.154						
7	1.223	3.397	43.551						
8	1.156	3.210	46.761						
9	1.111	3.086	49.847						
10	1.072	2.978	52.825						
11	1.059	2.942	55.768						
12	1.035	2.876	58.643						
13	.934	2.595	61.238						
14	.931	2.587	63.825						
15	.907	2.518	66.343						
16	.870	2.416	68.759						
17	.825	2.291	71.050						
18	.801	2.225	73.275						
19	.780	2.167	75.442						
20	.759	2.109	77.550						
21	.735	2.043	79.593						
22	.682	1.893	81.486						
23	.651	1.809	83.295						
24	.632	1.755	85.050						
25	.611	1.698	86.748						
26	.556	1.543	88.292						
27	.550	1.529	89.820						
28	.530	1.473	91.294						
29	.473	1.314	92.608						
30	.468	1.299	93.907						
31	.426	1.184	95.091						
32	.419	1.163	96.254						
33	.389	1.079	97.333						
34	.365	1.013	98.346						
35	.312	.868	99.214						
36	.283	.786	100.000						

Principal components analysis was used based on Rutledge (2018) report, that the primary purpose was to identify and compute composite scores for the factors underlying the ‘Attitude towards person with intellectual disability scale’. Initial eigen values indicated that the first four factors explained 21%, 8%, 7% and

6% of the variance respectively (these factors in the initial solution have eigenvalues greater than 1 and fifth and sixth factors explained 5% and 4% of the variance respectively. An eigenvalue is a number, telling you how much variance there is in the data in that direction, in the example above the eigenvalue is a number telling us how spread out the data is on the line (IBM Corp, 2020).

However, solutions for four factors were examined using varimax rotation of the factor loading matrix. The four factor solution, which explained 32% of the variance, was preferred because of: (a) its previous theoretical support (b) the ‘levelling off’ of eigen values on the screen plot after four factors (Figure 3) and (c) the insufficient number of primary loadings and difficulty of interpreting the fifth factor and subsequent factors (Rutledge, 2018). Thus EFA was repeated by specifying number of factors to be extracted as 4. The resulting eigenvalue and variance explained by the factors is given in Table. Thus, the first four factors explained 10%, 7%, 7% and 6% of the variance respectively for the rotation matrix. Thus 4 factor solution now explained 32% of variance.

A total of four items 28, 9, 19 and 23 were eliminated because they did not contribute to a simple factor structure and failed to meet a minimum criteria of having a primary factor loading of .45 or above. All the items in the scale satisfied the criteria of factor loading and hence decided to keep all the 18 items in the scale (Rutledge, 2018; Field, 2005).

### **The Factor Labelling**

The analysis yielded four factors explaining a total of 32.247% of the variance for the entire set of variables. The scrutiny of the meaning and nature of the items loaded under each component revealed that these items are measuring four different domains of attitude towards person with intellectual disability. researcher named these derived four factors as

F-1: Inclusion, F-2: Expectation, F-3: Independency and F-4: Acceptance.

Table 9 shows 4 factor and their corresponding items with factor loading. The Factor-1: Inclusion: Five items in this factor focus the inclusion of person with intellectual disability in the various part of community activities. Such as participation in community activities, friendships and inclusion in group activities in

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

school. High score indicates participant have more inclusive attitude and lower score indicates less inclusive attitude about person with intellectual disability. Factor-2: Expectation: The five items under second factor assess the level of expectation and hope of community members towards person with intellectual disability, such as, expectation about the ability for their achievement and community participation. Factor-3: Independency: The four items under third factor focus on the attitude of community members related to ‘How much the person with intellectual disabilities are independent and how much they depend on to other nondisabled person’. Factor-4: Acceptance: Four items under last factor focus on readiness of person to accept person with intellectual disability as a fellow being and friend. High score indicate high level of acceptance and low score indicate low level of acceptance towards person with disability. This factor structure explain that F-1, F-2, F-3 & F-4 are the first order factors and attitude towards person with intellectual disability as the second order factor.

**Table 9**

*Grouping of 22 Items into Four factors with Rotated Factor Loading*

Items	Factors			
	1	2	3	4
AD31	.751			
AD29	.636			
AD20	.558			
AD32	.528			
AD17	.504			
AD21		.720		
AD33		.684		
AD14		.672		
AD7		.559		
AD2		.548		
AD13			.745	
AD34			.696	
AD3			.602	
AD25			.472	
AD8				.785
AD36				.605
AD1				.591
AD11				.472

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.



**Confirmatory Factor Analysis**

Confirmatory factor analysis deals with measurement models, where the relationship between observed variables (indicators) and latent variables (factors) are pre specified based on a priori hypothesis obtained from past evidence usually from an EFA or from theory (Brown, 2015). Thus, for current scale AT-PID, four factor latent structures, obtained from EFA is examined by first order factor analysis.

For the CFA, the questionnaire was completed by a total of 400 adults, 43% were men and 57% women of age range between 18 to 63. Educational qualification, 6%- below SSLC, 47%- SSLC to +2, 34% -Graduation and 23 % Above Graduation.

**Table 10**

*Goodness of Fit Indices for four factor model of AT-PID scale*

$\chi^2$	$p$	CMIN/DF	RMSEA	CFI	GFI
262.459	<0.001	2.035	0.065	0.838	0.896

*Note:* CMIN=Relative chi-square, RMSEA=Root Mean Square Error Approximation, CFI= Comparative Fit Index & GFI= Goodness of Fit Index,

The analysis was carried out using the AMOS software. In this analysis, the value of chi- square was measured, which was 262.459 with  $p < 0.001$ , being statistically significant. However, the Chi-square value shows great sensitivity to the sample size, which is why researcher decided to use other adjustment indexes in order to contrast the model. CMIN/DF was 2.035, so shows good fit when value is below 3.0. The CFI and the GFI have a range of 0 to 1, considering these values more valid when they are closer to one; in addition, the value of RMSEA is considered to indicate a good fit to the model if it is less than 0.08 ( Kline, 2005). In the study, the CFI was 0.838, the GFI was 0.896 and the RMSEA that was obtained was 0.065. Thus, based on Figure 4, Table 10 and Table 11 it is concluded that data show a reasonable fit to the hypothetical model.

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

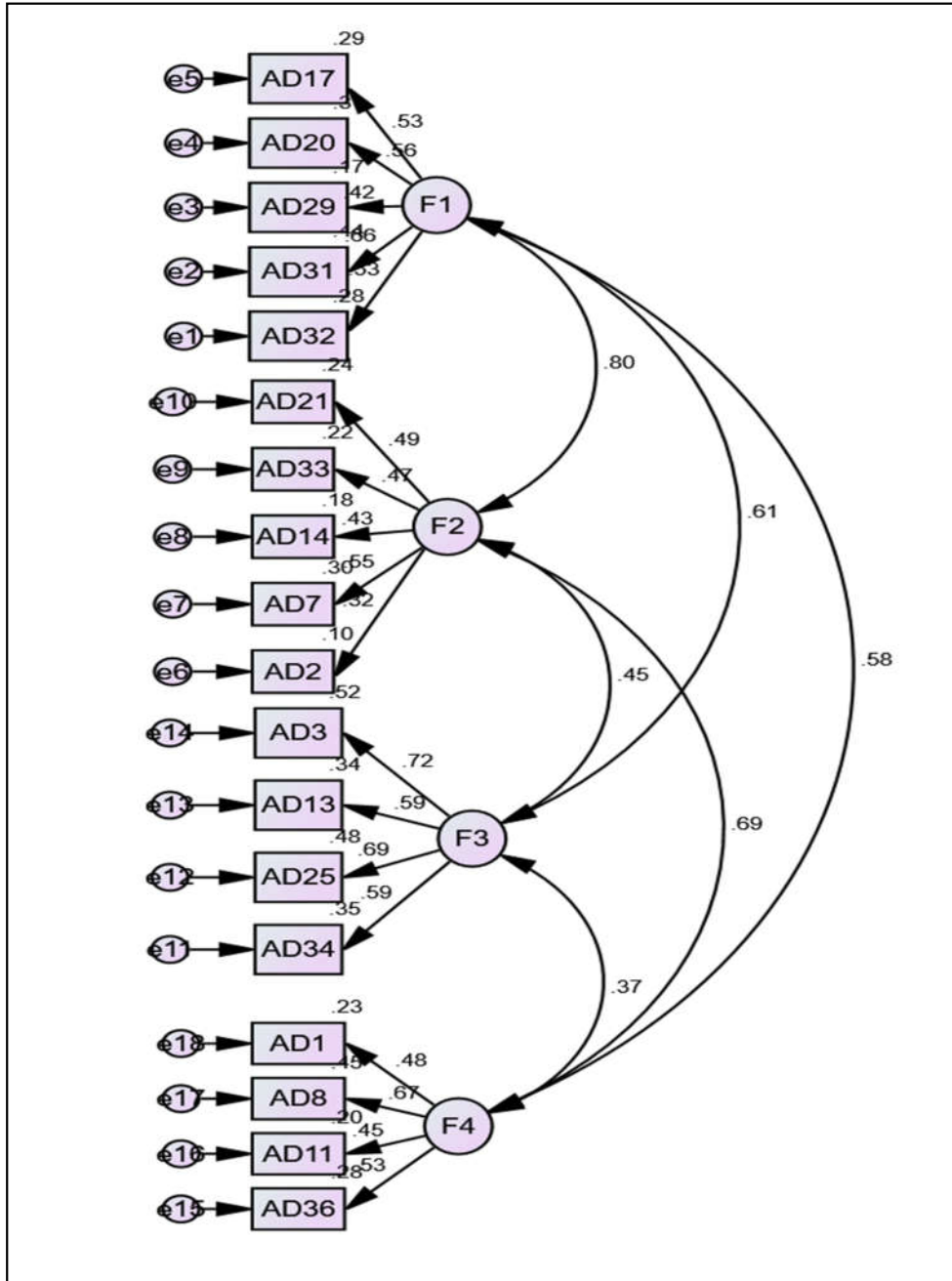
**Table 11**

*Unstandardized Loadings and Standardized Loadings for Confirmatory Factory Analysis model of 'Attitude towards Person with intellectual Disability Scale'*

Variables	Unstandardised Coefficient (B)	S.E.	Standardised Coefficient (Beta)	P Value
AD31 <--- F1	1.053	.159	.662	<0.001**
AD29 <--- F1	.861	.174	.417	<0.001**
AD20 <--- F1	1.116	.185	.560	<0.001**
AD7 <--- F2	1.672	.430	.546	<0.001**
AD14 <--- F2	1.238	.345	.429	<0.001**
AD33 <--- F2	1.250	.338	.466	<0.001**
AD21 <--- F2	1.038	.276	.491	<0.001**
AD34 <--- F3	1.000		.591	
AD25 <--- F3	1.294	.175	.690	<0.001**
AD13 <--- F3	.991	.148	.586	<0.001**
AD3 <--- F3	1.313	.175	.719	<0.001**
AD36 <--- F4	1.000		.528	
AD11 <--- F4	.355	.074	.450	<0.001**
AD8 <--- F4	.814	.140	.674	<0.001**
AD1 <--- F4	.726	.145	.476	<0.001**
AD32 <--- F1	1.000		.529	
AD17 <--- F1	.951	.162	.534	<0.001**
AD2 <--- F2	<u>1.000</u>		.32	

**Figure 4**

Confirmatory Factor Analysis of Attitude towards Person with Intellectual Disability Scale



Note: F1; Inclusion, F2: Expectation F3: Independency F4: Acceptance

## **Reliability and Validity**

### ***Validity***

The inventory has face validity. Construct validity of the scale is established using EFA and CFA

### ***Reliability***

To check the internal consistency of the scale, Cronbach's Alpha was found out. Cronbach's Alpha is a measure of the internal consistency of a test or scale. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. Value of Cronbach's Alpha range between 0 and 1(Tavakol & Dennick, 2011).

The test has coefficient of alpha of 0.794 for 18 items AT-PID. It indicates acceptable level of internal consistency. Domain coefficient of alpha is given in Table 12.

**Table 12**

*Coefficient of Alpha of each Factor.*

Factor	Factor name	Coefficient of alpha
F1	Inclusion	0.701
F2	Expectation:	0.702
F3	Independency	0.62
F4	Acceptances:	0.6

### **Reordering of the items**

In the draft scale there were 36 items, and these item numbers were used throughout in the analysis process like, item analysis, factor analysis and confirmatory factor analysis. Exploratory Factor analysis (EFA) and Confirmatory Factor Analysis (CFA) brought a four first order factors and one second order factor. The serial number of the items in the just identified model was not continuous;

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

hence the items were re-numbered and arranged from item one (1) to eighteen (18). The initial item number and newly assigned serial number (final item number) Mean, Sd, and variance of each item are presented in Table13,

**Table 13**

*Initial item number, final item number and descriptive statistics of each item in the Attitude towards Person with Intellectual Disability Scale*

Initial Item Number	Final Item Number	Mean	S.D.	Variance
Item-2	Item-1	2.16	.939	.882
Item-7	Item-2	2.21	.903	.816
Item-31	Item-3	2.76	.598	.358
Item-13	Item-4	2.57	.660	.435
Item-8	Item-5	2.79	.563	.317
Item-29	Item-6	2.68	.629	.395
Item-33	Item-7	2.05	.809	.655
Item-25	Item-8	2.56	.685	.469
Item-36	Item-9	2.39	.841	.707
Item-17	Item-10	2.54	.691	.478
Item-21	Item-11	1.94	.763	.582
Item-3	Item-12	2.68	.624	.390
Item-14	Item-13	1.92	.852	.726
Item-20	Item-14	2.69	.613	.375
Item-11	Item-15	2.93	.321	.103
Item-32	Item-16	2.54	.675	.455
Item-34	Item-17	2.44	.702	.492
Item-1	Item-18	2.63	.700	.491

**Scoring**

AT-PID scale is a three point scale with response as Agree (1), Undecided (2) Disagree (3). Sum of the all item score constitute the attitude of individual subject towards person with intellectual disability .For calculating the *dimension* wise score calculation is as follows,

*Test Construction Development Attitude towards Person with Intellectual Disability scale*

Add score of item 3,6,10,14 and 16= Inclusion

Add score of item 1,2,7,11 and ,13 =Expectation

Add score of item 4,8,12 and 17=Independency

Add score of item 5,9,15 and18=Acceptances

CHAPTER 4  
**RESULT AND DISCUSSION**





#### **About the chapter 4**

The present study was an attempt to explore and understand social inclusion of young adults with intellectual disability. In this study, domains of social inclusion of young adults with intellectual disabilities were explored, along with factors that enabled and disabled social inclusion. Factors included barriers, process, and benefits of social inclusion among young adults with intellectual disability. The present study explored components that facilitate factors of social inclusion through a multilevel approach, i.e., a personal, interpersonal, community, and policy level.

The study was conducted using a multi-phase and mixed method. It was conducted in three phases through multi-level, convergent parallel mixed research design. In Phase-1, the researcher attempted to understand the current life status of young adults with intellectual disability. The researcher had also explored their 'experience' of social inclusion with respect from three domains of social inclusion (i.e., community participation, interpersonal relationship and perceived social support). Quantitative method was used in this stage. In Phase-2, the researcher had tried to explore the enabling and disabling factors of social inclusion such as perceived barriers, processes and perceived benefits of social inclusion. Qualitative methods were used in this phase of the study. In order to triangulate, the data from different sources and levels, such as parents, professionals in the field of rehabilitation and community members were included. As a continuation of the Phase-3, in Phase-3, the researcher conducted a detailed exploration of the attitude of community members towards young adults with intellectual disability and negative attitude was identified as an important barrier of social inclusion of young adults with intellectual disability. For this purpose, the researcher developed a test to identify attitude towards young adult with intellectual disability through psychometric approaches. Further by using this tool, the researcher had attempted to explore attitude of community members towards person with disability and explore the various influencing factors of attitude toward them such as age, gender educational status and relationship. Quantitative research approach was used in this phase.

## **Outline of Result and Discussion Chapter**

The result and discussion was discussed in six sections in accordance with the objectives of the study. As the researcher had used mixed method of research design, researcher had integrated and discussed findings derived from different phases of study in the various sections of results. Mixed method study generally integrates results and/or analysis from qualitative and quantitative methods, and also from different phases. This point of mixing is called “point of integration” (Morse & Niehaus, 2009; Guest, 2013). Morse and Niehaus (2009) identify two possible points of integration: the ‘results point of integration’ and the ‘analytical point of integration’. In this study, researchers used both the result point of integration and the analytical point of integration across three phases. In the result point of integration, for the purpose of triangulation, findings and results of one phase could be added and integrated with components of other phases. “In the case of an analytical point of integration, a first analytical stage of a qualitative component is followed by a second analytical stage, in which the topics identified in the first analytical stage are quantized. The results of the qualitative component ultimately, and before writing down the results of the analytical phase as a whole, become quantitative; quantizing also is a possible strategy, which would be the converse of this” (Schoonenboom & Johnson, 2017).

Result and discussions were presented in six sections as given below,

- Section-1: Life status of young adults with intellectual disability.
- Section-2: Domains of social inclusion among young adults with intellectual disability.
- Section-3: Process and factors facilitating social inclusion among young adults with intellectual disability.
- Section-4: Perceived benefit of social inclusion of young adults with intellectual disability.
- Section-5: Barriers to social inclusion of young adults with intellectual disability.
- Section-6: Community member’s attitude as a barrier to social inclusion of young adults with intellectual disability.

### **Section-1: Life Status of Young Adults with Intellectual Disability**

This section deals with the findings from the exploration of the current life status of young adults with intellectual disability. A review of articles on the life of young adults with intellectual disability revealed that currently, very few studies focus on 'life status'. Hence, as a preliminary contextual analysis, the first part of the study focused on what young adults with intellectual disability were doing at the time of the study, i.e., their socio-demographic details, specific disability conditions, and the activities they were involved in.

### **Section-2: Domains of Social Inclusion among Young Adults with Intellectual Disability**

This section is a detailed exploration of the social inclusion experienced by the young adults with intellectual disability and its domains (status of social inclusion). For this, the researcher explored the three domains of social inclusion in three parts (i.e., community participation, interpersonal relationship and perceived social support). Part 1 discussed the level of involvement of young adults with intellectual disability in various activities in the community. Part 2 discussed the nature and type of interpersonal relationships of young adults with intellectual disability and how they perceived these relations. In part 3, the researcher discussed the social support and sense of belongingness as perceived by young adults with intellectual disability. These three domains synergically determine the experience of social inclusion among them.

### **Section– 3: Process and Factors Facilitating Social Inclusion among Young Adults with Intellectual Disability**

This section deals with the process and factors facilitating social inclusion of young adults with intellectual disability. The data were obtained through qualitative methods. Through thematic analysis, researcher had identified various themes of social inclusion, which could facilitate the process of social inclusion of young adults with intellectual disability.

#### **Section– 4: Perceived Benefit of Social Inclusion of Young Adults with Intellectual Disability**

In the section- 4, perceived benefits of social inclusion of young adults with intellectual disability at the personal level, social level, community level and policy level were discussed. On the basis of identified themes in the domains of benefit of social inclusion was discussed in individual, interpersonal and community level.

#### **Section– 5: Barriers to Social Inclusion of Young Adults with Intellectual Disability**

This section mainly discussed the perceived barriers of social inclusion of young adults with intellectual disability. Researcher had mainly used qualitative methods for collection of data. In this section, each identified theme, sub themes and categories related to barriers obtained by thematic analysis are discussed. Three global themes were identified as barriers of social inclusion.

#### **Section– 6: Community Member’s Attitude as a Barrier to Social Inclusion of Young Adults with Intellectual Disability**

In this section, a detailed exploration of main domains identified from the study that stand as barriers of social inclusion was discussed, i.e., attitude of community members towards person with intellectual disability. The study used the ‘attitude towards intellectual disability scale’ developed by the researcher to explore the attitude of community members towards young adults with intellectual disability and explore other factors that may influence attitude toward them such as age, gender, educational status, and relationships.

## **SECTION 1: UNDERSTANDING THE CURRENT LIFE STATUS OF YOUNG ADULTS WITH INTELLECTUAL DISABILITY**

The section-1 focused on exploration of the current life status of young adults with intellectual disability as preliminary understanding of the study. Section-1 has been divided into 2 parts. In the Part-1 of section 1 the current life status of young adults with intellectual disability were presented and discusses areas such as socio-demographic characteristics and their specific disability conditions. The part-2 of section 1 discussed about the current life activity of young adults with intellectual disability.

### **Part 1: Current Life Status of Young Adults with Intellectual Disability**

This section discussed the current life status of young adults with intellectual disability. Studies in this field have given little attention to age specific needs of young adult with disability and there were very few attempts made to identify and document the life of young adults with intellectual disability, particularly, about their social life and experience of social inclusion. So, an attempt is made to explore current life status of young adults with intellectual disability in terms of disability specific conditions and current activities involved in. The data was collected through descriptive survey from their caregivers.

Part-1 discussed about the socio demographic details of children with intellectual disability. The demographic details include their gender and their level of disability. It is identified that the severity of their intellectual disability condition directly correlates with their social participation, social inclusion and level of involvement in society (AAIDD, 2010). Another factor focused here is the associated condition or disability of the participants. People who had other disabilities or had multiple disabilities were excluded from the sample, as such associated conditions with intellectual disability may lead them to be more dependent and restrict their social interaction opportunities.

Another component of socio demographic details discussed was the details of the caregivers of young adults with intellectual disability. Many researchers

(Ramasubramanian et al., 2019; Dada et al., 2020) have constantly reported that the caregiver's age, education and employment status influence the adequate care, financial support and social support system for the intellectually disabled. So, the part-1 of section-1 explored demographic details, disability specific factors and caregiver's specific factors. The findings are given in Table 14.

### Demographic Characteristics of Young Adults with Intellectual Disability

**Table 14**

*Gender, Level of Disability and Associated Condition/ Disability of Young Adults with intellectual disability and Age, Education and Employment status Caregivers/Parents*

Demographic details	N	%
Gender of young adult with ID		
Male	333	66.6
Female	167	33.4
Severity of disability		
Mild (50 % to 74 %)	395	79
Moderate (75% to 89%)	75	15
Sever (90- 99%)	30	6
Associated condition		
Nil	195	39
Physical difficulty (inc/ CP)	20	4
Speech difficulty	165	33
Hearing difficulty	4	1
Visual difficulty	22	4
Mental illness	21	4
Down syndrome	33	7

Childhood Epilepsy	212	42
Age of Caregivers/ parents		
40 below	9	1.8
41 to 60	424	84.8
61 to above	58	11.6
Dead	9	1.8
Education status of Caregiver/ parents		
Below SSLC	311	62.2
SSLC to Pre-degree	142	28.4
Graduation	36	7.2
Above Graduation	11	2.2
Employment status of Caregiver/ parents		
Unemployed	88	17.6
Daily wage Labourers	339	67.8
Skilled Labourers	73	14.6

---

Table 14 depicted the demographic details of young adults with intellectual disability and demographic details of their parents. The data consisted of gender, age, level of disability and associated condition and age, education and job of their parents.

### ***Gender***

Table 14 shows that two thirds of the participants (i.e., 66%) were males and one third of the participants (33%) were females in the total number of samples. Third gender was not identified in the sample. The difference in the ratio in gender may be because parents are hiding the fact that their girl has intellectual disability and also may be because of gender-based discrimination experienced by girls and women with disability from community. Parents may conceal the disability condition of the girl child, particularly if she is intellectually disabled, in concern of

social rejection. In similar line many studies (Julius, et al., 2003; Umb-Carlsson & Sonnander, 2006) reported that there is poor representation of women and girls with intellectual disability in many areas of community. It was observed that role of gender is a neglected issue in research on intellectual disability (Padencheri & Russel, 2004). While planning any type of intervention for individuals with intellectual disability, gender based discrimination and difference in providing opportunity has to be considered. Women and girls with disabilities are often subjected to double discrimination, sexism, as well as disability bias (Leveille, 2000). This double discrimination places them at higher risk of gender-based neglect, low expectation and forceful exclusion from community participation. Menon and Sivakami (2019) argue that girls and women with intellectual disability are not encouraged to participate in various community activities and form relationships even with peer group. Further Youth Ki Awaaz, (2019) reported that males with intellectual disability are at relative advantage in terms of opportunity for vocational training, employability, marriage, family formation, access to community resources, etc. as compared to females with intellectual disability. This situation demands for development of more systematic gender sensitive approach to strengthen the inclusion of the rights of women and girls with disabilities which would help to achieve gender equality, empowerment of all women and girls with disability and increase their representation in community.

### ***Severity of Disability***

Table 14 shows that 79% of the participants belong to a mild level of intellectual disability category, whereas the remaining fell into the category of moderate (15 %), and severe (6%) level of intellectual disability. The mild and moderate group could be trained and educated for optimal independent life. The main characteristic of young adults with mild levels of intellectual disability is that they face difficulties in higher cognitive functions (AAIDD, 2010). Compared to other categories, mild intellectually disabled group can learn and practice life skills, which allow them to lead an independent life with minimal levels of training. Young adults with mild intellectual disability can take care of themselves, travel to familiar places and participate in community activities (Dusseljee et al., 2011). Most of them



are employable in jobs requiring simple skills and are often able to live independently. If provided with an optimal level of training and adequate level of support at the right time, young adults with mild level of intellectual disability will be able to lead an independent life. In support of this observation, many studies suggest that young adults with mild level of intellectual disabilities are able to form interpersonal relationships, if provided the opportunity to participate with their non-disabled peers in supportive structured community activities (Taylor et al, 1987; Siperstein, et al., 2009). But in case of severe and profound level of intellectual disability, even the training provided will not improve the social functions due to the level of severity and comorbid conditions. Severe level intellectually disabled group have major delays in many domains of development and are dependent in almost all area of their life (Sattler, 2002).

### ***Associated Conditions***

In most cases of intellectual disability, presence of associated medical conditions is likely. But in this present study, the associated disability conditions of physical, sensory and motor illness were excluded because of the possibility of multiple disabilities which itself independently act as a limitation for their social inclusion. Thus participants included were only young adults with intellectual disability with other minor difficulties. These are secondary conditions or conditions that developed due to disability. Table 14 shows that 42 % of the participants had an associated condition of childhood epilepsy and 33 % have speech difficulty. The result also shows that only 33 % of participants were not affected with any associated conditions, while, the rest of them faced: hearing difficulty (1 %), physical difficulty (4 %), visual difficulty (4 %) and downs syndrome (7 %). One third of the participants facing associated conditions were affected with daily living skill particularly communication skill. The poor communication skill may be due to lack of community exposure and peer interaction. Difficulty in social communication is likely to and could negatively affect their ability to form peer relationship and participation (Nordin & Rabi, 2020). So, they are in need of an age appropriate social skill training program. Communication skill is vital for the development and maintenance of meaningful interpersonal skill and effective integration into society (Owens et al., 2008). Table 14 also showed that the majority of the participants had childhood epilepsy. Since epilepsy is a neurological condition, it requires long term

medication. During the clinical practices, researchers had observed that, due to concern and fear over the child having another epilepsy episode, the parents often restrict the movements of the children in society. In a recent study conducted on parental attitude on epilepsy in India by Rani and Thomas (2019), it was reported that majority of parents believe that persons with epilepsy could not live independent community life. Parental attitudes towards epilepsy may be due to uncertainty of seizures and over safety concerns as someone always had to be in proximity to the affected child. This over-protective behaviour of parents likely limit the child from acquiring opportunity for playing with children of the same age group, and this lack of exposure would lead to deficits in socialization skills in later stage (Chapieski et al., 2005).

### ***Care Givers/Parents Details***

The second part of the demographic data consists of the details of the caregivers of young adults with intellectual disability. It included care giver's age, educational level, and employment status. The demographic details of caregivers were included as they provide information and because person with intellectual disability need constant support for age appropriate social skill training. The support was influenced by factors like parent's motivation, readiness, and level of information, their available resources and education. One of the factors considered was the age of the caregiver. 84 % of the parents of the participants were of 41 to 60 years of age. Studies reported that elderly parents of young adult with intellectual disability were often anxious about the lives of their children, after their death. Hamedanchi et al. (2016) reported that the elderly parents of children with intellectual disability experience higher level anxious compared to younger group of parents. Studies also reported that older parents often experience difficulty to provide adequate care to their wards due to their age related psycho-social limitation (Greenberg, et al., 1993; Piazza et al., 2014). Elder parents also have great concerns about the future of the child after their death.

The next demographic factors were the education and employment status of the caregivers. Table 14 shows that the majority of the caregivers hadn't completed their SSLC (i.e., 62%), and were either unemployed or were daily wage workers (i.e., 18% & 68% respectively). Caregiver's low education status influence their

understanding about the special needs of their children with intellectual disability. Given their jobs, regular and inconsistent income, they face difficulty in meeting their child's needs. Parents with limited education, was less likely to be aware about new therapeutic techniques. They may have faced difficulty in providing adequate training required for their children. Most of the materials constructed to give information to the caregivers were not culturally sensitive and at times incomprehensible to people with limited education. They may be unaware about concepts of social empowerment or social participation. The caregivers with limited education (below SSLC), who were unemployed, and were daily wage workers may not have had access to expensive therapy centres in urban areas. In support of these findings, Gladwell and Mary (2015) found family socioeconomic status (SES) and caregiver's level of education to be key players in explaining the level of parental involvement in their children's care. Lower-income and less-educated caregiver's of children with intellectual disability were less likely provide adequate level of training and opportunity. Due to their limitations in level of awareness and resources, caregivers often fail to recognize the special needs required for their children (Porterfield & McBride, 2007). Studies also reported that caregiver's educational and employment status found to play a very critical role in level of involvement in appropriate care of children with intellectual disability (Dada et al., 2020; Moosa-Tayob & Risenga, 2022). In result, caregivers who take an active and appropriate role for providing care and training would foster many skills in them, which in turn lead to improved children's independent life ability. In another perspective, studies also reported poverty was reported as being both a cause and consequence of a disability in childhood. Many studies (Asa et al., 2020; Daudji et al., 2011; Datta & Russell, 2002; Miller et al., 2011) reported that having a person with intellectual disability in family would often create many financial burden for the family, such as reduced family income significantly, high financial demands and poor access to material and services, which affect not only the caregivers but other members of family. As discussed, caregiver's educational and financial statuses are known to be major predictor of parental involvement and availability of appropriate training for children with intellectual disability. Thus systematic strategies have to be

designed and implemented to caregivers empowerment programme through different means as majority of caregivers had primary level of education and were unemployed. Caregivers empowerment programs should be more accessible, affordable and culturally relevant.

### **Part-2 Current Life Activity of Young Adults with Intellectual Disability**

The Part-2 of section-1 discussed the type and level of involvement in life activity by young adults with intellectual disability. In this part, the researcher attempted to explore the activities in which they are involved. The study has identified seven types of activities and situations involved in by young adults with intellectual disability. Further, these type of activities were classified into 3 categories such as 1) age appropriate activity, 2) age inappropriate activity, and 3) sitting at home idle. The findings were discussed in detail below.

**Table 15**

*Current Life Activity of Young Adult with Intellectual Disability*

Life activities	N	%
Age inappropriate activity		
Attending general school	103	21
Attending to special school	190	38
Age appropriate activity		
Pursued Higher education	1	0.2
Attended Pre-vocational skill training	33	6.6
Undergoing training at a job training centre	20	4
Doing small jobs	19	4
At home, did nothing in particular	134	26.8

Table 15 shows the current life activity of young adults with intellectual disability.

This section attempted to know more about their current activities, as only a few studies were conducted about young adults with intellectual disabilities. Moreover, in the Kerala context, the researcher couldn't find similar studies, especially in young adults with intellectual disability belonging to this specific age group. The study on intellectual disability were usually conducted on, either school going students under 18 years who were registered in the formal education system or from the disability census that doesn't specify about particular group, 'young adults'. Also, the data regarding their employment or their social life were not available. So, as a base for the research, their current status had been included and studied.

The main characteristics of young adulthood is, involvement in an age appropriate higher education system or vocational training or interpersonal relationship training. This age is a transition period from childhood to adulthood (Arnett, 2000). Involving in age appropriate activities such as having a job and participation in community activities are key aspect of young adulthood (Renee & Cynthia, 2019). The current 'activity involvement status' of young adults with intellectual disability were studied based on age appropriate activity, age inappropriate activity and idle at home. Age appropriateness was measured by whether they were involved in an age appropriate higher education system or vocational training or interpersonal relationship training. Age inappropriateness was measured on the basis of whether they were going to formal school (in general or special school), even after the age of 18 years.

From the Table 15, it is reported that 27% of the participants weren't involved in any activity and were idle at home. It may be due to a lack of opportunities or ignorance or illness conditions, if present. In the clinical experience of the researcher, it was also observed that parents often tend to show overprotective behaviour regarding their child's condition, and it may restrict their child's involvement in community activities.

The majority of the participants (73%) were engaged in some form of activity, out of which only 15% were involved in age appropriate activities. Among the 15%, only 1 individual was engaged in higher education. Access to appropriate

higher education and training is considered as a right for all people; however, access to higher education for people with disabilities is still a challenge. It was unlikely for higher education to be possible for many of them, but the Universities in Kerala provide them with reservations for their social empowerment and participation. Despite the considerable provision of reservation for young adults with intellectual disability in higher education institution in accordance with RPWD Act (2016), the full inclusion of these students has not been achieved. Researcher observed that, the reservation opportunities were not used appropriately in higher education institutions, maybe because of the lack of appropriate training programme according to their ability level. Among the participants, 7% of them had attended pre-vocational skill training, 4% of them were undergoing training at a job training centre and 4 % of them did semi-skilled jobs. Involvement in any age appropriate activity is key to social participation and involvement. But only 15% of the participants fell into this category. Among the participants, 73% were engaged in different kinds of activities, 58 % of them were still going to school, either in general or special school. They were going to school even after 18 years of age and they spent time with children who were younger than them. It inhibited them from developing age appropriate social skills and establishing age appropriate relationships. It also limits them to get exposure to and getting involved in, age appropriate activities. It has been observed that, these groups at young adulthood were treated by parents, teachers and society as an ‘eternal child’ and were not accepted as an adult. Similar to this finding of current study, Ainsworth and Baker (2004), in their research reported that person with intellectual disability have fewer choices of activities according to their developmental need such as forming friendship with same age groups and independent living. Gaylord and Hayden (1998) also reported that individuals with intellectual disability have limited access to higher education and community involvement. In same line of these findings, Hall (2010) also reported that, “many young adults with intellectual disability are unable to participate in the social and recreational events of a community because they lack supporting friendships, transportation, adequate personal funds, personal assistance, or the knowledge of how to find and navigate recreational activities”.

In summary, the above Table 15 showed that in total only 14% of the participants were engaged in age appropriate activities. However, in total 59% of the participants were involved in age inappropriate activities and 27% participants were sitting idle at home and not involved in any activities. These age inappropriate activities of the participants could be due to various factors. To ensure their social participation and empowerment, they should be provided with adequate training, and social opportunities for engaging in age appropriate activities.

Multiple studies (Wilson et al, 2017; Eisenhower & Blacher, 2006) have reported that the reason young adults with intellectual disability do not engage in age appropriate activity, is that their parents don't recognize them as adults. The parents tend to consider and view them as a child. Community members have not recognize that a child with disabilities needs to develop into young adults and further need a transition to adulthood. So, as part of their transition, it is recommended, to give an orientation for an attitude change among the parents and community members that young adults with intellectual disability were not children any more, but were adults, and they could lead an adult life if provided with adequate training and support. Involvement in age appropriate activities of young adults with intellectual disability would provide opportunity to participate in various community activities and form interpersonal relationship, in result it would help them to achieve social inclusion (Hall, 2017). Above findings indicate that the identified unjustified segregation from age appropriate life activity and lack of choice of young adults with intellectual disability are considered as a form of discrimination for social inclusion of them.

## **SECTION-2: EXPLORATION OF DOMAINS OF SOCIAL INCLUSION AMONG THE YOUNG ADULTS WITH INTELLECTUAL DISABILITY**

Section-2 of result and discussion attempted to explore and understand the various domains that determine the social inclusion of young adults with intellectual disability. One of the concepts that could ensure empowerment of people with intellectual disability is their social inclusion. But there were only a few studies conducted about the social inclusion of young adults with intellectual disability. Majority of the studies were conducted on inclusion in the context of inclusive education and school participation. After the schooling of young adults with intellectual disability, their involvement and engagement in society, becomes significant determinant for their social inclusion.

There were many domains for social inclusion from a theoretical point of view. Three significant domains were identified from the review of literature (Hall, 2010). They are (1) community participation, (2) interpersonal relationship, and (3) sense of belongingness and perceived social support. These three domains in combination describe the experience of social inclusion in its true sense. This three dimensional understanding of social inclusion compasses both subjective experience and objective process of social inclusion. Hall (2010) conceptualized social inclusion as full and fair access to community facilities and activities, having meaningful and reciprocal relationships with family, friends and acquaintances, and having a sense of belonging to a group. Section-2 mainly focused on their level of experience in each of these three domains.

The first part of section-2 identified the level of experiences in community participation. Community participation was defined based on the domains included in the International Classification of Function (ICF) model (WHO, 2011). ICF model; has recommended 4 domains for community participation i.e., (1) productive activity, (2) recreational and interpersonal activities, (3) consumption of facilities, and (4) cultural or social activity.

The second part of section-2 attempted to explore the 2<sup>nd</sup> domain of social inclusion i.e., the level of interpersonal relationships of young adults with



intellectual disability. This part attempted to explore the status of their interpersonal relationship by using Friendship Status Questionnaire developed by the researcher. It tries to explore their level of involvement in friendships, nature of their relationships, characteristics of their relationship like type of activity, engagement, meeting places etc.

Third part of section-2 tried to understand the 3<sup>rd</sup> domain of social inclusion i.e., perceived social support and sense of belongingness level of young adults with intellectual disability. The sense of belongingness is considered as the perceived social support system of the intellectually disabled young adults. Altogether, the various domains of social inclusion were identified and discussed into the 3 sections given below.

### **Part-1: Community Participation**

Participation in community activities of life can be considered as one of the key elements of social inclusion (Simplican et al., 2015). It also acted as an opportunity for social interaction, forming social networks, and also act as a vital determinant of social well-being. For young adults with intellectual disability, community participation took place in a variety of domains of their life such as post school education/ vocational training, employment and recreation activities with the same age group. When compared with peer groups without disabilities, young adults with intellectual disability had lower levels of mobility and participation in education, employment, and recreational activities (Hall, 2010). This had implications for their health and well-being and life course opportunities (Carroll et al., 2018). Finding on the type and level of community participation of young adult with intellectual disability is discussed below,

**Table 16***Community Activities of Young Adults with Intellectual Disability*

Community activities	Yes		No	
	N	%	N	%
<b>A. Productive activity (Age appropriate)</b>				
Attending Pre-vocational skill training	10	7	140	93
Attending training at a job training centre	6	4	144	96
Doing small jobs	6	4	144	96
Higher education	1	0.6	149	99.3
<b>B. Interpersonal/Recreational</b>				
Shared friendships with non-disabled peer	34	23	116	77
Played with peers	57	38	93	62
Involved in public with peers (park, movies & hangouts etc.)	28	19	122	81
<b>C. Consumption of facilities(domestic)</b>				
Purchase/shopping-	48	32	102	68
Travelled in Public transport	33	22	117	78
<b>D. Cultural/Social activity</b>				
Joined local public culture activities clubs	12	8	138	92
Participated in volunteer activities in the area	17	11	133	89

Table 16 depicts the level of the community participation of young adults with intellectual disability as reported by participants. Table 16 shows that most of the young adults with intellectual disability were not involved in most of the age appropriate area of community participation.

***A. Productive Activity (Age appropriate)***

In the productive type of activity, Table 16 shows that, only 7% participants were attending pre-vocational skills training. 96% were not attending any type skill training programs for jobs. 96% participants were not involved in any form of job. Only 0.6% participants were pursuing higher education, while a significant majority (99.3%) were not. These 4 identified areas of productive activities can be seen as a means for individuals to participate in social settings and interact with others, and

thereby help to create a sense of self identity. As individuals with intellectual disability become unable to find an opportunity to be involved in any sort of age-appropriate productive activity, they lose their chances to be involved in social interactions (Hall, 2010; McConkey, 2007). They were likely unable to create a sense of self identity and feel a sense of belongings. This affects their community participation and social inclusion. Engaging in productive activities not only helps in creating a better identity, it may also act as a means of income.

### ***B. Interpersonal & Recreational Engagement***

The 2<sup>nd</sup> type of activity that was evaluated was interpersonal engagement and involvement in recreational activities. People of this age group were generally expected to come out of the care of their parents and establish their own identity and be involved in interpersonal relationships with peers (Arnett, 2010). As the Table 16 shows, the three main activities taken into consideration were, friendship with peers without disabilities, play, and if stepped into public with them. Findings show only 23% of young adults with intellectual disability shared friendship with non disabled peer. Further Table 16 shows only 38% participants engaged in play activity with peers. Lack of friendship with non disabled peers may hinder them from learning new skills, and skills necessary for social interaction through observation and imitation (Glick & Rose, 2011). Only 19% of young adults with intellectual disability were involved in public places with peers. Public involvement facilitated social representation and helps to raise the visibility and public acceptance. As social representation increases, the level of involvement by young adults with intellectual disability may also increase thereby reducing the misconceptions of the public.

### ***C. Consumption of Facilities Available***

The 3<sup>rd</sup> type of activity was the consumption of facilities available. Achieving meaningful and effective social participation and utilization of resources required emerging adults' utilizing the available facilities. To be independent, some necessities are: usage of available facilities, travel, shopping/purchasing whatever is necessary for living. But as findings from the Table 16 shows, only 32% of young adults with intellectual disability were involved in purchasing or shopping. This may

be due to the lack of opportunity or skill deficit. Among them, 78% of participants did not use public transport available to travel. They may be dependent on their parents or may have lacked the skills necessary to travel alone in public transport. Price et al. (2017) reported that of ability of independent travelling by using public transport improves opportunities for independent living and provide more opportunity for employment for young adult with intellectual disabilities. The results show that a majority of young adults with intellectual disability not utilizing facilities of community which would facilitate their independent life, particularly shopping and traveling in public transportation facilities.

#### ***D. Involvement in Cultural/Social Activities***

The 4<sup>th</sup> type of activity of community participation considered was involvement in cultural/social activities. An important factor in social inclusion was involvement in cultural and social activities. Being a part of cultural activity helps in interaction with others and self development. It also acts as an interdependent social support system. The aim of community participation is to be involved in voluntary or club activities. Such activities provide a great sense of belongingness (Hall, 2010). But as the finding from Table 16 showed, only 8% of young adults with intellectual disability were involved in club activities while a significant majority (92%) were not. Very few intellectually disabled young adults (i.e., 11%) participated in volunteering activities in the area. These young adults often did not receive opportunities for social representation.

The overall findings about the community participation of young adults with intellectual disability presented in Table 16 shows that young adults with intellectual disability have low level involvement in community participation, namely in the areas of age appropriate productive activity, interpersonal engagement, consumption of facilities and cultural/social activity. Thus, in conclusion, it can be said that young adults with intellectual disability had poor levels of community participation. These indicated that are excluded from social participation and affected their social inclusion. Appropriate strategies has to be implemented to empower and support the

community participation of young adult with intellectual disabilities at all levels to the fullest extent possible.

### **Part-2: Interpersonal Relationship**

Developing and sustaining reciprocal interpersonal relationships is the second component of social inclusion for young adults with intellectual disability. Part-2 of section 2 discussed about the findings obtained from the interpersonal status questionnaire regarding the current interpersonal status of young adults with intellectual disability from Phase-2 of the study. Meeting and talking to people in the community is an important component of social inclusion (Abbott & McConkey, 2006). Having meaningful interpersonal relationship is one of the key determinants of social inclusion. Living in the community did not, in itself, guarantee social integration and inclusion for individuals with intellectual disability. Friendships and involvement in leisure activities with peers may indicate the beginning of the process of community participation. Friendships and social networks served as important sources of social support that may help individuals to deal with the challenges that adult life entails (Nguyen et al., 2017). Supportive interpersonal relationships functioned as an important resource for promoting social adaptation and social interaction. According to the self-determination theory, supportive relationships may have fulfilled the adolescent's basic psychological needs for social relatedness (Ryan & Deci, 2018). If this need was met, young adults with intellectual disability could feel connected to their peers, which could thus foster their motivation to behave in socially appropriate ways and improve community participation. Interpersonal support may also reduce stress in demanding situations and increase the young adult's focus on and interest in community life (Kiuru et al., 2014; Wang et al., 2012).

To explore the level, characteristics and process of current friendship of young adults with intellectual disability, researcher has used friendship status questionnaire which helps to explore the three factors of friendship relation. These factors included, 1) nature of friendship (include - who their friends were, how many friends they had, whether they are individuals with disability or not), 2) the kind of

activities they were involved in from friends, 3) the place of meeting. Findings from each factor are discussed below,

### ***1. Nature of Friendship of Young Adult with Intellectual Disability***

**Table 17**

*Nature of Friendship of Young Adult with Intellectual Disability*

		N	%
Friendship with same age group	Yes	102	68.0
	No	48	32.0
Friendship with Non disabled	yes	46	30.7
	No	104	69.3
Number of perceived friends	Nil	45	30.0
	1	18	12.0
	2	28	18.7
	3	31	20.7
	4	9	6.0
	5	19	12.7
Who is friend	Classmate	109	72.7
	Relatives	18	12.0
	Neighbours	23	15.3

Table 17 discussed the nature of friendship of young adults with intellectual disability. The nature of friendship is explored on the basis of 4 areas namely, which are friendship with the same age group, friendship with non-disabled, number of perceived friends and who are their friends. As Table 17 shows that 68 % of young adults with intellectual disability had friendships with others who were in the same age group. Almost one-third of the participants, i.e., 32% did not share friendship

with others in the same age group. Only 30.7% of the young adults with intellectual disability shared friendship with non-disabled individuals, while more than two-thirds of the population (69.3%) did not share friendship with non-disabled individuals. Similar to this finding, Friedman and Rizzolo (2018) report that, compared to nondisabled people, people with intellectual disability have more struggle forming and maintaining friendships particularly with same age and non-disabled and have less close relationships with their friends. Studies also suggest people with intellectual disability have the fewest number of friends across all other disability categories group (Petrina et al., 2016). There are multiple factor influencing the nature and quality of friendships of young adult with intellectual disability. Pottie and Sumarah (2004) argued that the major reason for these inequalities in the friendship status of people with intellectual disability is poor social networks due to a lack of opportunities for fostering and maintaining friendships.

As young adults, people are expected to have a great number of friends as proposed by Arnett (2000). Finding from the Table 17 shows that 30% participants reported that they had no friends, 12% had one friend, 18.7% had 2 friends, 20.7% had 3 friends, 6% had 4 friends, and 12.7% had 5 friends. Almost 60% of the participants reported having either 1 friend or 2 friends or had no friends at all. Generally, other people in this age group tended to have 3-5 friendship groups or friendship circles. In the case of young adults with intellectual disability, only 18% perceived to have had at least 4 or 5 friends. The size of the friendship circle they had was very small. These findings are consistent with findings of earlier studies. Robertson et al. (2018) reported that the average number of friendship circles of a person with intellectual disability to be just two people. They mostly had friendships with individuals and not as groups. They may have had a limited level of activity and less opportunity for social inclusion.

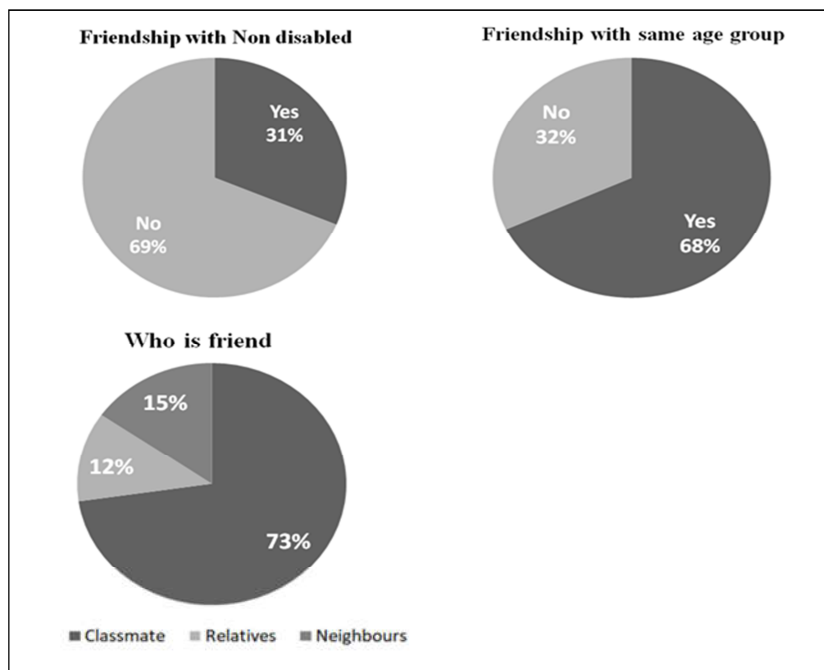
The third area under nature of friendship explored was ‘who these friends are’, i.e., whether they were classmates, relatives or neighbours. Table 17 shows that majority of the young adults with intellectual disability had friends who were their classmates (72.7%). Outside the setting of class, only few participants reported having friends. 12% had friends who were relatives and 15.3% had friends who were neighbours. Friendship with other members of the community was observed to be as

low. This may be due to the confinement of the activities of young adults with intellectual disability, to classrooms and home.

In summary Table 17 showed that young adults with intellectual disability shared significantly fewer numbers of friendships with non-disabled individuals in the same age group and that most of their friends were their classmates. They were unable to form friendships with other non-disabled, individuals in the same age group and it is a clear indication of social exclusion. These young adults with intellectual disability had very few opportunities to create friendships with non-disabled individuals. Social inclusion of young adults with intellectual disability took place when they were able to form relationships with all kinds of people in the society. Having a few number of friendships and lack of connections with peers not only hinder social inclusion of young adult with intellectual disability but also affect their quality of life. As nature and quality of friendship are key determinacies of social inclusion, above findings suggest more intervention needs to be done for young adult with intellectual disability to facilitate friendship opportunities and maintain those friendships. Figure 5 depict the above discussed finding – Nature of friendship among young adult with intellectual disability.

**Figure 5**

*Nature of Friendship among Young Adult with Intellectual Disability*





## 2. Type of Activity Engaged with Friends

The type of activity engaged with friends in whom young adults with intellectual disability were involved is of high significance, because ideally, it should be age-appropriate, promoting or enhancing social inclusion, and it should contribute to recreational or productive elements. Researcher has selected 4 common types of activities engaged with friends which were popular among young adults at the time. The selection of popular activities also showed the extent to which young adults with intellectual disability were involved in these activities, thereby helping researcher to look into how informed or understanding they were of the trends of the times. These activities were 1) talking and chit-chatting, 2) playing using mobile, 3) game and sports and 4) travelling. Results are discussed below,

**Table 18**

*Type of Activity Engaged with Friends*

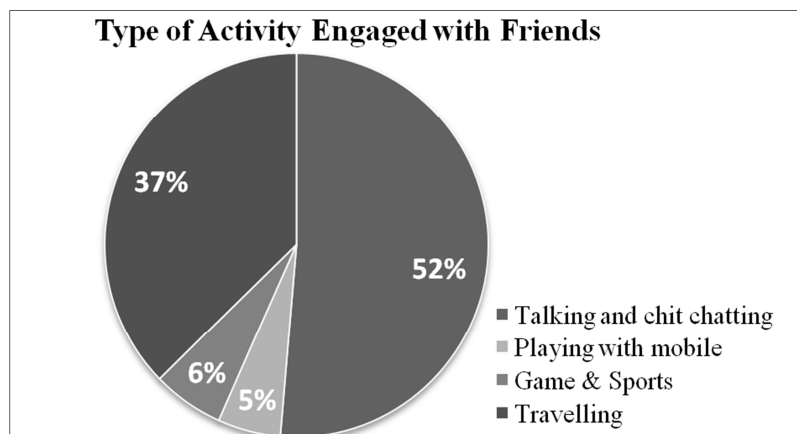
	N	%
Talking and chit chatting	77	51.3
Playing with mobile	8	5.3
Game & Sports	9	6.0
Travelling	56	37.3

Table 18 shows that, talking and chit-chatting with friends is the major activity in their friendship relationship (i.e., 51.3%). Only 5.3% of the participants reported to have played using mobile phones. 6% of young adults with intellectual disability played games and sports with friends. Travelling was done by 37.3 % of the participants. As inferred from the table, the majority (51.3%) were involved in talking and chit-chatting with friends. This can be considered positive involvement, i.e., to have spent time with friends in conversation. The analysis of the previous tables revealed that most of the young adults with intellectual disability did not share friendships with non-disabled friends (77%). It also showed that most of the friends were from school (74.7%). It can be concluded that the likely reason for the majority

of young adults with intellectual disability to be involved in talking and chit-chatting was due to the fact that they were in a school setting, and they lacked the provisions to hang out or lack activities to be involved in games and sports. The activity where the young adults with intellectual disability were engaged in at the second-highest level was travelling (37.3%). Travelling and exploration could be considered as one of the trends among people of their age group, at the time. Even though 37.3% of the participants were involved in this activity, compared to non-disabled young adults, this number is significantly low. This showed that their social participation was also low. In further to get the subjective experience of the friendship, detailed study of the quality of these reported friendship activities has to be done.

**Figure 6**

*Type of Activity Engaged with Friends*



### ***3. Place of Meeting with Friends***

One very important factor in social participation and social interaction is where people meet others. Meeting with friends should not be limited to just schools. It is important to meet friends outside the school setting as well as community setting, as it could promote the initiative for interaction with non disabled peer groups, and could give exposure and ensure social participation. Hence, the place of meetings was significant, as it may be viewed as the physical representation of social participation and social inclusion.

**Table 19**

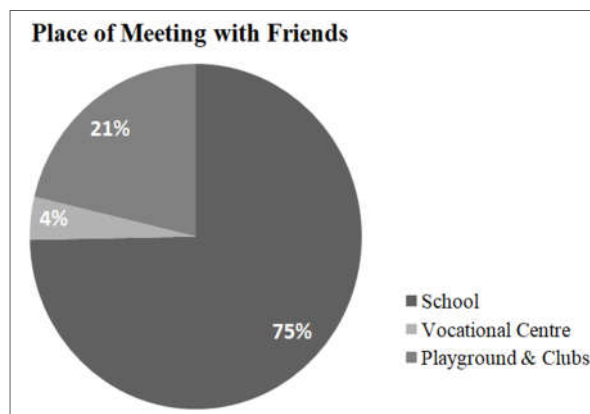
*Place of Meeting with Friends*

	N	%
School	112	74.7
Vocational Centre	6	4.0
Playground & Clubs	32	21.3

Table 19 depicted where young adults with intellectual disability met with their friends. Participants had reported 3 settings where they met with their friends. These were schools, vocational centres, playgrounds, and clubs. Almost three fourths of the participants (74.7%) reported that they met with their friends in school and not outside the school. Only 25 % of young adults with intellectual disability (4% in vocational training centres and 21.3% in playground and clubs) met with their friends in settings other than school. This indicated that their community participation and interpersonal relationships were limited to school situations/environments. Schools provided a structured environment. It was time-bound and curriculum-based. This created limited opportunities to share and interact with others. They most probably were only involved in the structured, curriculum-based activities and training activities in school and may only have got a few opportunities to form interpersonal relationships and experience social inclusion.

**Figure 7**

*Place of Meeting with Friends*



### **Part-3 Social Support and Sense of Belongingness**

Perceived social support and a sense of belongingness were the third components of social inclusion. This subjective feeling of being part of a community with a valued role and identity would have facilitated their integration and inclusion (Hall, 2010). Belonging meant acceptance as a member or part of. A sense of belongingness is generally considered a human need, with other social needs. Vaccaro et al. (2015) defined a sense of belongingness as a subjective feeling of value and respect derived from a reciprocal relationship in which they have shared experiences, beliefs and personal characteristics. Belongingness means perceived support and acceptance as a member or part of a community. Very little research has been conducted to identify how young adult with intellectual disabilities develop and experience a sense of belongingness during their period of transition to adult life. Even though the feeling of belongingness is an integral component of social inclusion of young adults, many studies have shown that young adult with a disability often experiences barriers to feelings of belongingness. Part-3 of section-2 mainly focused on the social support and sense of belongingness felt by young adults with intellectual disability. A person with intellectual disability often experiences a limitation in capacity for self-reflection due to their cognitive limitations (AAIDD, 2010). Hence, inquiry about their social support and sense of belongingness had been done with the support of parents. Four factors of the perceived social support system were identified. These factors were adopted from the Multidimensional scale for perceived Social Support (Zimet et al., 1988). The four factors were: availability of friends, help from friends, support from friends during difficult times, and readiness to share joy and sorrow as perceived by young adults with intellectual disability. These four factors synergically determine the perceived social support and sense of belongingness. The findings are discussed below.

**Table 20**

*Perceived Social Support and Sense of Belongingness from Friends among Young Adults with Intellectual Disability*

		N	%
Perceived availability of friends	Not at all	82	54.7
	Some time	61	40.7
	Always	7	4.7
Perceived help from friends	Not at all	70	46.7
	Some time	49	32.7
	Always	31	20.7
Perceived support from friends during difficult time	Not at all	76	50.7
	Some time	48	32.0
	Always	26	17.3
Perceived readiness to share Joy and sorrow	Not at all	91	60.7
	Some time	31	20.7
	Always	28	18.7

Table 20 first discussed the perceived availability of friends, i.e., the availability of friends for social participation, community participation and play activities. The data showed that only 4.7% had reported that their friends were always available. 54.7% of young adults with intellectual disability reported that their friends were not at all available. 40.7% participants reported that their friends were only available sometimes. Lack of availability of friends was a direct factor for social exclusion. Findings of similar studies reported that perceived unavailability of friends and social relationship would create both sense of social exclusion and subjective feeling of loneliness (Nguyen et al., 2016).

Perceived help from friends discussed whether their friends helped in times of need. For people of this age group, there was a significant importance in

interdependence life (Nguyen et al., 2016). These interactions or interdependence among friends may include helping in higher education, schooling, training or in vocational areas. In order to get a clear idea of the areas of help assessed, certain examples were provided such as sharing notes, sharing resources, providing information, material help and help in times of need. But Table 20 showed that only 20.7% of young adults with intellectual disability reported that they had always received help from friends. Among the sample, 46.7% of participants reported that they did not receive help from friends and 32.7% reported that they sometimes got help from friends.

In the factor of perceived support from friends during difficult times, there was emotional support, material support and social support that they received during hard times. These may be viewed as important coping mechanisms to reduce stress, strain and reduce feelings of loneliness. Only 17.3% participants reported that they always received support from friends. 32% reported receiving support sometimes. Half of the young adults with intellectual disability reported that they didn't receive support from friends during difficult times (50.7%).

Emotional connection and emotional sharing were important components of interpersonal relationships. Involvement of others in sharing sorrow and joy strengthened bonds of the relationship. Sharing joy created happy moments and memories. Here, the readiness of friends of young adults with intellectual disability to share sorrows and joy were focused on. Table 20 showed that only 18.7% of the participants reported that their friends were ready to share joy and sorrow, 20.7% reported that friends were ready sometimes and many of the young adults with intellectual disability reported that they did not have any friends to share joy and sorrow (60.7%).

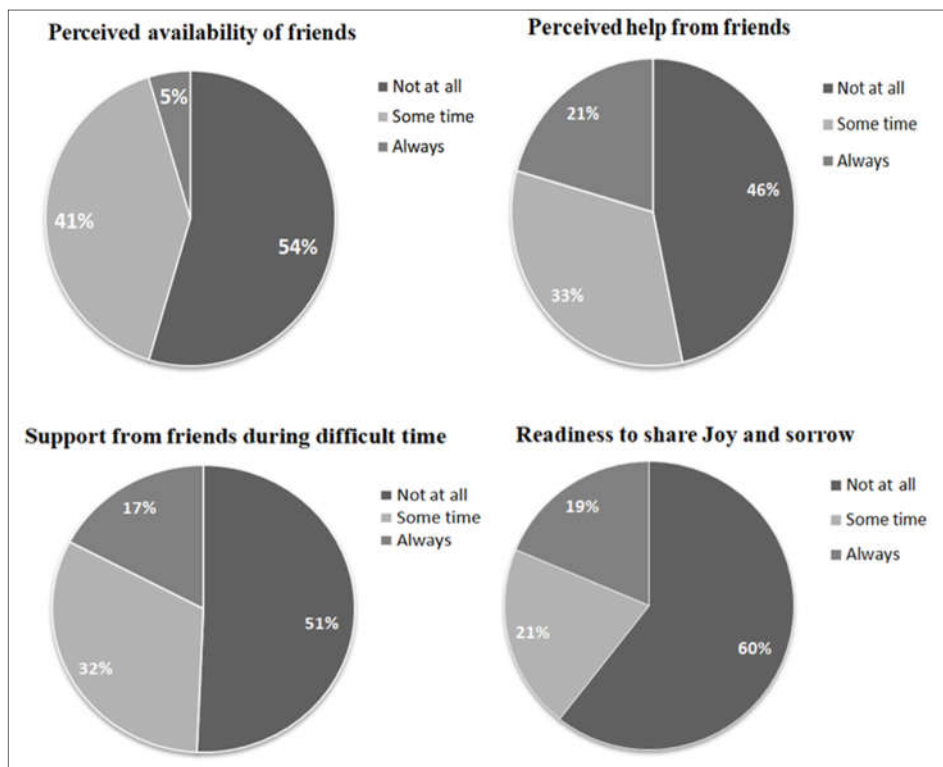
In summary, it could be concluded that perceived social support and sense of belongingness was low for young adults with intellectual disability in the areas assessed, namely perceived availability of friends, perceived help from friends, perceived support from friends and perceived readiness to share joy and sorrow. This indicated that these young adults with intellectual disability may not have

experienced social inclusion. As anticipated, it was found that lack of perceived support from friends was more important both in terms of social inclusion and quality of life of young adult with intellectual disability particularly as it has positive correlates of subjective feelings of well-being and self-esteem (Wilson et al.2016).

This result should be analysed with the limitation that young adults with intellectual disability have in expressing their emotional need and their interpersonal skill. This has made it difficult for them to recognize and appreciate these factors evaluated in this study. While reporting the subjective experience of young adults with intellectual disability, limitation of their verbal and cognitive ability should be taken into account.

**Figure 8**

*Perceived Social Support and Sense of Belongingness from Friends among Young Adult with Intellectual Disability*



### **SECTION-3: PROCESS AND FACTORS FACILITATING SOCIAL INCLUSION**

Section 3 discusses the process and factors that facilitates the social inclusion of young adults with intellectual disabilities as reported by the participant group (i.e., Parents, Rehabilitation professionals and Community members). The process of social inclusion is multidimensional process and can be influenced by individual, interpersonal and community-level factors, along with structural factors and policy factors. The characteristics, levels and variables that ensured the social inclusion of young adults with intellectual disabilities were explored in detail. These factors interacted synergistically or sequentially to make the social inclusion of young adults with intellectual disabilities practical. The variables that facilitate the process of social inclusion during this transition to adult life were identified and discussed. Thematic analysis of interview transcript of participants was done and a total of 517 responses were obtained for the same. Different themes were identified from the responses and further, these themes were categorised into global theme. The themes were categorized to three different levels, the three levels being, 1) the personal level, 2) interpersonal and community level, and 3) system and policy level. This categorisation of different levels was done based on the ecological system model proposed by Bronfenbrenner and Ceci (1994) which would help to decide which domain required intervention and also for exploring interaction of factors in different levels during the process of social inclusion of young adult with intellectual disability. These three levels were often seen as mutually interacting and social inclusion takes place through the process of complex reciprocal interactions of various factors from each level. Each was discussed in detail. Representative quotations from participant's response were selected for each main theme discussed. In order for the visual representation of these themes, diagrams have been presented and discussed along with the results.



**Table 21**

*Identified levels, Global themes, Themes of domains of Process and Factors Facilitating of Social Inclusion of Young Adults with Intellectual Disability*

Level	Global theme	Organizing themes & subtheme	Response	
			Frequency	Percentage
<b>LEVEL-1: PERSONAL LEVEL</b>				
	<b>Age appropriate skill training</b>			
		1. Functional skill training	51	28.3
		a. Independent living skill		
		b. Social skill		
		c. Recreation skill		
		d. Psycho-sexual skill		
		2. Pre-vocational skill training	53	29.4
		3. Self-advocacy training	10	5.0
<b>LEVEL-2: INTERPERSONAL &amp; COMMUNITY LEVEL</b>				
	<b>Attitude and behaviour change</b>			
		1. Attitude and behaviour change	71	39.4
		a. Attitude management		
		b. Avoid discriminating behaviour		
		2. Positive parental involvement	17	9.4
	<b>Awareness creation</b>			
		1. Awareness creation to community members	36	36.1
		2. Awareness programme for teachers	5	2.7
		3. Awareness programme for parents	24	13.3
	<b>Create opportunity for community participation</b>			
		1. Create opportunity for community participation	95	52.7
		2. Opportunity for peer interaction	28	15.5

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<b>LEVEL-3: SYSTEM AND POLICY LEVEL</b>			
<b>Create Appropriate training opportunity</b>	1. Curriculum level modification for transition	31	17.2
	2. Establish skill Training centres	29	16.1
<b>Create opportunity for employment</b>	1. Create opportunity for employment	38	21.1
<b>Create inclusive policy</b>	1. Special policy for social inclusion	29	

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#### **LEVEL-1. PERSONAL FACTOR**

The first level was the personal level factor of young adults with intellectual disability that facilitates the process of their social inclusion. One global theme was derived under this level, further three theme were identified under this global theme i.e., functional skill training, provide pre-vocational skill training and provide self-advocacy training programs. These global themes, respective themes and subthemes were discussed in detail.

#### **GLOBAL THEME-1: Provide Age-Appropriate Skill Training**

Age-appropriate skill training is the first global theme that emerged in personal level factors of social inclusion of young adults with intellectual disabilities. Three themes were identified under this global theme of ‘Age-appropriate skill training’, i.e., 1) Functional skill training 2) Pre-vocational skill training, and 3) Self-advocacy training. Each of these themes is discussed below.

#### ***Theme-1: Functional Skill Training***

The first theme identified was ‘providing age-appropriate functional skills training’ and total 51 (28.3%) responses were obtained in the theme. Functional

skills are a group of skills that are considered as an important factor that determines the independent living and community participation of young adults with intellectual disability, particularly at the transition stages (Ioanna, 2018). Cronin (1996) reported that functional skills would support individuals to achieve the independence that enables them to play their roles as independent individuals in the community. Four sub-themes (i.e. skill area) were identified viz., independent living skills, social skills, recreation skills, and psycho-sexual skills. These four themes are discussed below.

**Subtheme-a. Independent Living Skill.** The first subtheme identified under functional skills was the independent living skill. Due to cognitive impairments and lack of exposure, young adults with intellectual disabilities often have deficits in independent living skill (AAIDD, 2010). These independent skills were personal skills such as motor skills, personal hygiene etc. (AAIDD, 2010). Participants reported that *“to ensure the optimal independent life and community participation; appropriate training of independent living skills has to be provided to young adults with intellectual disability. These skill training should include personal hygiene, independent travelling, independent shopping, safety skill and money management etc”*. Participants shared the view that, training in the mentioned skills would enable young adults with intellectual disability to be independent and facilitate their social participation and community involvement. In support of this finding, Dollar et al. (2012) reported independent living skills would enhance ability to lead an independent life without having to seek help from others and by utilizing their potential. This finding shows that providing adequate and age appropriate training of independent living skills would enable them to participate in productive activities. This results also shows that independent living skills training would help young adults with intellectual disabilities to acquire various skills required for optimal independent life, in result it may facilitate the process of community participation and social inclusion of young adults with disabilities.

**Subtheme-b Social skill.** The second subtheme identified under functional skills training was social skills. In section-3, where the barriers to social inclusion

were discussed, it was identified that young adults with intellectual disabilities had deficits in interpersonal and social skills. Participants share their view that *“in order to ensure community participation and social inclusion, age-appropriate social skill training was needed to be provided to young adults with intellectual disability. These include training on how to behave in society, acting in various social situations, coping with different situations, and recognising different types of abuses in society”*. Participants also emphasized the need of providing appropriate social skill training at the early ages of children with disability and need for including social skill training as part of the inclusive school curriculum. This social skill consists of a variety of behaviors such as helping, sharing, initiating and responding to communications by other people, asking for help from another person, or giving positive feedback to other people (Zach et al., 2016; Elliott et al., 2001). Participant’s response shows, training in the mentioned social skills is significant to establish friendships with the same age group and to ensure adequate community participation.

Similarly, this social skill has been identified by many previous studies as a significant contributing factor to social interaction and participation and also to build meaningful interpersonal relationships (Cameron et al., 2021; Palisano et al., 2009). Thus, social skill training may be considered as an effective approach to support successful inclusion of young adults with intellectual disability in all sectors of the community.

**Subtheme-c: Recreation Skill.** The third subtheme identified under functional skills was recreation skills. Participants reported that *“providing age appropriate skill training to involve in recreational activities would be significant and it would provide opportunities for young adults with intellectual disabilities to interact with peers”*. Many studies have highlighted the potential significance of recreation activities for all children as well as children with intellectual disability which help to develop their physical, social, and psychological health (Fatih, 2020; Chien et al., 2017). Participants also shared that *“Difficulty can arise for young adults with intellectual disabilities to participate in games with extensive rules. But they can be involved in games that require more physical activity, like football and*

sports. *This can gradually help them to make meaningful interpersonal relationships and eventually lead to their social inclusion*". The benefits of participating in recreational activities are reported in many studies. Fatih (2020) reported that attending recreational activities provide opportunities for social interaction and a chance for forming friendships as well. Powrie et al. (2015) also reported that participation in recreational activities helps young adults with intellectual disability to develop social skills in making a formal and informal network of friends; and increase social interactions and self-efficacy. Petersen et al. (2021) argue that regardless of educational level and cognitive ability of students, recreational activity participation was associated with better self-rated health and social integration.

**Subtheme-d: Psycho-sexual Skill Training.** The final subtheme identified under functional skill training was psycho-sexual skill training. Arnett (2010) proposed that young adults are in a period where they are undergoing the transition from adolescence to adulthood, some primary goals of this period being establishment of age-appropriate friendships, intimate partner relationships, involving in sexual relationship, and leading a married life. Participants reported that *"Over the years young adults with intellectual disabilities become sexually mature, and they get exposed to sexual stimulation and content from society, either directly or indirectly. They need the training to deal with their sexuality and express sexual feelings healthily and appropriately"*. The above response illustrates that appropriate training on sexual behaviours and marital life are often ignored particularly for young adults with intellectual disability. Parents shared that *"our wards required age-appropriate sexual education as sexual harassment and sexual abuse were often reported for young adults with intellectual disabilities"*. This response emphasises the need of providing sexual abuse prevention training to them, also emphasises the need of appropriate training for initiating a healthy and intimate relationship which would help them to achieve autonomy and self-care with regard to their own sexuality, identities, and relationships. All the factors have been shown to play a significant role in the healthy interpersonal relationship of young adults with intellectual disability (Sapire, 1988; Roden et al., 2020).

### ***Theme-2: Pre-vocational Skill Training***

The second identified theme under skill training was ‘provide pre-vocational skill training’. Total 53 (29.4%) responses were obtained in the theme. Pre-vocational training precedes vocational training by facilitating individualised transition programs. Pre-vocational training is the training program that helps and prepares young adults with intellectual disabilities for vocational training (Braun et al., 2016; Thressiakutty & Rao, 2001). However, participants share that “*most of the time, young adults with intellectual disabilities don’t go through these transition programs and entered directly into vocational training after schooling. This causes difficulty forming social relationships at vocational training centres or employability at job centres*”. Thressiakutty (1998) suggested that pre-vocational skill training would enable them to be prepared for and fit for vocational training and productive community participation. This finding shows the importance of providing pre-vocational skill training. Many participants also emphasise the need of providing vocational training opportunity for productive employability of young adults with intellectual disability. Mukhopadhyay (2010) suggested that employability is a fundamental part of productive individual life and social inclusion. Similarly, Montobio and Lepri (2007) reported that the participation of young adults with intellectual disabilities in work environments allows them to form social networks and social identities also often helps to learning social values. It shows that participation in pre-vocation skill training would help to assimilation of the values of social inclusion such as that of coexistence and conditions of interaction. Therefore, pre-vocational skill training could be recommended to be one of efficient mechanisms for the inclusion of young adults with intellectual disability into community settings.

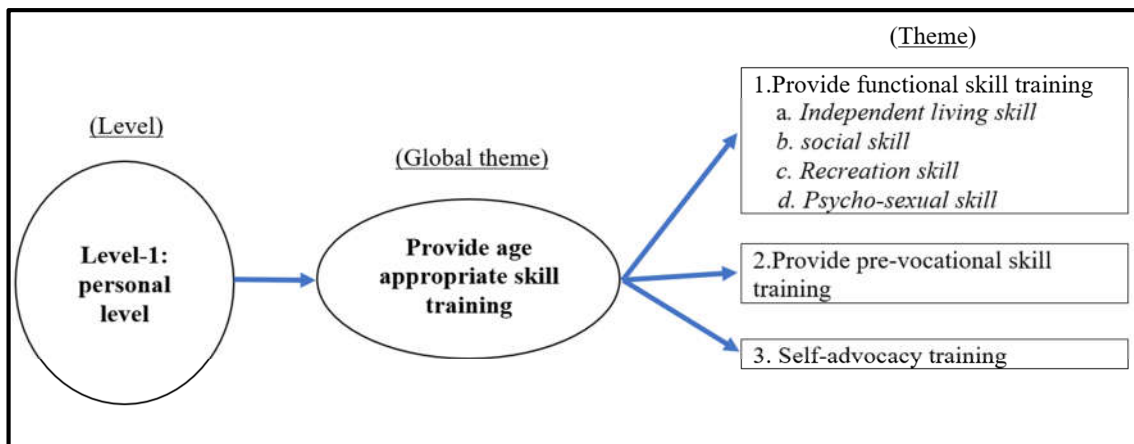
### ***Theme-3: Self-advocacy Training***

The third theme identified under personal level factors is ‘to provide self-advocacy training’. Participants reported that “*self-advocacy training programs will help intellectually disabled young adults ensure their rights, social participation, and social inclusion and promote interaction with others*”. This response illustrates the need for providing self-advocacy training to young adults with intellectually

disability as part of the skill training, as an empowering movement. The goal of self-advocacy is “know your rights and responsibilities, speak up for your rights, and you can make choices on your decision that affects your life” (Sievert et al., 1988). Björnsdóttir and Jóhannesson (2009) suggested that self-advocacy training helps to give proper awareness about rights, responsibilities, and opportunities and equip them to make individual decisions for the purpose of improving their social life. Even though self-advocacy training was identified as an important component of self-empowerment for young adults with intellectual disabilities in many studies, only few response (10 Nos. responses) have been identified from the transcript of the interview of participants. It may be because most parents and professionals may not be aware of self-advocacy training programs.

**Figure 9**

*Diagrammatic representation of derived Global themes, Theme under the Personal level Factors Facilitating the Process of Social inclusion*



**LEVEL-2: Interpersonal and Community Level**

The second-level factors identified as the facilitator for social inclusion of young adults is interpersonal and community level factors. Three global themes were derived in this level. They were 1) Attitude and behaviour management towards young adults with intellectual disability, 2) Awareness creation and 3)

Creating opportunities for social participation. Several themes were also identified under all these levels.

Interpersonal and community members consist of parents, family members, educational trainers, teachers and people at different community levels (Bronfenbrenner & Ceci, 1994). This study tried to explore the interaction with the individuals who worked closely with intellectually disabled young adults in different situations like in training institutions, vocational areas, community environment, travelling, etc., and how this situation facilitates the social inclusion of intellectually disabled young adults. Each global themes and themes in this level are discussed below.

### **GLOBAL THEME-1: Attitude and Behaviour Change**

Two themes have been identified under the global theme of attitude and behaviour change. They were changing community member's attitude and behaviour towards person with disability and positive parental involvement. According to Fishbein and Ajzen (1974) attitude can be taken to mean a person's bias in assessing, evaluating or weighing in on a disabled person's situation or circumstances. These evaluation, feelings and intentions toward the disabled person may have a very positive influence on social inclusion. Theme identified under this global theme are presented and discussed below,

#### ***Theme-1. Attitude Management towards Person with Disability***

The first theme identified was the change in attitude towards young adults with intellectual disability. Total 71 (39.4%) responses were obtained in the theme which is the second highest number of responses to a theme compared to other themes. This high numbers of response highlight the potential role of positive attitude of community members for generating inclusive environments that encourage positive change in attitude towards these young adults with intellectual disability. Further, two subthemes were identified: 1) Attitude management, and 2) Avoiding discriminating attitudes.



**Subtheme-1.a. Attitude Management.** The first subtheme identified was management of community members' attitude towards young adults with intellectual disabilities. According to participants community members' positive attitude towards young adults with disability is a significant factor of their social inclusion. Many participants shared "*The negative attitude of people at various levels of society hindered the social inclusion of young adults with intellectual disabilities. A positive and inclusive attitude change was needed for their social inclusion*". This response shows the need for developing and implementing an effective and sustainable program for attitude changes to address various identified negative attitude of community members towards young adults with intellectual disability. Olson and Zanna (1993) argue that an effective attitude management has to focus on three components of attitude formation, i.e., behavioural, affective and cognitive to create significant changes in community members' attitude towards young adults with intellectual disability. The behavioural component consists of a person's willingness to interact and form relationships. The affective component consists of the emotional domain of an attitude whereas; the cognitive component consists of ideas, beliefs, and opinions (Eagly & Chaiken, 1993; Olson & Zanna, 1993). Many studies conducted on attitude management training (Devkota et al., 2017; Muñoz-Cantero et al., 2013; Novo-Corti & Isabel, 2011) shows that the misconceptions and misunderstandings of community members about person with intellectual disabilities could be replaced by a positive attitude towards them. These positive attitudes could enhance community member's inclusive behaviours towards person with disability.

Since the beliefs and information about young adults are essential factors of attitude creation, Robey (1979) suggested that providing proper awareness about person with disability is vital in attitude management training. This 'information-based attitude management training' would help to create an understanding of young adults with intellectual disabilities. However many studies reported that traditional information-based training programs have little influence on attitudes management toward disability (Tait & Purdie, 2000; Lee & Rodda, 1994). Another group of researchers reported that the level of contact with a person with intellectual disability was a factor in determining positive attitudes toward people with disabilities (Rees et al., 1991). Similarly, Hassanein and Elsayed (2014) also

reported that increased contact with people with disability would enhance positive attitude toward them. Therefore, it shows that attitude management programme has to promote opportunities for direct contact with people with disabilities which would lead to favourable changes in attitude. In summary, this finding suggested that an effective attitude management programme requires a combined strategy of providing accurate information about disability and enforcing rewarding contacts between the 'nondisabled' and people with disabilities.

**Subtheme-1.b: Avoid Discriminating Behaviour.** The second sub-theme was 'avoided discriminating behaviour towards young adults with intellectual disability'. Participants reported that *“young adults with intellectual disabilities face many discrimination from family members, neighbours, community members, training centres and public spaces. An effective intervention to address this discriminatory behaviour has to be designed and implemented. Community must to treat them as equal to other members, as every individual has their rights and the right to have a dignified existence”*. This response illustrate that in order to ensure the social inclusion of young adults with intellectual disability, this reported discriminative behaviour towards them need to be addressed. According to American Psychological Association (APA, 2022) discrimination is a behaviour or action which can be observed, and it needs to be addressed with attitude management training and various proactive legislative measures. Recently a number of legislative changes, acts, and programme have been introduced to address the discriminative behaviour towards person with disability (Narayan & John, 2017). RPWD Act-2016 has already provided the same provision and have to be implemented.

Two subthemes were identified in the theme of attitude and behavioural change. These two subthemes were interrelated because attitude change caused behaviour change and this brought about inclusive behaviour automatically. It shows that, attitude change is the most central theme among them. To have an attitude change, awareness creation also need to be ensured. Therefore, this attitude management may be considered as core factor in facilitating the social inclusion of young adults with intellectual disability.

### ***Theme-2: Positive Parental Involvement***

The second theme identified in attitude and behaviour change was positive parental involvement. Participants reported that *“to ensure the effective social inclusion of young adults with intellectual disability, parental involvement must be positive and appropriate”*. This response highlights need for nurturing parental involvement for the social inclusion of young adults with intellectual disabilities. In the same note previous studies (Kurani et al., 2019; Boer & Munde, 2010) have shown that attitude of parents, involvement level of parents, and training level of parents influence the social inclusion process of their intellectually disabled wards. Participants reported that *“Parents' restrictive behaviours and excess concern often hindered the social inclusion of young adults with intellectual disability. Parents must encourage their children to get involved in age-appropriate activities”*. Similar to this Crowell (2019) reported that reduction of restrictive behaviour of parents helps young adults establish independence. Participants shared the views that parental involvement and care of their wards with disability need to be equally shared by both the father and the mother. Participants reported that *“usually, caring for these young adults becomes the primary responsibility of their mothers. It needed to be replaced by equal involvement of both the parents”*. This response emphasises that the father and the mother need to share responsibility in providing required support for young adults with intellectual disabilities. Otherwise, it may cause excess stress for the mothers and increase the caregiver's burden. Caicedo (2014) reported caregiver's burden would negatively influence caregiver's ability to provide appropriate care and support to their ward for empowerment.

### **GLOBAL THEME-2: Awareness Creation**

Awareness creation was the second global theme under interpersonal and community-level factor that facilitated the social inclusion of young adults with intellectual disability. Total 65 (36.1%) codes were derived in this global theme. It is third highest number of response for a theme. The previous section-3, discussed that lack of awareness influence negative attitudes and discriminative behaviours of community members towards young adults with intellectual disability. Under this

global theme, three themes were identified viz. 1) awareness programs for community members, 2) awareness programs for teachers, and 3) awareness programs for parents. These themes are discussed below.

***Theme-1: Provide Awareness to Community Member***

The first theme identified in the global theme of awareness creation was to provide awareness to community members about person with disability. The ecological system model suggests that community members consist of large group comprising of neighbourhood members and the members of the community at different levels such as teachers in training institutions, vocational training institutions, people in public transport systems, shops, public utility centres etc. Participants reported that *“lack of understanding influence the attitude and behaviour of community members towards young adults with intellectual disabilities. So, it was essential to give adequate and proper awareness to the community members”*. Participant’s report shows that appropriate knowledge of community members about disability would help to develop a positive attitude toward the young adults with intellectual disabilities and promote inclusive behaviours. Similar to this, previous studies identified the association between community member’s knowledge about the person with disability and their positive attitude and inclusive behaviour. i.e., Studies (Wang et al., 2021; Shahif et al., 2019; Uysal et al., 2014) reported that community members who have higher knowledge level would have better attitude toward people with disabilities. The importance of disability awareness has been given prominence in almost all Acts and Policies for the empowerment of person with disability. According to RPWD-Act-2016 it is the obligatory Government agencies to conduct disability awareness programme to ensure the person with disability’s right of life with dignity (Narayan & John, 2017). 39<sup>th</sup> clause of RPWD states that Government must spread awareness and sensitize the general public about issues of persons with disabilities (RPWD act, 2016). To achieve this aim the government has been given the responsibility of organizing and supporting campaigns for spreading awareness about the rights of persons with disabilities. Participants suggested that awareness creation can be done through

different modes like specific or usual educational training programs or behaviour-changing communication strategies. This awareness programme may be done through pamphlets, formal educational systems or school curriculum systems etc. Babik & Gardner (2021) reported that awareness creation needed to be provided on an informational level, but there should also be opportunities for interaction with intellectually disabled individuals physically which in turn may eradicate the misconceptions about disabled individuals in the community. It shows that providing opportunities for social interaction for young adults with intellectual disabilities was also directly influenced by the community's attitude regarding them. This finding suggests that awareness creation through structured and systematic programs need to be developed and implemented to enhance the process of social inclusion.

### ***Theme-2: Awareness Programs for Teachers***

The second theme identified was the awareness programs for teachers. Participants reported that, *“teachers and trainers, often lacked awareness about social needs and importance of inclusion and social participation”*. In support of this response, from the review of existing school and prevocational skill curriculum, researcher also had observed that very little attention has been given to the concept of community participation and social inclusion of person with disability. It demands the need to provide adequate orientation and sensitization to school teachers about significance of social inclusion of young adults with disability. Participants also reported that *“there is a need to provide an awareness training program for general school teachers other than special school teachers”*. As part of inclusive education, most children with intellectual disabilities attend public school. Many parents have shared that *“teachers in general schools often lack awareness about of the conditions, limitations or abilities of disabled students”*. Previous studies conducted on the general school teacher's awareness level in the Indian setting are also supporting this finding, i.e., Agrawal (2015), Gandhimathi (2010) and Sarojini (2000) reported that general school teacher's exhibits low level of awareness about children with disability and often shows discriminative attitude toward them. These findings emphasis the need of creating awareness among

general school teachers towards person with disability to ensure the inclusive learning experience and also inclusive social life in adult stage.

### ***Theme-3: Awareness Programs for Parents***

The third theme identified was awareness programs for parents. Participants reported that “*the awareness training programs have to begin from the parents and are needed to provide appropriate and consistent awareness, particularly on the need of community participation and social inclusion*” Participants have also reported that “*parents need the training to get awareness about their children's skills and deficits*”. From the researcher's clinical experience, many parents shared that they are unaware of the condition of their children, the type and level of disability, and the co-morbid features of the disability. It showed need of awareness programme to parents about the various area of disability empowerment such as the role of comprehensive care and age-appropriate skill training. In support of this finding, previous studies (Orsolini, 2022; Salami et al., 2018; He et al., 2017) have highlighted that parent’s awareness level have a great influence in receiving adequate skill training at appropriate age which may further help their children to participation in community activities and forming age appropriate interpersonal relationships.

### **GLOBAL THEME-3: Create Opportunity for Community Participation**

The third global theme identified at the interpersonal and community level was ‘create opportunities for community participation’. In the previous section of this study, researcher identified lack of opportunity for community participation as a barrier to the social inclusion of young adults with intellectual disabilities. Based on this, two themes were identified under this category. They were 1) Opportunity to participate in community activities and 2) Opportunity for peer interaction. These two themes are discussed below.

#### ***Theme-1: Opportunity to Participate in Community Activities***

The first theme identified was opportunity for community participation. Participants’ response shows that creating opportunity to participate in various community activities is vital factors that facilitate the process of social inclusion of young adults with intellectual disability. Total 95 (52.7%) responses were obtained

in the theme which is the highest number of responses to a theme compared to other themes. Similar to this, Hall (2010) suggested community participation is the one of the important domains of social inclusion. Community participation is the ability to interact meaningfully at different community levels like productive, interpersonal, recreational, and social (WHO-2001). Participation in the community would provide opportunities in using community resources such as having access to facilities, venues, and mainstream services such as education, employment, transport, recreation, and cultural activities (Abbott & McConkey, 2006). During the transition period, young adults were expected to participate in productive community activities such as appropriate vocational training and employability (Arnett, 2010). Participants share their view that *“opportunity for vocational skill training has to be provided along with the timely opportunity for age-appropriate jobs. In addition, opportunities to participate in recreational activities such as involving in games and hangout with same-age friends, etc. have to be provided”*. Participants also shared that *“participation in activities begins first from family and neighbourhoods. Young adults with intellectual disability must be given opportunities to take on minor responsibilities in small neighbourhood activities like marriage, culturally sensitive functions, or occasions*. These response illustrate the positive association between opportunity for participating in various community activities and their social inclusion. However providing opportunities for community participation may not be enough. Carroll et al. (2018) argue that even though the opportunities were created, person with disability were rarely utilizing these opportunities due to the lack of expectations and readiness. It shows that young adults with intellectual disabilities must be enabled to use the opportunities provided. Encouragement needs to be given to those involved in productive, interpersonal, social, and recreational groups of social participation. As part of this encouragement, initially structured programs and games could to be conducted. Anaby et al. (2013) suggest that proactive planning has to be done to create opportunities to participate in various activities inside and outside the school setting such as arts fest, ability festival, special sports career selection pathways, and job fairs for young adults with intellectual disabilities.

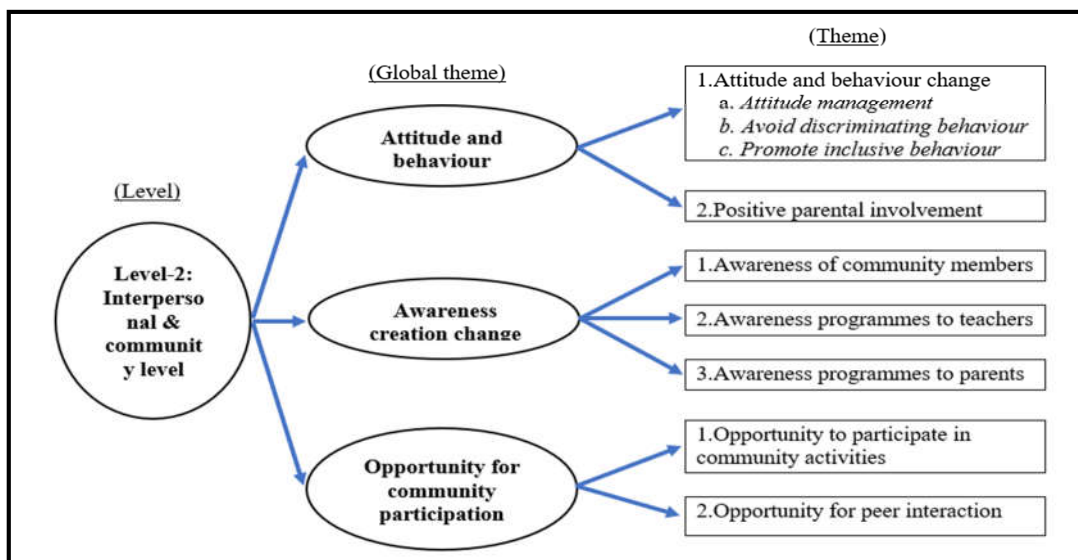
### ***Theme-2: Opportunity for Peer Interaction***

The second theme was the opportunity for peer interaction. Participants have reported that *“there is a need to provide them with opportunities to share their*

interests, watch films, play games, travel, have fun and share with peers”. In the case of young adults with intellectual disability, forming and maintaining intimate relationships with peers is considered as one of major developmental goals (Arnet, 2010). Multiple studies emphasize friendship as a major source of social support during the period of young adulthood (Sullivan et al., 2016; Arnet, 2010). Participants share the view that “young adults with Intellectual disability need opportunities for initiating, maintaining, and enjoying friendships through providing the options for hangout spaces, community clubs, involvement with students of the same age group in the vocational training centres, and being involved in games and leisure activities as part of the system”. It shows interpersonal relationship plays a vital role in social inclusion and it could act as a major source of social support.

**Figure 10**

*Diagrammatic representation of derived Global themes and Theme under the Interpersonal and Community level factors facilitating the Process of Social Inclusion*



**LEVEL-3: System and Policy Level**

The researcher has identified the system and policy level as the third level factor that facilitate the process of social inclusion of young adults with intellectual disability. The researcher has identified three global themes under the system and policy levels factors. First, create appropriate training opportunities, second, create



opportunities for employment, third, and create inclusive policy. These three global themes identified were related to social system and policy and are hence included in this level.

### **GLOBAL THEME-1: -Appropriate Training Opportunity**

The first global theme identified was creating appropriate training opportunities. Two identified themes under this global theme are discussed below.

#### ***Theme-1: School Curriculum Modification***

The first theme identified under global theme creating appropriate training opportunities is the need for curriculum modification of training programs. Total 31 responses were derived in this theme. Participants reported that *“The curriculum should be based on inclusive principle. The inclusion of young adults with intellectual disabilities in training activities and different co-curricular activities should be encouraged. These inclusive activities should be more than just educational activities. The evaluation system should be skill-based rather than based on academics”*. This response of participants emphasises the need for inclusive curriculum appropriate to students with an intellectual disability as they require more specific skill training programs than non-disabled young adults. An inclusive educational curriculum is one which provides all students, regardless of background and immutable characteristics, with an equal opportunity to achieve the learning outcomes of their programme (UNCRPD, 2016). According to UNESCO (2017) accessibility, zero-reject non-discrimination and reasonable accommodation are key features of inclusive school curriculum. According to UNCRPD (2016) inclusive educational opportunity is a fundamental human right of all learners and not just a service. In the context of Sustainable Development Goal-4 (United Nations General Assembly, 2015) inclusive curriculum for education and training of students with intellectual disability have become more relevant and urgent, as it recommends the inclusive and quality education for all.

Participants share their view that *“the curriculum should focus on helping students with an intellectual disability acquire skills necessary for social and interpersonal relationships and personal skills., Inclusive and need based curriculum would help the special need students to be part of a continuous training*

process, starting at the primary level and systematically upgraded to pre-vocational skill training at the secondary level and then finally upgrading to vocational skill training. In support of this finding, many studies recommended that curriculum should be flexible and adaptable to the needs of students with disability (Adewumi et al., 2017). Odom et al. (2011) reported that the comprehensive assessment and care plan and individualised education programme is essential for an inclusive curriculum. Polat (2011) also reported that inclusive and rights-based approaches should be considered while developing appropriate curriculum adaptations to match learners' needs instead of the learners fitting into the curriculum. This finding shows that inclusive and skill-based and flexible curriculum and training is crucial for ensuring the achievement of skill required for vocational and social inclusion of young adults with intellectual disabilities.

### ***Theme-2: Establishing Vocational Skill Training Centres***

The second theme identifies was establishing skill training centres. Participants reported the need for establishing appropriate skill training to ensure employability and social inclusion. Participants share the view that to ensure effective vocational training, it has to be provided through a formal system and required accessible and need based vocational training centres. Participants reported that *“there is a necessity of providing vocational training to young adults with intellectual disability through a proper system such livelihood based vocational centre run by Govt”*. Participants also share their view that *“vocational training services should be included as part of the curriculum of higher education systems in schools and should be certified”*. The certificate provided may help in the employment and career suggestion for young adults with intellectual disabilities. From the clinical experience of researcher, the need for a formal vocational training system was observed. Most of the participants have emphasized *“there is a need of establishing an accessible training centre as young adults with intellectual disability face difficulty to access training centres due to logistical and economic factors”*. It shows the needs for the establishment of easily, accessible and affordable skill training centres for young adults with intellectual disabilities. Further participants reported that *“The majority of skill training centres usually provide training in only one or two major areas. Instead, they should focus on delivering training after assessing the needs, interests, commercial viability, and chance for social inclusion*

*of skills*”. This response shows that apart from understanding the vocational interests of young adults with intellectual disabilities, the primary requirement was to survey the current job opportunities and find out which job has greater employability possibility.

## **GLOBAL THEME-2: Create Opportunities for Employment**

The second global theme identified by the researcher under the system and policy level was creating opportunities for employment for young adults with intellectual disabilities. Participants reported that *“young adults with intellectual disability need to be provided with adequate and appropriate employment opportunities. This employment can be of different types and at different places such as supportive, competitive, and community-based jobs”*. Employability may be considered as an important factor in the financial independence, identity creation and community participation of young adults with intellectual disabilities. Multiple studies have reported employment opportunities as a critical element in the social participation and social inclusion of young adults with intellectual disabilities (Venkatesan, 2021; Bell, 2020). The researcher observed that most of the existing employability provided through social service or philanthropy model advocates would not facilitate social inclusion rather it merely keeps them busy or engaged. The working atmosphere often provide a context for social interaction and identify them as independent adults (Umberson & Montez, 2010). Participants have reported that *“young adults with intellectual disabilities should be provided more job opportunities in the government or public sectors based on their skills and abilities. The government should make appropriate measures to identify and ensure suitable skill-based job opportunities for them”*. International Labour Organization (ILO, 2013) recommended a policy level intervention on vocational skill training and employment based on the principle of equal opportunity and suggested that *“whenever possible, disabled persons should receive opportunity for employability and under the same conditions as non-disabled persons”* (ILO, 2013). Similarly RPWD Act (2016) also provide provision to design and implement appropriate social welfare measures to ensure right-based employment participation and to create appropriate job reservation provisions both in government and private sector. Participants reported that *“even after securing a job, young adults with intellectual disabilities find it difficult to continue in that job due to the negative behaviour of*

*their colleagues. Therefore, sensitisation of the community members is necessary for creating a suitable job environment*". This response highlights the need for sensitisation of community members to create awareness and a positive attitude toward the employability of young adults with intellectual disability

In summary, the above discussed themes such as providing adequate and suitable employment opportunities, and creating an inclusive work environment to help young adults with intellectual disabilities to achieve social participation, social interaction and financial independence, may help to reduce the family burden and help them in leading an independent life. All these factors may synergically facilitate in the social inclusion of young adults with intellectual disabilities.

### **GLOBAL THEME-3: Create Inclusive Policy**

The third global theme identified under system and policy level factors facilitating social inclusion was creating inclusive policy. As suggested by many policy document such as UNCRPD (2016), to a create a completely inclusive environment for young adults with intellectual disabilities, appropriate intervention at the policy and administrative levels was required. The researcher has identified one theme under this category i.e., special policy for social inclusion which is discussed below,

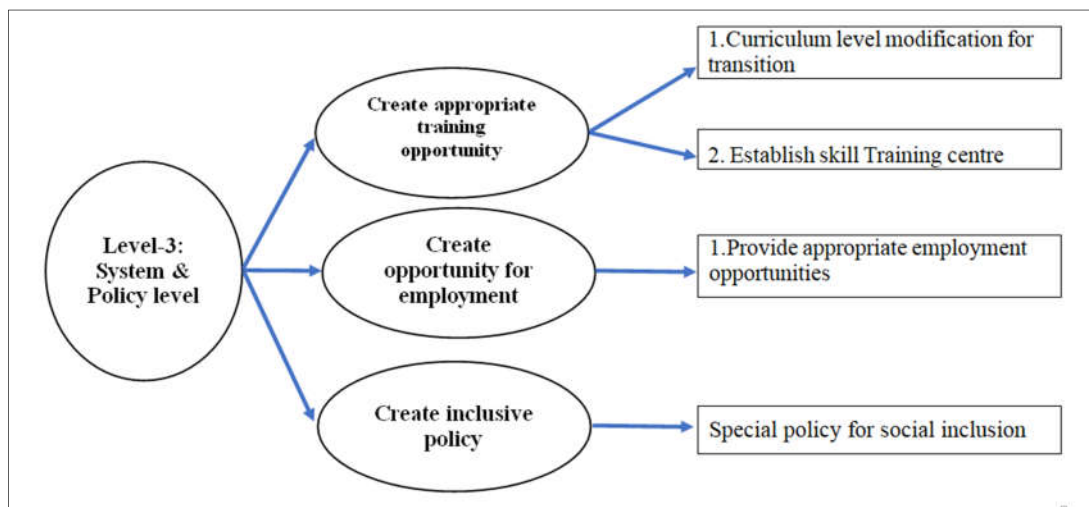
#### ***Theme 1. Special Policy for Social Inclusion***

The theme identified was a particular policy for social inclusion. The participants have reported that *"the Government should implement special projects, schemes and policy-level interventions for creating a disability-friendly and inclusive social situation"*. This response of participant shows the significance of policy and system-level intervention has to promote social inclusion. Fostering inclusive social values and practices are based on the core concept of 'society for all and every individual has an active role to play' (Charaf et al., 2014). United Nations Human Rights Declarations recommended that Governments and other stakeholders should design public policies and programmes for social inclusion and combat inequalities, disparities, and social exclusion of persons with disability (U.N.2010). There were different studies and policy documents on disability-inclusive policies (Hayes & Bulat, 2017; U.N., 2010; UNESCO, 2009).Among them, the guidelines

put forth by the UN Human Rights Commission and UNESCO have worldwide acceptance. According to these guidelines, four critical steps should be implemented to ensure social inclusion. The first was the promotion of non-discriminatory practices, a measure to prevent discrimination at any level is to be implemented. The second was to take initiatives that provide young adults with intellectual disabilities barrier-free accessibility to physical needs and informational needs. The third was to promote supportive services such as therapy, assistive devices and other health services. The fourth was participation; participation opportunities necessary for ensuring social inclusion are to be implemented. Apart from these, several inclusive policies also mention attitude management toward marginalized individuals (ILO, 2015).The policies mostly speak of general inclusion. Therefore, policies that address the social inclusion of intellectually disabled individuals specifically are to be brought about. From review of existing disability-inclusive policy, researcher had observed that almost all documents recognize the needs and rights of disabled people for an inclusive environment. However, these documents often failed to propose systematic and evidence-based strategies and policy measures required to foster an inclusive social milieu for person with disability such as systematic implementation plans, budgetary allocations, and enforcement mechanisms.

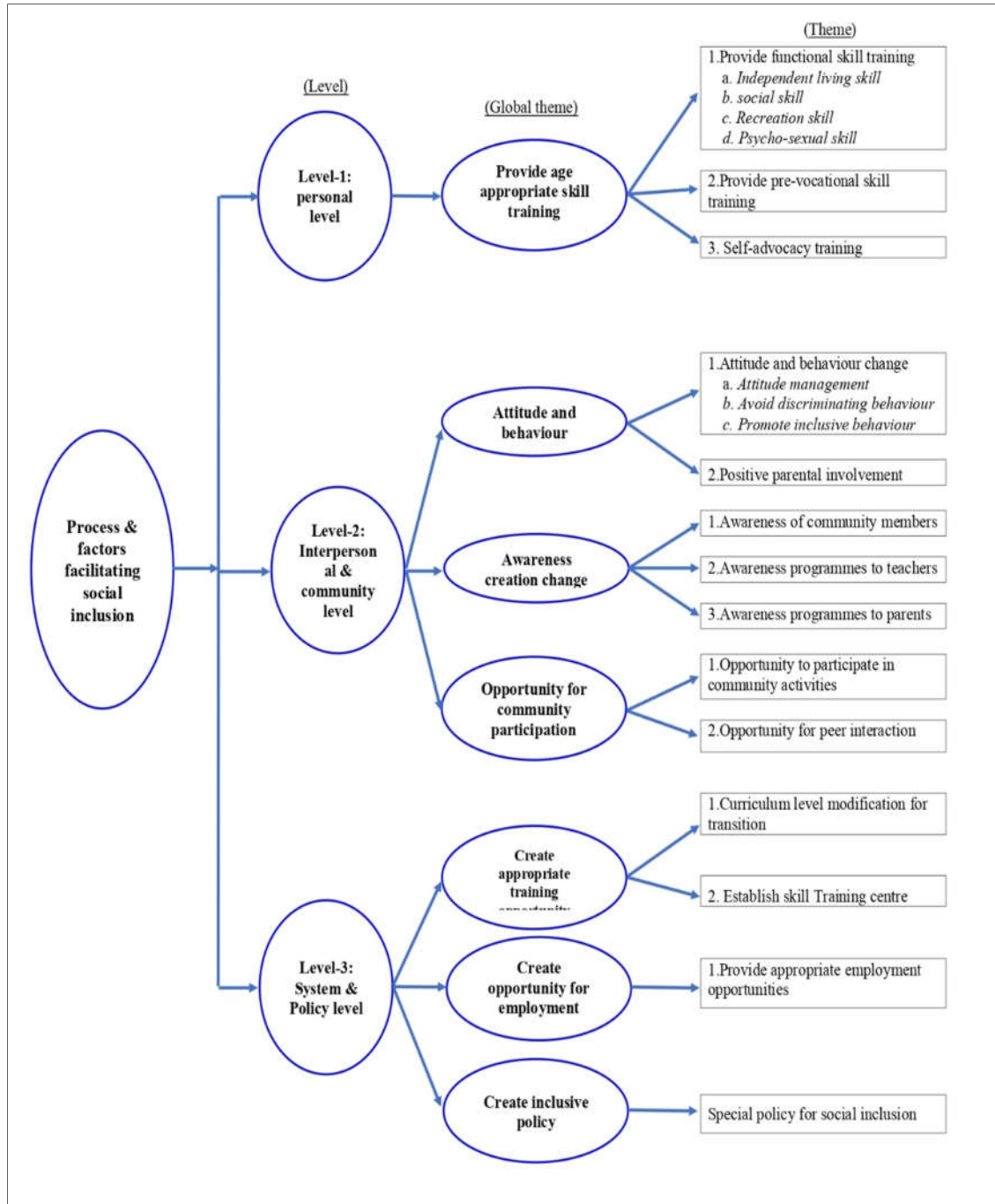
**Figure 11**

*Diagrammatic representation of derived themes and categories under the system and policy level factors facilitating the process of social inclusion*



**Figure 12**

*Diagrammatic representation of derived themes, Global them and levels of factors facilitating social inclusion of young adults with intellectual disability*



#### **SECTION-4: PERCEIVED BENEFITS OF SOCIAL INCLUSION OF YOUNG ADULTS WITH INTELLECTUAL DISABILITY**

Section-4 discusses the perceived benefit of social inclusion on the life of both young adults with intellectual disabilities and others as reported by participants. In this area total 317 Nos. of codes were identified from the thematic analysis. The identified themes on perceived benefits of social inclusion were categorized into three levels. They are, personal level of young adults with intellectual disability, family level and community level. Level-1 is personal level and the researcher has identified 3 global themes at the personal level. Level-2 is the family level; one global theme was identified at the family level. It is the support and satisfaction of parents. Level-3 is the benefits of social inclusion on community level. The one global themes identified under this level was community empowerment. All the themes at the personal, family, and community levels are mutually interrelated and create overall benefits. Review of existing studies shows that more evidence is available about the impact of the social exclusion of person with intellectual disability than the benefits of their social inclusion, as exclusion is still so visible in the community. Social inclusion is more than simply increasing the level of community participation, it's ensuring that every single individual regardless of their ability and differences, experience a sense of belonging and are valued as members of community (Hall, 2010).

Each theme was discussed in detail. Representative quotations from participant's response were selected for each main theme discussed. In order for the visual representation of these themes, thematic diagrams have been presented and discussed along with the results. Table 22 show the list of identified theme, global theme and levels of perceived benefit of social inclusion of young adults with intellectual disability. Table 22 also shows the frequency of response under each theme.

**Table 22**

*Identified Theme, Global theme and levels of perceived Benefit of Social Inclusion of Young Adults with Intellectual Disability*

Level	Global theme	Theme	Response	
			Total	Percentage
<b>LEVEL-1: PERSONAL</b>				
1. Self-empowerment		1. Opportunity for skill improvement	40	22.2
		2. Self-efficacy & independency	73	40.6
		3. Perceived feeling of belongingness	44	24.4
2. Increase in social relationship and participation		Increase in social interaction	35	19.4
		Increase productivity and Income generation	9	5.0
3. Financial independence		Identify as contributing members	2	1.1
<b>LEVEL-2: FAMIL</b>				
	Support and satisfaction of parents	Support and satisfaction of parents	55	30.6
<b>LEVEL-3: COMMUNITY</b>				
	Community empowerment	Productive member and human resource of society	59	32.8

### **LEVEL-1: Personal Level**

In this level researcher attempted to explore the perceived benefits of social inclusion of young adults with intellectual disability in their personal life. Social inclusion is considered as an important component of quality of life, particularly for people with intellectual disabilities (Bickenbach, 2011). From the thematic analysis, majority of responses were obtained under personal themes (i.e., total 203 responses) while comparing the number of themes obtained under other two level. However, from the review of existing literature researcher has observed that very



few studies have focused on the effect of social inclusion on personal level of young adults with intellectual disabilities (Hall,2010). In the personal level, three global themes were identified, i.e., 1) Self-empowerment, 2) Increase social participation and 3) Financial independence. Each of these global themes and their respective themes are discussed below,

### **GLOBAL THEME-1: Self-empowerment**

The first global theme identified in personal level benefit of social inclusion is self-empowerment of young adults with intellectual disability. Further three themes have been identified under this global theme, i.e., 1) Opportunity for skill improvement, 2) Self-efficacy and independency and 3) Perceived feeling of belongingness, each theme are discussed below,

#### ***Theme 1. Opportunity for Skill Improvement***

The first theme identified under the global theme of self-empowerment of young adults with intellectual disability is that it provides ‘opportunities for skill improvement’. Total 40 Nos. of responses were obtained under this theme. Participants share their view that *“through social inclusion, young adults with intellectual disabilities will get opportunity to learn new social and functional skills by observing and practising them. They will also get the opportunity to learn how to interact and behave in social situations from individuals without disabilities”*. This response indicates that young adults with intellectual disabilities would get opportunities to acquire and improve their skills through social inclusion. It also shows that creating opportunities for social interaction may enable them to be in the required situations to understand the behaviours necessary for maintaining relationships. This opportunity for community participation and exposure to various social situation may facilitate acquiring additional functional skills needed for independent daily living such as money management skills, travel skills, skills required for using different resources, safety skills, etc. (Duncan et al.,2018). Thus, these skills may be vital to achieving the personal development of young adult with intellectual disability and may have significant contribution in their overall empowerment.

### ***Theme 2. Improve Self-Efficacy and Independency***

The researcher has identified self-efficacy and independency as the second theme under self empowerment as an outcome of social inclusion in personal level. Self-efficacy is the belief in an individual about one's capabilities in performing a task and it is a positive evaluation of oneself (Bandura, 1997). Total 73 Nos. of responses were identified under this theme. Participants have reported that "*the self-efficacy of young adults with intellectual disabilities can be improved through social participation and social inclusion*". This response shows that social inclusion would help to increase the self-efficacy and independency among young adults with intellectual disabilities and achieving self-efficacy may allow them to enjoy their life despite of their limitation. Self-efficacy is essentially a situational specific form of self- confidence. Self-efficacy is at the centre of Bandura's (1977) social cognitive theory, which argue that individual ability as a factor result from the interactions between personal factors and environmental factors to complete a required task. Many studies have reported that the increase in self-efficacy is associated with high level of participation in community activities among students with intellectual disability (Bertills et al., 2021; McAuley et al., 2011). Further studies in the area also revealed a positive correlation of self-efficacy, subjective well-being and life satisfaction (Caicedo, 2012). Rogowska et al. (2020) reported that self-efficacy is a useful indicator of adaptation with environment and independent living ability of person with disability. Transitioning from dependence to interdependence and later independence is considered as an important facilitator of self empowerment and self-development in young adults with intellectual disabilities (Arnett,2010). In total, the theme shows that social inclusion of young adults with intellectual disability would create opportunity to learn new skill which would help to improve self efficacy. Further this increase in self-efficacy could contribute to their overall wellbeing as evident by above discussed studies.

### **Theme-3: Feeling of Belongingness**

The third theme identified under global theme of self-empowerment is the feeling of belongingness. Total 43 Nos. of responses were identified under this theme. Participants share their view that *“social inclusion would help to create a feeling of belongingness among young adults with disability and they feel like one among the community members. They think that they are being considered, accepted and cared for by others. They also get the support from other community members in times of need.”* This response shows that feeling of belongingness and perceived social support as an outcome of social inclusion of young adults with intellectual disability. Baumeister and Leary (1995) defined sense of belonging as “a feeling that one is an integral part of a system or experiencing a fit between one’s self and others around him/her”. Perceived social support and sense of belongingness of young adults with intellectual disabilities as valued member of society may increase satisfaction and happiness. Crisp (2010) reported that social inclusion would bring a sense of belongingness and this perceived sense of belongingness is positively correlated with overall well-being for young adults with intellectual disability and may reduce the negative consequences of discrimination they tend to experience from the community. It shows that perceived social support would help them to gain confidence and happiness as members of society, knowing that they won’t be rejected and develop positive feelings as part of a system. Similar to this findings many studies have reported that there is a positive correlation between individual’s perceived social support and well-being (Villatte et al., 2021; Poudel et al., 2020; Victoria,2020). Studies had also reported the positive effect of social support on health, quality of life, and especially mental health (Fasihi Harandi et al., 2017).

### **GLOBAL THEME-2: Increase in Social Relationships and Participation**

The second global theme identified in the personal benefit of social inclusion of intellectually disabled young adults is increased social relationship and participation. Total 35 Nos. of responses were identified under this theme. Participants reported that *“by providing social inclusion, the intellectually disabled young adults get opportunities to interact with the community at different levels, which in overall improves their social relationships”*. This response shows that

social inclusion would promote social interaction, participation, and meaningful engagement in such situations. Similar to this previous studies also reported that increased social participation would help to get involved in mainstream social functions such as employability, recreational activities, productive activities, and other day-to-day activities (Amado et al.,2013). Nkwanyana, (2020) reported that social inclusion would provide opportunity to participate in recreational and leisure activities and it may result in increase of satisfaction and pleasure for the participant without compulsion. It shows that participating in age appropriate recreational activities is a way of dealing with various challenges that are faced by society, it will support young adults with intellectual disability to learn skills and socialize beyond their families boundaries (Stanish et al., 2016).

Participants reported that “*social inclusion would facilitate young adults for age appropriate interaction at different level such as interpersonal relationships, interaction with neighbours, friends or peers, with support groups and involve in various community activities*”. This response shows that social inclusion would enhance interaction with both disabled and non-disabled communities. Inclusive social situation would also encourage young adults with intellectual disability to interact with non-disabled peers and other community members (Sreckovicet al.,2017). Inclusive social situations also help them to utilize the available resources and services needed for meaningful participation in society (Burns et al., 2004).

In support of these response, many studies reported positive effect of social inclusion on social relationships and participation i.e., ensuring social inclusion of young adults with intellectual disability may facilitate adequate opportunity for community participation and it could directly or indirectly lead to their well-being and makes them a meaningful contributing member in society (Cummins & Lau, 2003; Sinnema, 1992). Previous studies show that social relationships have long-term effects on overall health of individuals. Studies consistently reported that individuals with close relationships and adequate community participation have better quality of life, health, and self-esteem (Honey et al., 2011; Umberson& Montez, 2010; House et al., 1988). However, this positive affects may depend up on the quality or quantity of community participation.

### **GLOBAL THEME-3: Financial Independence**

The third global theme identified in personal level was financial independence. From the responses, financial independence of young adults with intellectual disability was identified as one of the outcomes of social inclusion at a personal basis. On considering the number of responses in other themes in personal level, under this theme, the researcher identified only comparatively less number of responses (11 Nos.). However from existing literature and the researcher's clinical experience, it was observed that, financial independence may be a significant outcome of social inclusion of young adults with intellectual disability. Especially in the case of young adults with intellectual disabilities, being involved in livelihood based employment and becoming financially independent are identified as an age-appropriate developmental goal (Arnett, 2010). Financial independence could be achieved through providing good vocational or employability opportunities. Social inclusion of young adults with intellectual disabilities often involve providing adequate job opportunities and it would facilitate as a sustainable source for income (Bonaccio et al., 2019). The researcher has identified two themes; increase productivity and income generation and identify as contributing and productive members.

#### ***Theme 1. Increase Productivity and Income Generation***

The first theme identified by the researcher under financial independence is increase productivity and income generation. Participants have reported that “*social inclusion would provide opportunity for employability and earn income, eventually it helps them to stand on their own.*” This response shows that through social inclusion i.e., social participation and meaningful involvement in productive areas by young adults with intellectual disabilities, they may get appropriate employment opportunities and a means to obtain sustainable income. This would help them to achieve financial independence and in achieving their own identity. Previous studies suggested that income generation helps to achieve independence among person with disability (Qazi, 2022). Disability is significantly associated with poverty and lower employment rates among person with disability (Groce et al., 2011). The World Health Organisation (WHO, 2010) reported that social inclusion would facilitate access to livelihoods which would reduce poverty among disabled people and

increase financial independency. ‘Livelihoods’ not only refers to the means for income and financial independence but also the opportunity to develop one’s full potential and independency with control over factors that shapes his/her life and contribute to society’s development (Stienstra & Lee, 2019). Reid and Riddick-Grisham (2015) reported that “work, and earning is not only the means for income but is also considered as means to take care of one’s own needs and that of one’s family, is part of identity formation, and gives meaning to lives”. It shows that through financial independence, young adults with intellectual disabilities may have more freedom in making their own choices and lifestyle and improve social well-being and social contribution.

### ***Theme 2. Identify as Contributing Members***

Identifying young adults with intellectual disabilities as contributing members of family and society is the second theme. Participants shared their view “*that social inclusion would provide opportunities to young adults with intellectual disabilities to participate in different productive sectors, in result they would be able to support their families financially*”. This response shows that social inclusion enhance the participation of young adults with intellectual disabilities in productive and livelihood based vocational activities which would enable them to recognize themselves as a financial support for their family and as a productive member. Reciprocally, the family may identify them as capable individuals, recognize their ability, and accept them. Further, this may help intellectually disabled individuals to engage themselves more frequently in social situations and improve their wellbeing.

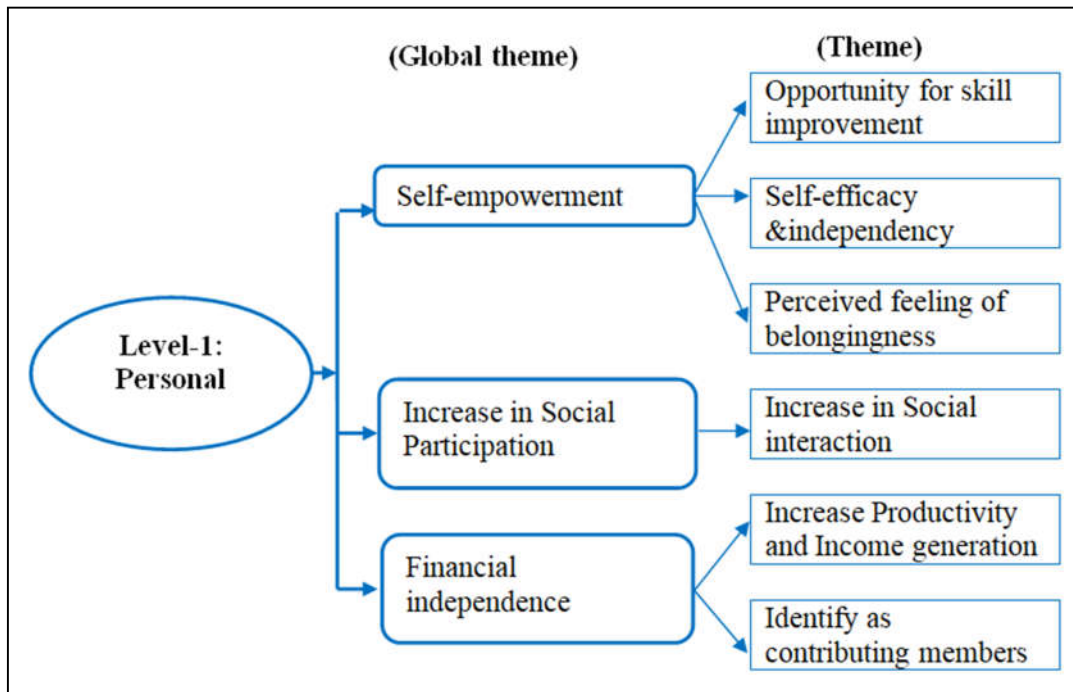
The two themes discussed under this global theme of financial independency could be considered as a by-product of social participation and community interaction. This finding indicates that employability and financial independency is a positive outcome of social inclusion. Further reciprocally it may facilitates satisfactory interpersonal relationships and meaningful engagement in society. It could be inferred that social inclusion would facilitate financial independency, and sense of contributing members of society would collectively contribute toward the well-being, happiness and adjustment of young adults with intellectual disability.

The above section discussed the identified three global theme under the personal level benefits of social inclusion of young adult with intellectual disability.

Upon a detailed analysis of the three global themes and their categories, it shows that they operate in an interrelated manner. Social inclusion improves overall participation, financial independence, self-efficacy and self-identity. Above discussed findings indicate the positive outcome of social inclusion on the various personal domain of young adults with intellectual disability such as opportunity for skill development, perceived social support, increased reciprocal relationships and financial independency. These personal level benefits of social inclusion may collectively contribute to a better quality of life for them. In support of this finding, many studies reported that social inclusion has positive effect of independent living among young adults with intellectual disability (Brown, 2017; Hall, 2010). Further Cooper & Picton (2000) reported independent living is associated with better quality of life. In conclusion, this study shows that social inclusion has been directly or indirectly linked to quality of life in young adults with intellectual disability.

**Figure 13**

*Diagrammatic Representation of derived Themes under the Global theme –Personal level Benefits of Social inclusion*



## **LEVEL 2. Family Level**

Level-2 discusses the identified benefits of social inclusion of young adult with intellectually disability at the family level. In this study researcher has identified positive effect of social inclusion of young adult with intellectual disability on the support and satisfaction among their parents and caregiver. The researcher has identified one theme as benefit of social inclusion in the family level, i.e., support and satisfaction for parents. Total 55 Nos. of responses were identified under this theme. It is discussed below,

### **GLOBAL THEME 1. Support and Satisfaction for Parents**

The theme identified at the family level perceived benefits of social inclusion is the support for parents and satisfaction of parents. Participants shared their view that *“if social inclusion of intellectually disabled young adults is ensured, the joy and satisfaction of their parents will be improved”*. This identified theme shows that social inclusion would facilitate the ability for independent living among young adults with intellectual disability and further it may help to reduce the worries and concerns and increase satisfaction among parents. As discussed in personal level benefits, social inclusion facilitates opportunity for employability and financial independency among intellectually disabled young adults which would enable them to support their family members financially. It emphasises link of independent living ability and employability of young adults with intellectual disability on the positive relationship of social inclusion and parental satisfaction. Many participants shared their view that *“adequate social participation and independent life for young adults with intellectual disability will reduce worry about the future of their wards for their parents and increase their perceived support to a great extent”*. Young (2004) reported that this perceived support is linked with well-being, which is a component of satisfaction level of their parents and reduce worries regarding the future of their wards. Samadi et al. (2022) have reported a positive association between satisfaction and perceived social support among parents of adults with intellectual disabilities who is living in inclusive social situation.



In support of this finding many previous studies reported the positive outcome of social inclusion of person with disability on family members, i.e., Naganuma et al. (2021) suggested that social inclusion was significantly associated with a reduced burden of family caregivers of person with intellectual disability. Similarly, Rodakowski et al. (2012) reported that social inclusion and adequate social support were consistently identified as key variables that reduce the perceived stress of caregivers of individuals with disability. Another group of studies reported the positive effect of social inclusion on dipping caregiver burden and it was associated with better caregiver mental and physical health (Drentea et al., 2016; Schulz & Sherwood, 2008). Caregiver demographic characteristics (eg, age, education, and available support) have to be considered while interpreting the above discussed association. Detailed empirical studies are required to demonstrate the pathways of relation between social inclusion and caregivers' satisfaction and its effect on various mediating and moderating factors.

### **LEVEL-3: Community Level**

Level-3 discusses the benefits of social inclusion of intellectually disabled young adults at the community level. In community level the researcher identified one theme i.e., productive member and human resources of society. Total 59 Nos. of responses identified under this global theme. It is discussed below,

#### ***Theme 1. Productive Member and Human Resource of Society***

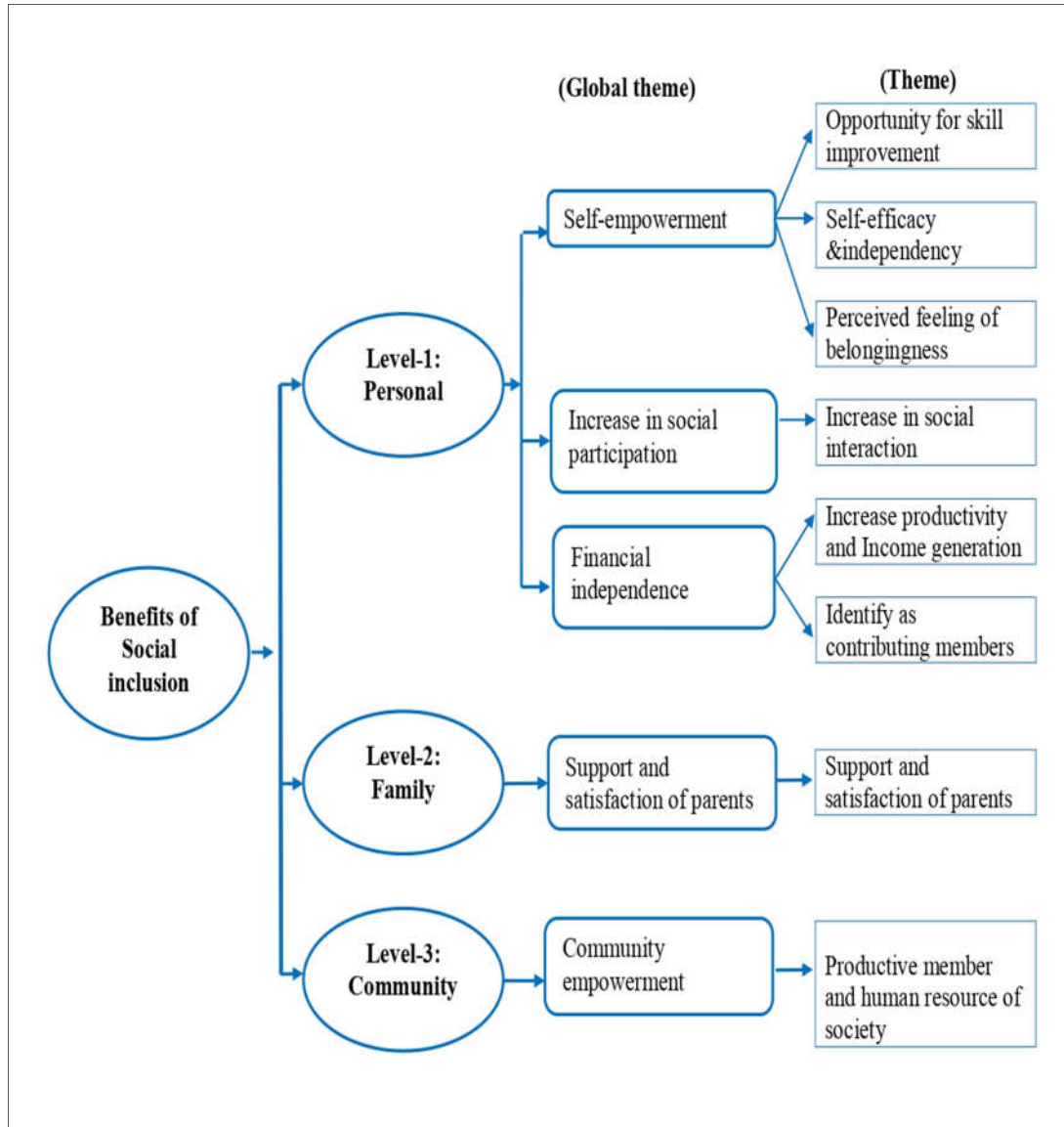
The first theme identified was 'productive member and human resource of society'. Participants reported that *“social inclusion would provide opportunity to young adults with intellectual disability to be involved in different work sectors and engage in other employment activities within their abilities and limitations. Mainly, they could become a human resource in semi-skilled and skilled areas”*. This responses shows that through social inclusion, intellectually disabled young adults could earn a sustainable income and become a good workforce in the community. This potential human resource could be utilized for community development through different developmental initiatives. Also, if this workforce is channelled to various employment sectors, it may help to resolve the unavailability of force in

semi-skilled work at the grassroots level. The human resource scarcity in semi-skilled workers could be replaced by these intellectually disabled young adults within their limitations to a great extent (Bjornshagen & Ugreninov, 2021). Participants shared that “*young adults with intellectual disabilities form a reliable workforce*”. Researcher also observed that compared to non disabled employees people with disabilities tend to stay longer in their workplace and shows high level of commitments, they are also to take fewer leaves. In support of this finding, Lindsay et al. (2018) reported that there are many benefits in hiring people with disabilities such as retention, reliability, and punctuality and employee loyalty.

This finding indicates that social inclusion would help intellectually disabled young adults to become productive members of society. This may make them as a human community resource and in result it would help in community empowerment. Participants shared their view that, “*when young adults with intellectual disability get included in the employment and become earning members, they become taxpayers*”. This response shows that when these intellectually disabled young adults become financially stable and be tax payers, the Government could reallocate disability welfare funds to other community developmental initiatives in some extend. Altogether, these discussed responses indicate that social inclusion of young adults with intellectual disability, directly or indirectly assist in economic development, workforce development, and human resource development. The findings of the study suggested that social inclusion is also inextricably linked to utilization of human resource and economical development of community. As social inclusion of people with disability has the positive effect of community development, responsibility to ensuring the social inclusion could not be limited to family members. Various policy frameworks on disability inclusion recommends that social inclusion should be a collective effort and integral part of all developmental policies of the government (Pal, 2018). Policies and programmes to promote social inclusion of person with disability are considered to be the duty of Government systems (RPWD Act, 2016). However, implementation of these policies and programmes are suggested to be a shared responsibility between government and the professionals and other community members.

**Figure 14**

*Diagrammatic Representation of derived Themes, Global themes and Levels under of Perceived Benefit of Social Inclusion of Young Adults with Intellectual Disability*



Section-4 discussed the benefits of social inclusion of intellectually disabled young adults. It identified three levels. They are personal level, family level and community level. These three levels are interrelated and promote social well-being, emotional well-being, and social development. All these themes are mutually interrelated and the outcome of social inclusion of young adults with intellectual

disability has shown positive effects in various levels. Identified personal level benefits of social inclusion such as opportunity for skill development, perceived social support, increased reciprocal relationships and financial independency are positively associated with the quality of life. In the family level, findings indicate that the positive outcome of social inclusion resulted in parental satisfaction and reduction of caregivers' burden. Finally study shows the direct and indirect link of social inclusion on community empowerment and the utilization of young adults with disability as a potential workforce for socio-economic developments.

## SECTION-5: BARRIERS OF SOCIAL INCLUSION OF YOUNG ADULTS WITH INTELLECTUAL DISABILITY

This section presents and discusses perceived barriers of social inclusion of young adults with intellectual disabilities. The researcher has attempted to explore different factors that act as barriers of social inclusion. This section involves findings from the qualitative research method approach done by interviewing three of the participant groups i.e., parents or caregivers, professionals, and community members. The interview data were transcribed and coded and themes and subthemes were identified using thematic analysis. Further, identified themes were clustered into global themes and themes which are presented below in Table 23 and it also shows the frequency of response under each theme. For the visual representation of these themes, thematic diagrams have been presented and discussed along with the results. Three global themes have been identified to act as the barrier of social inclusion of intellectually disabled young adults. They are (1) the attitude and behaviour of others towards young adults with intellectual disability, (2) the lack of opportunity for social inclusion, and (3) Skill deficit in young adults with intellectual disability. Each global theme and respective themes are discussed below.

**Table 23**

*Identified Global Themes, Themes acting as Barriers of Social Inclusion of Young Adults with Intellectual Disability*

Global themes	Themes	Responses	
		Number	Percentage
<b>1.Attitude &amp; behaviour of others</b>	1. Negative attitude of community members	84	46.7
	2. Misbehaviour & discrimination from the community	100	55.6
	3. Lack of awareness about person with disability	45	25
	4. Restrictive behaviours of parents	29	16.1
<b>2.Lack of opportunity for</b>	1. Lack opportunity for	40	22.2

<b>social inclusion</b>	social interaction		
	2. Unavailability of friends & peers	6	3.3
	3. Lack of opportunity for training	37	20
	4. Lack of employment opportunity	8	4.4
<b>3.Skill deficit in young adults with intellectual disability</b>	1. Deficit in social skill	44	24.4
	2. Deficit in independent mobility skill	10	5.5

### **GLOBAL THEME-1: Attitude and Behaviour of Others**

First global theme identified as a barrier of social inclusion of young adults with intellectual disability is the attitude & behaviour of others. From the thematic analysis, the majority of responses were obtained under the first global theme i.e., the attitude and behaviour of others towards intellectually disabled young adults (i.e., a total of 258 responses) while comparing the number of themes obtained under the other two global themes mentioned in Table 23 ( i.e., 91 and 54 Nos. of response respectively). Further, Table 23 shows that total of four themes have been identified under this global theme, i.e., 1) Negative Attitude of Community members, 2) Misbehaviour & discrimination from the community, 3) Lack of social awareness about person with disability, and 4) Restrictive behaviours of parents. They are discussed below,

#### ***Theme-1: Negative Attitude of Community Members***

The first theme identified under the first global theme is ‘the negative attitude of community members towards young adults with intellectual disability. Total 84 Nos. (46.7%) of responses were obtained under this theme. Attitude is considered as an essential factor in determining behaviour, and interaction and providing necessary help to young adults with intellectual disabilities to meet their needs (Zheng et al., 2016). Nolen-Hoeksema et al. (2009) defined attitudes toward disability as the cognitive and behavioural processes that involve judgment and

favourable/unfavourable reactions to aspects of disability. In this theme, the attitude of community members mainly looked into their beliefs about young adults with intellectual disability and their awareness of the life situations and needs of young adults with intellectual disabilities, and how they interacted with young adults with intellectual disabilities. The researcher had identified two subthemes under the theme of negative attitude toward young adults, which were, a. Perception as a child and dependent, and b. Stigma. These subthemes are discussed in the following section in detail.

**Subtheme-1: Perception as a Child and as a Dependent.** Young adulthood is the stage where individuals enter the stage of transition to adulthood after adolescence. This is when individuals complete their formal school training and look ahead to vocational training or higher education (Arnett, 2000). Participants share their view that *“community members have always viewed young adults with intellectual disability as children that they are dependent and cannot do things independently”*. The common notion reported among community members about young adults with intellectual disability was that *“they depend on their parents and others in most areas of their life”*. This response shows that even though meaningful community participation and independent adult life are to be achieved during this period, the community members viewed young adults with intellectual disabilities as children. It also indicates that the idea that young adults with intellectual disabilities are dependent on others in all areas of life may result in perceiving them as children. In this similar line, studies also reported that a person with an intellectual disability is often seen as an eternal child even at the age of 25 or 30 (Starke et al., 2016). The researcher has observed that, even after 18 years of age, they were often sent to special schools such as BUDS school. The consequence of such an attitude may lead to denial of adult life, like others, for young adults with intellectual disabilities. In support Wood et al., (2018) argued that the different elements of adult life such as a job, forming age-appropriate interpersonal relationships, marriage, parenthood, and other socially participative features are denied for young adults with disability. Therefore, the perception of young adults

with intellectual disabilities as a child could act as a barrier to their adult independent life and social inclusion.

**Subtheme-2: Stigma.** The second subtheme identified under the theme of negative attitude is the stigma toward young adults with intellectual disabilities. Participants reported that the “*community views intellectually disabled individuals as incapable*” and “*they become aggressive or would behave inappropriately outside and they are unable to have a normal relationships*”. This response shows that community members often view young adults with intellectual disabilities with a stigmatized attitude. Participants also share that “*society does not see the potential of disabled individuals*”. Such stigmas may lead to labelling young adults with intellectual disabilities as incapable. Goffman (1963), defined stigma as a discrediting attribute that places a subject into a different and undesirable category. Stigma creates a negative status established in society and negative attitudes that lead to discriminatory behaviour towards a stigmatized group (Silván-Ferrero et al., 2020). Studies reported that this stigma contributed to the discrimination and exclusion experienced by people with disabilities and their families in all aspects of their lives (Trani, et al., 2013; Mutz., & Kirsti, 2015; Yoshida, 1990). The above response indicates that stigmatized attitudes by community members often acted as a barrier to the social participation of young adults with intellectual disabilities. In similar to this finding, Koszela (2013) reported that the stigma of community members can act as a barrier to people with disabilities availing their right to full participation in community activities. Incomplete information, false perceptions, and lack of awareness about the life of a person with a disability perpetrated many of these stereotypes (Hannah et al., 2021; Jamal, 2019).

The above-discussed two subthemes are collectively called attitudinal barriers. The attitudinal barriers may lead to denying their right to meaningful participation in the community and ignoring the potential of people with disabilities. It would lead to the greatest obstacles to achieving equality of opportunity and social integration (Rohwerder, 2015). The view that intellectually disabled individuals are more like children and incapable, retarded and dependent, and unable to take up



responsibilities prevailed in society (Edwards, 1997). In turn, this negative attitude may lead to a lack of acceptance and discriminative behaviour towards young adults with intellectual disabilities in society. Thus attitudinal barriers could be considered as the core determinacies of many other barriers. Community members may be unaware of their negative attitudes towards person with intellectual disabilities; hence it is important to make a conscious effort to address the stigma, existing stereotypes, and lack of awareness. To understand the different types of prevailing attitudes of community members towards young adults with intellectual disability and factors that may influence attitudes toward them there is a need for further exploration. The researcher had attempted to explore the attitude of community members towards young adults with intellectual disability and it has been discussed in section-6 of the study.

### ***Theme-2: Misbehaviour & Discrimination from the Community***

The second theme identified under the first global theme is the misbehaviour and discrimination of community members toward young adults with intellectual disabilities. This theme obtained the highest number of responses among identified themes i.e., a total of 100 Nos. responses (55.6%). It shows the significance of existing discriminative behaviour towards young adults with intellectual disability. Moreover, discriminative behaviour is well evident and observable compared to the above-discussed attitudinal barriers. Under the theme of misbehaviour, the researcher identified two subthemes such as 1) teasing and mocking and 2) avoiding and discrimination. Each sub-themes are discussed below.

**Subtheme-1: Teasing and Mocking.** The first sub-theme identified under misbehaviour was teasing and mocking. Participants have shared that “*community members treat young adults with intellectual disabilities as objects of fun. They make fun of for their appearance and actions; it is reported more in the case of individuals with Down syndrome*”. This response shows that when interacting with individuals with intellectual disability community members often tease and mock them. Also, parents of young adults with intellectual disabilities have reported being victims of such misbehaviours by community members. Acts of such kind may

induce fear for involvement in community activities in young adults with intellectual disability as well as their caregivers. Further, these misbehaviours have been reported in the denial of their right (Ghosh, 2022). In result, these misbehaviours may lead to barriers to the social inclusion of young adults with intellectual disabilities.

**Sub-theme-2: Avoiding and Discrimination.** The second subtheme avoiding and discriminating under misbehaviour mainly discusses the community members' exclusion and prejudice in treating young adults with intellectual disabilities. Participants reported that *“people tend to avoid interacting with intellectually disabled individuals and experience avoidance from community members in different settings such as social interactions, play, social functions, and even public transport”*. This reported avoiding situation could be considered a type of misbehaviours that would result in the experience of social exclusion. Avoidance often occurs when a person with a disability is subjected to unjust treatment and prejudicially categorized into a separate group (Malik & Yadav, 2021). Multiple studies have reported that compared to other non-disabled individuals, persons with disability experience more physical, psychological, and emotional discrimination (McConkey et al., 2021; Griffin et al., 2019; Mark, 2019). Previous studies reported that young adults with intellectual disability may experience discrimination from the community either directly or indirectly (Temple et al., 2018; Ali et al., 2013). Direct discrimination may be considered as the refusal of opportunity to participate in particular community activities, education, and employment. On another hand, indirect discrimination is where administrative rules and policies, which appear to be neutral, actually have a disproportionate and detrimental impact on a person or a group of people with a certain attribute like intellectual disability (Link & Phelan, 2001; Lau & Cheung, 1999).

Discriminative behaviour often creates a feeling of distance among young adults with intellectual disabilities from the community and brings down feelings of belongingness. Avoiding and discriminative behaviour towards intellectual disability individuals from social situations may be due to their negative attitude toward them

(Deepak et al., 2016). Participants reported that “*young adults with intellectual disabilities have faced a lot of physical and sexual abuse due to their disability*”. This response shows, due to their lack of resistance capacity, and lack of awareness, young adults with intellectual disabilities have faced physical, sexual, and emotional abuse from family and community members. Researcher observed that, due to limited social cognition capacity, sometimes, intellectually disabled individuals face difficulty to understand that they are being discriminated and avoided by others. Moreover, they have limited ability to react to the discrimination they face. It indicates that identified lack of awareness, lack of ability and lack of resistance capacity among young adults with intellectual disabilities could be the possible factors for them to be still discriminated against and avoided. These discriminations and avoidance have subjected them to misuse and abuse (Janardhana et al., 2015).

The two subthemes of teasing and mocking and avoiding are discussed under the theme of misbehaviour and discrimination. These may act as barriers to personal freedom and social participation for young adults with intellectual disabilities. These reported misbehaviours could be considered disability-related harassment which can be exploitative or abusive conduct against disabled people and has long standing negative effects on their life such as violating the dignity, safety, or autonomy of the person experiencing it (Gustin, 2020). Also, discriminative behaviour would create an intimidating and humiliating social situation for them (Temple et al., 2018). Even though teasing, staring, and misconduct towards young adults with an intellectual disability are considered legal offenses. Such actions are mostly not reported. Hence, it is recommended that proactive legal measures have to be implemented to address this abuse and assault against intellectually disabled individuals.

### ***Theme-3: Lack of Awareness about Person with Disability***

The third theme identified under the level of community members is the lack of social awareness about persons with intellectual disabilities. Total 45 Nos. (25%) of responses were obtained under this theme. Participants had reported that “*community members are often less aware about life of intellectually disabled individuals, such as their conditions or disability, needs, and rights and ignore the*

*skills or potentials of young adults with intellectual disabilities*”. These responses illustrate the community members’ lack of awareness about the special care or the empowering situations required by young adults with intellectual disability. Participants have reported that *“in most cases, parents have a poor awareness regarding the conditions, needs, and the importance of social participation of young adults with intellectual disability”*. Participants also shared their view that *“most of the parents lack proper awareness regarding the different therapeutic interventions and vocational training methods”*. This response indicates a lack of awareness among parents regarding the training, needs, and therapy services that young adults with intellectual disabilities require. Awareness among parents, their knowledge, and orientation are essential because parents play an indispensable role in empowering young adults with intellectual disabilities (Sharma, 2015).

Previous studies reported that the lack of awareness would lead to many myths and negative attitudes about intellectually disabled individuals. As a result, it has created barriers to their social inclusion (Babik & Gardner, 2021b). It has been observed that a lack of understanding by community members about the life of young adults with intellectual disabilities had made hindrances in identifying their full potential (Wilson et al., 2016). This is may especially be true in the case of individuals with a mild level of disability. Their ability, personal skills, social life, and ability to take up supportive employment are often unrecognized. It has been reported by many studies that, lack of knowledge about the needs and situations of young adults with intellectual disabilities would lead to creation of negative attitude among community members about the person with intellectual disability, further, this negative attitude would lead to misbehaviour towards them (Brown, 2016; Lindsay & Edwards, 2013). This identified theme highlights need of giving appropriate awareness creation about the conditions of young adults with intellectual disability, their age-related needs, and the percentage of their disability, their potential and their rights (Williamson 2014). Alves and Lopes-dos-Santos, (2013) suggested that disability awareness programs would be a relevant strategy for enhancing knowledge about disability, improvement of positive attitudes toward people with disabilities, and the acceptance of people with disabilities.

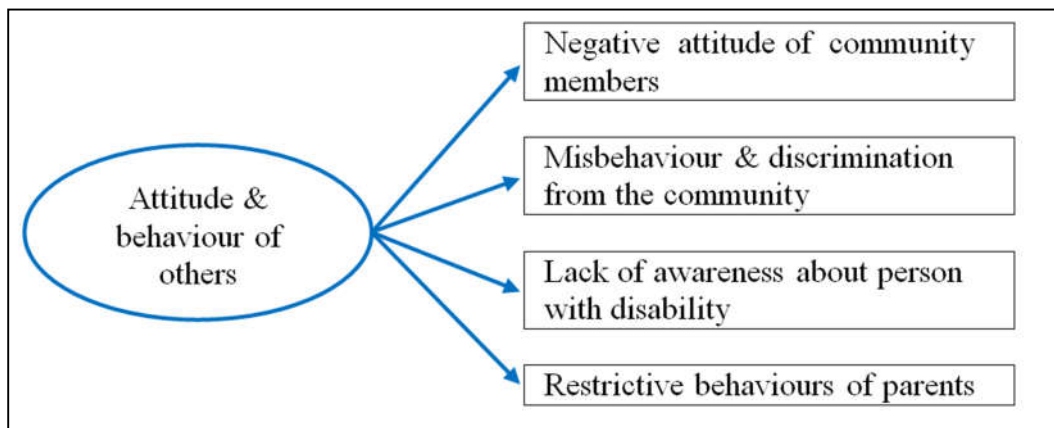
#### ***Theme-4: Restrictive Behaviours of Parents***

The theme of restrictive behaviors of parents due to fear of rejection has been identified as a barrier to social inclusion of young adults with intellectual disability. Total 29 Nos. (16%) of responses were obtained under this theme. Parents' attitudes, behaviour, and readiness play significant roles in preparing young adults with intellectual disabilities for community life (Hazarika et al., 2017). Also, parents have an essential role in identifying areas of skill training and area of their ability. Hence, the exploration of factors specific to parents, such as their attitude and behaviour, and how these factors influence the social inclusion of young adults with intellectual disabilities is important. As discussed earlier in social barriers, young adults with intellectual disabilities were subjected to abuse and misbehaviour. Participants have reported their concerns about *“whether intellectually disabled individuals would be victimized by mistreatment due to their low resistance and reactance capacity”*. Participants also reported that *“children with intellectual disability are more vulnerable to abuse than other groups of disability”*. This response indicates the fear and concerns among parents of young adults with intellectual disability regarding the abuse or misuse from community members. Another concern expressed by participants was *“intellectually disabled individuals may indulge in dangerous activities or risky behaviours under the influence of peer pressure as they have limited social skills”*. This response also indicates that due to fear of being the victim of abuse, parents may be afraid to send their wards who have an intellectual disability to society alone and parents often restrain their wards from community participation. Participants reported that *“due to parent’s fear of rejection, and over-caring nature, parents often fail to provide the necessary support required by young adults with intellectual disabilities in social participation”*. The response shows that the exposure required by young adults with intellectual disabilities in social areas and as part of the learning process is cut off by restricting their participation in social gatherings. This lack of exposure leads to the poor acquisition of skills required for community living (House et al., 1988). A previous study reported that over-protective parents who do not allow their child to participate in any activity with his/her peer would act as hindering their socialization (Raya et al., 2013). Crawford

et al. (2015) reported that “parental fear has been identified as a potentially critical barrier to children’s ability to travel and be involved in community activities and may act to restrict social life”. Parents' restrictive behaviour may be due to their lack of adequate knowledge about their child’s abilities, negative attitudes by others, and the fear of abuse and misuse by community members.

**Figure 15**

*Diagrammatic Representation of derived Themes under the Global theme -Attitude and Behavior of other*



**GLOBAL THEME-2: Lack of Opportunity for Social Inclusion**

The 2<sup>nd</sup> global theme identified as the barrier to the social inclusion of intellectually disabled young adults was the lack of opportunities. The researcher has identified four themes under this global theme. They are: 1) lack of opportunities for community participation, 2) Unavailability of friends & peers, 3) lack of opportunities for training, and 4) lack of employment opportunities. A total of 91 responses had been obtained under this global theme. These themes are discussed below.

***Theme-1: Lack of Opportunity for Community Participation***

The first identified theme under the global theme of ‘lack of opportunity’ is the lack of opportunity for community participation. Researcher has identified a total of 40 responses in this theme. Participants reported that “young adults with intellectual disability are often confined to one corner of the house after schooling age. Their social movements are restricted, and their parents are not taking them to

*the outside world. They spend almost all their time in their house and they hardly get exposure to these various community activities*". This response shows that young adults with intellectual disability tends to experience a significant level of scarcity in the required opportunity for community participation than their peer non-disabled group. This lack of opportunities for social interaction may be due to discrimination against them and a lack of a disability-inclusive social structure. In support of this, many researchers have argued that young adults with an intellectual disability had a limited level of "community visibility" or "presence" (Clement & Bigby, 2009). For young adults with an intellectual disability, the opportunity for community participation is generally considered as doing things with non-disabled people in an inclusive social situation. Regular socialization involves participating in various community activities that could be productive, recreational, or interpersonal (Carvalho et al., 2013). Little attention has been given to identifying and documenting the areas of productive, recreational, or interpersonal activities required for young adults with intellectual disabilities (Verdonschot et al., 2009c). It may reduce their opportunity for social participation. The actual opportunities for community participation that are available to young adults with an intellectual disability depended on various environmental factors such as their family living situation, size, and availability of resources in the neighbourhood and available resources (Chan et al., 2020).

### ***Theme-2: Unavailability of Friends and Peers***

The second theme identified was the lack of opportunity to interact with friends. Participants reported that "*young adults with intellectually disability largely lack the opportunity to establish or maintain a healthy, meaningful and long-lasting friendship with disabled or non-disabled individuals of the same age group*". Researcher had observed that they often create interpersonal relationships at schools or vocational training centers. They face difficulty to maintain these relationships after schooling due to a lack of opportunities to meet them outside the school. The researcher observed that intellectually disabled young adults mostly spend their time with disabled peers or children below their age group. They often face difficulty to interact or establish relationship with non-disabled individuals of the same age group. This may be attributed to their skill deficits and lack of opportunity may also play a vital role in the experience. This indicates a lack of opportunity to

initiate and maintain meaningful interpersonal relationships for young adults with intellectual disabilities.

According to Freeman and Kasari (1998, p. 343), *“opportunity for making friends would help to make an age-appropriate relationship that is reciprocal, stable and serve the functions of intimacy, companionship, emotional support, and affection”*. Studies also reported that, an opportunity to interact with friends play a vital role in the social life of young adults with intellectual disability, as it would help to develop various interpersonal skills and provide a context that supports numerous aspects of social inclusion (Guralnick et al., 2006). Previous studies in the area reported that the opportunity for age-appropriate peer interaction was a significant variable in determining social inclusion (Devenish et al., 2020; Amado, et al., 2015; Siperstein et al., 1996). Gordon et al. (2005) suggested that the first step in promoting social acceptance and inclusion of person with intellectual disability is to increase the opportunity for interaction with another non-disabled peer group. Even though, participants have reported that lack of opportunities for young adults with intellectual disability for interacting with friends, they also share their view that *“friends and peers have a much less discriminative and negative attitude than community members”*. It indicates that, unlike community members, peers and friends are least involved in harassing and abusive behaviour. Mostly they form friends with individuals from training centers.

### ***Theme- 3: Lack of Opportunities for Training***

The third theme identified under the global theme of lack of opportunity is the lack of opportunity for training. Total 37 Nos. (25%) of responses were obtained under this theme. Participants reported that *“there is a lack of skill-based training on their livelihood, which considers their aptitude, interests, abilities, and situations”*. Participants have also reported that *“there is a lack of training that enables them to find an independent livelihood and promotes their social interaction”*. This response shows that young adults with intellectual disabilities often experience difficulty to get age-sensitive higher education and training facilities. Disability-friendly and skill-based higher education and training play a vital role in the employability and independent living of people with disability. It promises an independent existence for the person in society (Ahmad, 2018). Even though they



have limited cognitive capacity, it may be beneficial for them to be involved in skill-based vocational career options in the formal higher education system. But studies in the area reported that only a very small number of people with disabilities have access to appropriate higher education and training in developing countries like India (Kunnath & Mathew, 2019). It had been reported that less attention has been given to the scope of intellectual disability-specific training curriculum and training packages in Indian higher education institutions (Taneja-Johansson et al., 2021).

The study has also identified two major challenges for availing adequate training opportunities i.e., lack of awareness and unavailability of the required training centers for young adults with intellectual disability. Participants had reported that *“most of the parents are mostly unaware of age-appropriate opportunity training that could facilitate social inclusion”*. Participants reported that *“even though there are training centers and therapy services, most of the parents face accessibility issues. Most of the centers are located in towns and cities”*. It shows that because of the logistics and transport issues, the parents face difficulty taking their wards to training centers which are often located in town. The researcher has observed that it may not be easy to travel with children with disabilities, especially in the public transport system. Thus, they needed to depend on private vehicles, which may not be affordable for most parents. Participants also reported that *“less attention was given to the training activities related to social skills in the regular training programme”*. Rehabilitation professionals in this area also shared the same concerns, they reported that *“most of the training centers focus only on behavioural problems and academic skill of young adults with intellectual disability”*. It shows that the opportunity for training of skills required for social inclusion like interpersonal training, social skill training, communication skill training, and social participation exposure are often ignored.

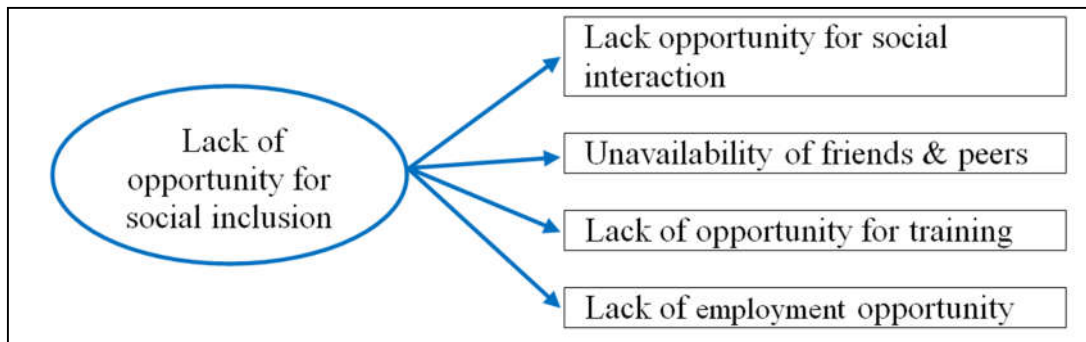
#### ***Theme-4: Lack of Employment Opportunity***

The fourth theme reported was the lack of employment opportunities for young adults with intellectual disability. Their independent living and social inclusion is often closely linked with adequate job opportunities. Participants reported that *“there is a lack of employment choice which is suitable for young adults with intellectual disability”*. It shows that there is a lack of suitable

employment opportunity for young adults with intellectual disability and most of the career options offered to them are of the type that makes them disabled, not ensuring their empowerment and monotonous or repetitive works that are not productive. It shows these types of conventional vocational opportunities often hinder their chance for self-earning, and community participation and promote self-identity and social inclusion. Employment is not merely an economic part of one's life; it also helps one form their identity and opportunity to interact with others (Gini, 1998).

**Figure 16**

*Diagrammatic representation of derived themes under the global theme of lack of opportunity*



### **GLOBAL THEME-3: Skill Deficit in Young Adults with Intellectual Disability**

The third global theme identified as the barrier to social inclusion of young adults with intellectual disability is skill deficit. Only two themes were identified under this global theme. In this study, participants have reported the various deficits in skills among young adults with intellectual disability that inhibit their community participation and social inclusion. People who are intellectually disabled may have various skill deficits, especially in adaptive, cognitive, functional, academic, and domestic areas (Schalock, 1996). Here, the study explored only the deficit in a skill that influences the experience of social inclusion directly or indirectly. The significant skill deficits reported as a theme were 1) deficits in social skills and 2) independent mobility skills. Total 54 Nos. of response were identified in this global theme.

### ***Theme-1: Deficit in Social Skills***

The first theme identified under skill deficit is the deficit in social skills. Social skills are a group of skill that helps to interact with peers of a similar age group, interact and participate with small and large groups based on the cultural context, and share different goals with others. These skills include daily interaction skills such as sharing, taking turns, and allowing others to talk without interrupting. Under the themes of social skills, this study has identified deficits in various skills which influence the social inclusion of young adults with intellectual disability such as communication skills, interpersonal skills and emotional regulation skills. First skill deficit identified related to the social inclusion of young adults with intellectual disability is communication skill deficit. Communication is known as one of the vital components of social interaction (Snowdon, 1988). Communication skills help to transact, share ideas and share concerns and feelings. Participants reported that *“young adults with intellectual disability have difficulties expressing their ideas, wishes and needs appropriately”*. Participants have also reported that *“they also lack adequate skills to express their concerns and frustrations adaptively, leading to behavioural issues”*. This response shows that communication skill deficits among young adults with intellectual disability created barriers to their social interaction. It also shows that the deficit in communication hinders intellectually disabled young adults from making social relationships and required transactions. Participants had also reported that *“young adults with intellectual disability also have deficits in functional language skills like reading and writing due to their cognitive limitation”*. It indicates that a deficit in functional language skills led to difficulties in comprehending the materials communicated to them in a written format or writing their demands on paper. Deficits in pragmatic speech were also reported for them. These difficulties may limit their social interaction and communication with their friends and other people.

Participants reported that *“intellectually disabled individuals have poor skills to establish age-appropriate interpersonal relationships or maintain the interpersonal relationship if established”*. It shows a deficit in interpersonal skills. Interpersonal skill deficit consist of difficulties in initiating and maintaining meaningful relationship with others (Turner et al., 2017). Along the same line, previous studies also reported that social skill deficit among person with intellectual

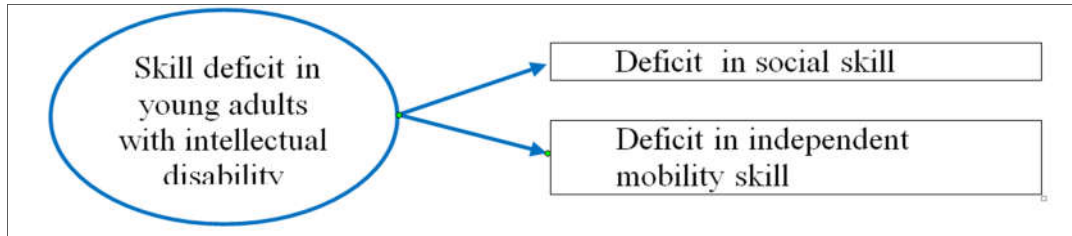
disability will eventually lead to poor achievements in their social functioning, peer rejection, social withdrawal, and isolation (Musetti, et al., 2019). Another skill deficit identified among young adults with intellectual disability is a deficit in emotional regulation skills. Participants reported that *“young adults with intellectual disability experience difficulty to regulate their emotions, share emotions appropriately, control emotions like anger, and getting irritated easily”*. Emotion regulation is the skill of an individual to regulate the internal experience and external expression of emotions (Thompson, 1994). Often, emotional skill deficits are reported in the intellectually disabled, however, there are very few studies on the topic of emotion regulation capacities of young with adult intellectual disability (TeBrinke et al., 2021; McClure et al., 2009). It may be due to their reduced higher cognitive function or lack of training for frustration tolerance.

### ***Theme-2: Deficit in Independent Mobility Skill***

The second theme identified under skill deficit is the deficit of independent mobility skills. It is one of the critical themes in social inclusion. Participants reported that *“young adults with intellectual disability have difficulty to travel independently and they depend on their parents to travel to various places. Due to this they often miss many opportunities for social participation”*. Participants also reported that *“the movements of intellectually disabled young adults were usually restricted by their caregivers due to their worry related to the safety of their children and fear of abuse”*. It shows that the difficulty in travelling independently would create a barrier to participate in community activities which are known to be significant contributors of social inclusion. The deficit in independent travel ability was often reported as one of the largest barriers hindering individuals with intellectual disability from achieving independence and maintaining employment. (Mechling & Savidge, 2011). Previous studies reported that deficit in independent mobility skills are linked with many negative outcomes including, poor access to employment, education, and other services, social exclusion, and decrease in their autonomy (Berg & Ihlström, 2019). Studies also suggested that training of independent traveling skills and facilitating the use of public transportation enhances opportunities for independent living and competitive involvement in community activities and community-based employment for individuals with intellectual disabilities (Price et al., 2017).

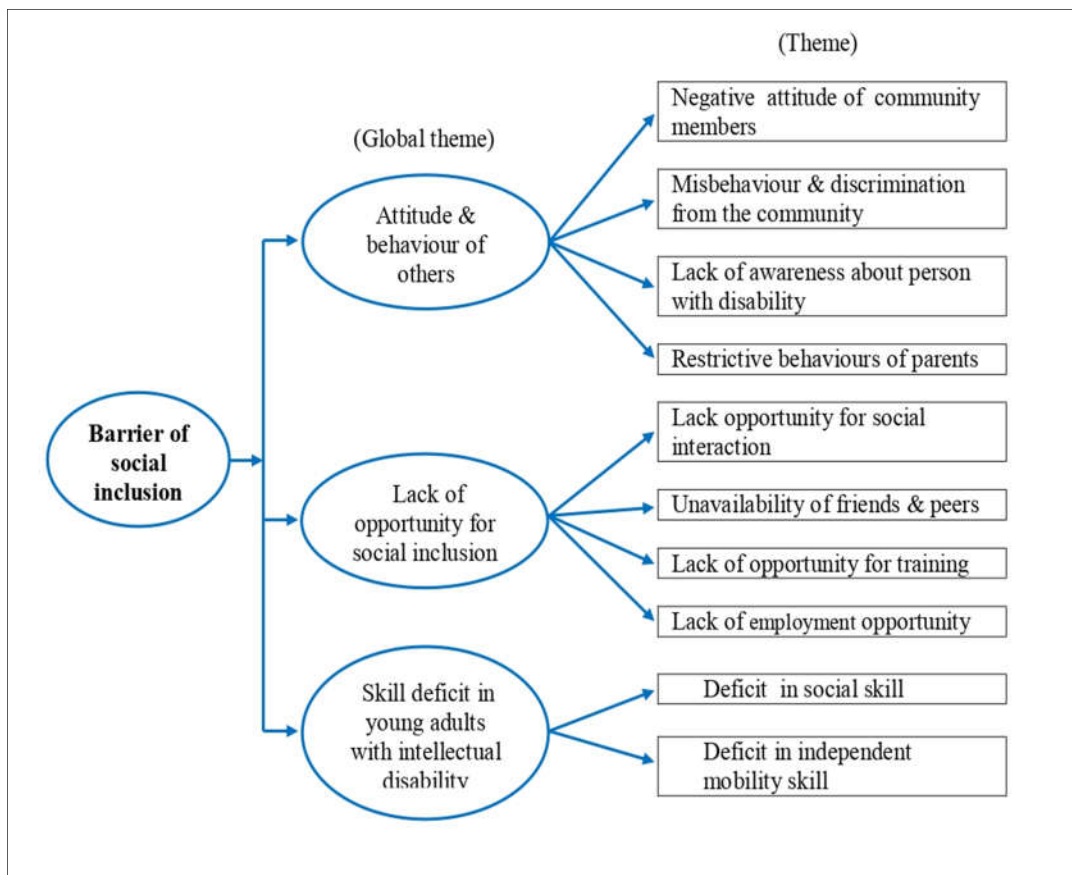
**Figure 17**

*Diagrammatic representation of derived Themes under the Global theme of Skill Deficit*



**Figure 18**

*Diagrammatic representation of derived Global themes and Theme of Barrier to Social Inclusion of Young Adults with Intellectual Disability*



## **SECTION-6: COMMUNITY MEMBER’S ATTITUDE TOWARDS YOUNG ADULTS WITH INTELLECTUAL DISABILITY**

In section-5 community member's attitude has been identified as a significant barrier to the social inclusion of young adults with intellectual disability. These negative attitudes towards the person with disability create barriers to their participation in social activities, such as access to public services, education, recreation, and employability. Thereby reducing their opportunities for social inclusion. As attitude is a multidimensional concept, to explore the community member's attitude, the researcher has used the attitude towards intellectual disability scale developed by the researcher which has been presented in the section-5 of chapter 4. This scale helped to identify the four dimensions of the attitude of community members such as Inclusion, Expectation, Independency, and Acceptance. In addition to the exploration of the attitude of community members, the researcher also explored the various influencing factors of attitude. Attitudes towards the person with intellectual disability resulting from the interaction of various factors such as the level of knowledge and existing beliefs about them and one’s personal experience with them, and may vary across the culture (Jansen-van Vuuren & Aldersey, 2020). As reported by many researchers, attitude toward person with intellectual disability can be influenced by many factors such as age, gender, educational status, and more importantly, level of contact and relationship (Wang et al., 2021; Zheng et al., 2016).

There are some studies on the public attitude towards person with a disability in general, but community members' attitudes towards young adults with intellectual disability have not been addressed widely in current available studies. Hence it is necessary to explore dimensions of community members' attitudes and it’s influencing factors. A better understanding of these factors would help to design programme to reduce the negative attitude of community members towards them. In this line, researcher has attempted to explore the attitude of community members towards young adults with intellectual disability and explore the influencing factors

of attitude toward them such as age, gender educational status, and relationships. The results are discussed in detail.

**Part- 1: Attitude of Community Members towards Young Adults with Intellectual Disability**

**Table 24**

*Score of Attitude towards person with intellectual disability*

	<i>Mean</i>	<i>Medium</i>	<i>Mode</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>Percentile</i>
Inclusion	2.52	3	3	.667	-1.074	-.060	45
Expectation	2.28	2	2	.683	-.426	-.835	45
Independency	2.17	2	2	.648	-.184	-.671	45
Acceptance	2.46	3	3	.593	-.578	-.595	45
Total -ATPID	42.28	44	46	8.949	-1.098	.823	40

Table 24 showed the descriptive statistics of the variable in the sample. Mean of the main variable, attitude towards person with intellectual disability, was 42.28 with SD 8.9. The variable had four sub domains. Mean value was highest for Inclusion (mean =2, 52, SD=0.667), Acceptance (mean = 2.46, SD=0.593) Expectation (mean = 2.28, SD=0.783), the least mean value was obtained for independence (mean=2.17, SD= 0.648).

This result shows that participants of the present study have comparably more inclusive acceptance as attitudes and acceptance towards young adults with intellectual disability and community members( mean of acceptance 2,46, inclusion 2,52). However, the finding also shows community members have less expectation from young adults intellectual disability and participants perceive them are more dependent on others. This finding indicates the level of expectation and hope of community members towards persons with intellectual disability such as lower expectations about the ability for their achievement and community participation. The finding also indicates community members have a prevailing belief that young

adults with intellectual disability are incapable of an independent life and they need support always. The idea that young adults with intellectual disabilities are dependent on others in all areas of life may result in perceiving them as children or objects of charity.

### **Part-2: Community Member’s Attitude towards Young Adults with Intellectual Disability based on Demographic Characterises**

Multiple factors influence inclusion-related attitude towards the person with disability. Community member’s attitudes toward young adult with disabilities are influenced by many demographic variables, such as, age, gender and education level and type of relationship with them. Hence, exploration of these four influencing factors of community member’s attitude towards person with disability has been discussed below.

#### **Age of Participants and Attitude towards Person with Intellectual Disability**

**Table 25**

*Mean and SD of ATPID based on Participants Age*

Variable	ATPID		
	Mean	SD	
Age			
	Below 18 years	35.66	11.438
	19 to 25 (Young adult)	42.67	6.325
	26 to 40 (Adult)	44.28	7.859
	40 to 60 (late adult)	44.22	9.349

Mean and SD of ATPID based on age of participants were presented in Table 25. Among different age groups, participants below 18 years scored low (mean =35.66, SD =11.438), and adult and late adults scored high (mean = 44.28, 44.22 with SD = 7.8, 9.3, respectively).



**Comparison of Score of ATPID and Participant's Age:**

Hypothesis- 1: There will be no significant difference in community member's attitude towards persons with intellectual disability based on different age group

**Table 26***One-Way ANOVA of ATPID by Participant's Age*

	Sum Squares	Df	Mean Square	F	Sig.
Between Groups	3231.154	3	1077.051	15.077	<.001
Within Groups	24717.843	346	71.439		
Total	27948.997	349			

**Table 27***Post hoc comparison of score of ATPID by Participant's Age*

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
below 18 years	19 to 25 (Young adult)	-7.011*	1.352	<.001	-10.50	-3.52
	26 to 40 (Adult)	-8.624*	1.414	<.001	-12.28	-4.97
	40 to 60 (late adult)	-8.560*	1.462	<.001	-12.33	-4.79
19 to 25 (Young adult)	below 18 years	7.011*	1.352	<.001	3.52	10.50
	26 to 40 (Adult)	-1.613	1.168	.512	-4.63	1.40
	40 to 60 (late adult)	-1.549	1.225	.586	-4.71	1.61
26 to 40 (Adult)	below 18 years	8.624*	1.414	<.001	4.97	12.28
	19 to 25 (Young adult)	1.613	1.168	.512	-1.40	4.63
	40 to 60 (late adult)	.064	1.293	1.000	-3.27	3.40
40 to 60 (late adult)	below 18 years	8.560*	1.462	<.001	4.79	12.33
	19 to 25 (Young adult)	1.549	1.225	.586	-1.61	4.71
	26 to 40 (Adult)	-.064	1.293	1.000	-3.40	3.27

\*. The mean difference is significant at the 0.05 level.

From the One Way ANOVA result in Table 27 it can be interpreted that there were statistically significant differences between the age groups as a whole.  $F(3,346)= 15.077, p<.001$ . Since  $p$  is less than significant value 0.05, reject  $H_0$  and conclude that there is significant difference in community member's attitude towards persons with intellectual disability based on different age group.

Table 27, multiple comparisons table for age groups, shows which groups differed from each other. The Tukey post hoc test was conducted on one-way ANOVA. From Table 27 it was found that there was a statistically significant difference between the age group below 18 years and all other age groups, such as the young adult group, ( $p<.001$ ), adult group, ( $p<.001$ ), and late adult group ( $p<.001$ ). There were no statistically significant differences between the young adult group and the adult group ( $p=0.512$ ). There was also no statistically significant difference between the adult group and the late adult group, as well as between the young adult group and late adult group( $p=.586$ ).

The above finding of the study shows that attitude toward young adults with intellectual disabilities follows a developmental trend, i.e., people show more positive attitudes by increasing age. In this study, late adult participants have a comparably more positive attitude than younger. In the support of this finding, few studies have reported similar findings such as there is an age difference in the level of attitudes of community members toward individuals with disabilities (Nowicki, 2006). Interestingly, younger participants especially those below 18 years show more negative attitudes toward them than the elder. It may be due to a lack of experience and contact with young adult with intellectual disability. Jason and Kristi (2012) reported that “younger participants might be more like to change their attitude based upon the contact with the person with disability.”

**Gender of Participants and Attitude towards Person with Intellectual Disability****Table 28**

*Mean and SD of Attitude towards young adult with intellectual disability based on participants Gender*

<i>variable</i>		<i>ATPID</i>	
		<i>Mean</i>	<i>SD</i>
Gender	Male	38.43	10.532
	Female	44.40	7.134

Descriptive statistics of present sample based on gender of participants were presented in Table 28. Female obtained a mean score of 44.40 with SD 7.134 and males scored 38.43 with SD 10.532.

**Comparison of Score of ATPID and Participant's Gender**

Hypothesis- 2: There will be no significant difference in community member's attitude towards a person with intellectual disability based on Gender

**Table 29**

*One Way ANOVA of ATPID by Participant's Gender*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2854.491	1	2854.491	39.585	<.001
Within Groups	25094.506	348	72.111		
Total	27948.997	349			

One-way ANOVA was employed to know whether there exists any difference in participants' attitudes towards intellectually disabled according to gender. Table 29 shows the output of the ANOVA analysis and whether there is a statistically significant difference between the two genders. It is seen that the

significance value is  $p < 0.01$ , which is below 0.05. And, therefore, there is a statistically significant difference in attitude,  $F(1,348) = 39.585$ . So, the null hypothesis was rejected, and the alternate hypothesis that there is a statistically significant difference in attitude based on gender was accepted.

The above finding shows female participants have more positive attitude than male participants. In the literature, there is a mixed reaction among researchers on gender differences in attitudes toward individuals with disabilities. In the support of our finding, study conducted by Nowicki and Sandieson (2002) reported female participants shows a more positive attitude towards individuals with disabilities than males. However, in contradiction to the finding of this study, Tamm & Prellwitz (2001) found that females and males were about equal in their views toward individuals with disabilities. Laws and Kelly (2005) argue that attitudes toward intellectual disabilities among males and females were similar, but females showed a more positive attitude toward individuals with intellectual disabilities than males. In the present research also, a difference in attitude was observed based on gender and females had more positive attitudes than males. Rather than gender may be the cultural setting is playing the role. Moreover, the female participants of the present study consisted of mothers, and generally, mothers have more sensitive towards the need of young adults with intellectual disabilities. Also, Barr and Bracchitta (2012), reported that females have been socialized into nurturing and caretaking roles. However, gender differences in attitude towards intellectual disability should be interpreted with caution as gender is more of a social constructive factor and it may vary across cultures.

**Education of Participants and Attitude towards Person with Intellectual Disability**

**Table 30**

*Mean and SD of Attitude towards young adult with intellectual disability based on education of participants*

Variable	ATPID	
	Mean	SD
Education		
SSLC &+2	37.12	10.859
Graduation	43.51	6.713
Above Graduation	46.68	5.662

Descriptive statistics of present sample based on educational status of participants were presented in Table 30. Participants who had education above graduation got the high mean score, mean = 46,68 with SD 5,662 and those who had 10<sup>th</sup> or plus two had mean of 37.12, with SD 10.859.

**3. Comparison of Score of ATPID and Participant’s Education**

Hypothesis- 3: There will be no significant difference in community member’s attitude towards person with intellectual disability based on participant’s education

**Table 31**

*One-Way ANOVA of ATPID by Participant’s Education*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5195.522	2	2597.761	39.617	<.001
Within Groups	22753.475	347	65.572		
Total	27948.997	349			

**Table 32***Post hoc comparison of score of ATPID by Participant's Education*

		Mean Difference	Std Error	Sig.	95% Confidence Interval	
(J) Education	Confidence				Lower Bound	Upper Bound
SSLC &+2	Graduation	-6.394*	1.023	<.001	-8.80	-3.99
	Above	-9.563*	1.111	<.001	-12.18	-6.95
	Graduation					
Graduation	SSLC &+2 Above	6.394*	1.023	<.001	3.99	8.80
	Graduation	-3.169*	1.073	.009	-5.69	-.64
Above	SSLC &+2	9.563*	1.111	<.001	6.95	12.18
Graduation	Graduation	3.169*	1.073	.009	.64	5.69

\*\* The mean difference is significant at the 0.05 level.

Table 31 shows One-Way ANOVA of attitudes towards intellectually disabled based on participants' education. It was found that there was a statistically significant difference between groups,  $p < 0.01$ . So, the null hypothesis was rejected, and an alternate hypothesis was accepted that there was a statistically significant difference in attitude based on education,  $F(2,347) = 39.617$ .

Tukey's Test for multiple comparisons found that there were significant differences between SSL &+2 group and all other groups ( $p < 0.001$ ). There was also a statistically significant difference between participants who had graduated and those who had education above graduation, ( $p < 0.001$ ).

The above finding shows people with lower educational qualifications have more negative attitudes toward people with disabilities than people with higher educational status. From this finding, it could infer that enrolment in the higher education system often provides a more inclusive perspective and it would encourage acknowledgment of the diverse nature of disability in terms of ability and prospectus. In support of these findings, Szumski et al., (2020) reported that educational exposure have a direct association with specific attitudinal features directed to disability, such as educational status would help to reduce stereotype and fear of disability (negative) and improve moral emotion toward people with disabilities

**Relationship and Contact with Person with Intellectual Disability and Participants Attitude**

**Table 33**

*Mean and SD ATPD and participant relationship with young adults with intellectual disability*

Variable	ATPID	
	Mean	SD
No direct experience/contact	39.01	9.591
Not directly acquainted, but had met		
Relationship with YAID them in community	43.67	6.860
Family members	46.76	5.681
Rehab professionals	49.03	4.694

Mean and SD of present sample based on participant’s relationship and contact with young adult with intellectual disability were presented in Table 33. Finding shows that Rehabilitation professionals had the highest mean score 48.74 with SD 5.189. In this category, college students obtained less mean 39.43 with SD 9.38.

**Comparison of Score of ATPID and Participant’s Relationship with Young Adults with Intellectual Disability**

**Hypothesis- 4:** There will be no significant difference in community member’s attitude towards person with intellectual disability based on participant’s relationship with young adult with ID

**Table 34***One-Way ANOVA of ATPID by Participants' relationship with young adult with ID*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3453.941	4	863.485	12.162	<.001
Within Groups	24495.056	345	71.000		
Total	27948.997	349			

**Table 35***Post hoc comparison of score of ATPID by participant's relationship with young adult with intellectual disability*

(I) Relationship with YAID	(J) Relationship with YAID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No direct experience	Not directly acquainted, but had met them in community	-4.666*	1.146	<.001	-7.81	-1.52
	Family members	-7.752*	1.839	<.001	-12.80	-2.71
	Rehab Professional	-10.026*	1.705	<.001	-14.70	-5.35
Not directly acquainted, but had met them in community	No direct experience	4.666*	1.146	<.001	1.52	7.81
	Family members	-3.086	1.900	.483	-8.30	2.13
	Rehab Professional	-5.359*	1.772	.022	-10.22	-.50
Family members	No direct experience	7.752*	1.839	<.001	2.71	12.80



	No directly acquainted but interacted in community	3.086	1.900	.483	-2.13	8.30
	Rehab Professional	-2.273	2.282	.857	-8.53	3.98
	No direct experience	10.026*	1.705	<.001	5.35	14.70
Rehabilitation Professional	Not directly acquainted, but had met them in community	5.359*	1.772	.022	.50	10.22
	Family members	2.273	2.282	.857	-3.98	8.53

Note \* the mean difference is significant at the 0.05 level.

From, One-way ANOVA results, which was performed to find out if there were any difference in attitude towards individuals with intellectual disability based on participant's relationship with young adults with intellectual disability and from Table 34 it can be seen that  $F(4,345) = 12.162$  and  $p < 0.001$ . So, the null hypothesis was rejected. The alternate hypothesis that was present there was a statistically significant difference in participant's attitudes towards intellectually disabled based on their relationship with young adults with intellectual disability.

In order to find out which all groups differed in attitude, Tukey Post Hoc test was conducted. The results were depicted in Table 35. There was a significant difference between those with no direct experience and other groups who were not as directly acquainted but interacted in community ( $p=0.001$ ), Family members ( $p < 0.001$ ), Rehab Professional ( $p < 0.001$ ). There was also a significant difference between not directly acquainted but interacted in community groups and rehabilitation professionals ( $p=0.02$ ). However, there was no significant difference in attitude was obtained between not directly acquainted but interacted in community groups and family members ( $p= 0.483$ ) ( $p=0.758$ ), as well as between family members and rehabilitation professionals ( $p= 0.857$ ).

This finding shows that among five categories of participants, rehabilitation professionals have more positive attitude towards young adult with intellectual

disability than other groups since they have more contact with disabled and have adequate awareness and information compared to other group. Participants who does not have no direct contact with disabled have shown comparably low positive attitude among the five groups. This finding is a evidence that increased contact and interaction with young adult with intellectual disability promotes more inclusive attitudes toward such individuals among public. Also having knowledge on disability (rehabilitation professionals) lowered the negative attitude. In support of this finding many studies report that attitudes toward individuals with disabilities are influenced by the amount of contact one has with such individuals (Barr & Bracchitta, 2012). In another study, researches reported that an increase in the duration and quality of contact with person with disability would determine the reduction in negative attitudes toward them (Jason & Kristi, 2012). People who has limited awareness and less opportunity to understand with person with disability carry more negatively biased view and relative discrimination towards person with disability. Studies also reported that increased knowledge about the person with disability would be related to positive attitudes (McManus, et al., 2010). In support of this finding, West et al. (2011) argue that knowledge and contact with out groups should lessen negative attitudes and predict more positive attitude.

It can be seen that the lower age group, being a male, low education status, and having no direct interaction with young adults with intellectual disability are more prone to have a negative attitude towards disabled. These studies conclude that people with higher education exposure and having contact with person with disability, would have more inclusive attitude towards them. Also, they would have fewer negative biases. Age, education, gender, and relationship are interrelated. But the common factor among this group is level of contact they have with person with disability. Level of contact and awareness about person with disability has an important influence on people's attitude towards such individuals. Having an opportunity to interact and make relationship with person with disability helps to diminish the misconception about the disabilities.

CHAPTER 5  
**SUMMARY AND CONCLUSION**



## **Context and Need of the Study**

Person with disabilities are generally considered as one of the most marginalised groups in the community (WHO & UNFPA, 2009; Hall, 2010). They often experience stigmatising attitudes from community. In addition, they experience, inaccessible environment, and lack of opportunity for social inclusion. These factors may lead to discrimination and social exclusion resulting in, not being able to meet their basic human needs and rights on an equal basis with others (Bathje, 2016). Voice and need of people with disabilities are often ignored and they are being 'left behind' in many essential areas of the developmental process. Social exclusion and discrimination on the basis of disability means any distinction, exclusion or restriction that has the purpose or effect of preventing people with disabilities having access to their rights (Sarkar & Parween, 2021b). As a cumulative outcome of these discriminative experience, people with disabilities usually have lower educational achievement, poor health, lower economic opportunities, poor social participation and are at increased risk of poverty (White et al., 2018; Crane, 2001).

Among the various group of disabilities, person with intellectual disability are the most marginalised categories. Due to their lack of social skills and deficit in adaptive skills, they tend to experience significant level of social exclusion and they have poor inter-personal relationships (Dell'Armo & Tasse, 2019). It has been observed that, the levels of cognitive deficit, the intensity of training received and opportunity to participate cumulatively determined the social functioning of person with intellectual disabilities. This observation shows that enhancement of cognitive and adaptive function of person with intellectual disability is not enough to ensure adequate social functioning and inclusion. Opportunities for participation and support from community also play a key element in effective social inclusion. However researchers have given less attention on these two potential factors.

In order to understand the experience and life process of person with intellectual disability, there is a need to explore their age-related life experience and how their specific developmental needs meet through interaction with environment.

Most of the studies, particularly from Indian context, have been conducted mainly on the theme of inclusion of children with intellectual disability in school settings (Singal, 2019). Discussion on social inclusion and social life of young adults with intellectual disabilities are significantly neglected and their issues are less addressed. Previous studies have constantly reported that young adults with intellectual disability have less number of friendship with limited social network and most of the time they remain dependent on family members (Louw et al., 2019; Hall, 2016; Tint et al., 2016; Kamstra et al., 2015). Also, young adults with intellectual disability have significantly poor interpersonal relationships and they participate less frequently in social activities than other disabled and non-disabled peers, even though they express a desire to participate and form intimate relationships (Verdonschot, 2009). There are multiple barriers imposed by environment that limit the achievement of age related social participation of young adults with intellectual disability (Hall, 2010). Due to lack of adequate opportunity for social interaction and community participation, most of them remain isolated in their home or neighbourhood. This may seriously affect their overall wellbeing.

In Indian context, particularly in Kerala education system, children with intellectual disability usually get special training in both inclusive setting and segregated setting till the age of 18 years. After the age of 18 years, despite of their skill deficit they have to leave high school without proper plan for how to integrate to community and adapt to independent adult life. While analysing the practices in Kerala, it could be identified that, there is no proper system for life long education and support of young adults with intellectual disability, after completing the high school, many young adults with intellectual disability hardly get the required age sensitive supports and services both in higher education and social life. Grigal et al. (2011) summarized that, due to these adverse socio-educational situation, young adults with intellectual disability have significant issues to adjust with the developmental needs of being purposefully engaging in social life. As a result, they experience discrimination, pervasive stigma and social exclusion. They experience lack of opportunity for social participation and have limited opportunity to develop meaningful and age sensitive interpersonal relationships and also experience multi level barriers for social inclusion (Hall et al., 2019). Social inclusion is a complex

and multi-level process that shows a series of constant and dynamic interactions between environmental, interpersonal and personal factors. These multiple contextual factors may act as barriers as well as facilitator for the social inclusion of young adults with intellectual disability.

Available literature has shown that very few studies have been conducted to identify how young adults with intellectual disabilities develop and experience community participation, interpersonal relationship and a sense of belonging during their period of transition to adult life. Hence, there is a pressing need to focus and explore the subjective and objective elements of social inclusion of young adults with intellectual disability. It would be socially and academically important to explore various factors that act as barriers and facilitators of social inclusion of young adults with intellectual disability. Through this study, factors facilitating and obstructing social inclusion of young adults with intellectual disability in the Kerala cultural context would be identified. The understanding of factors facilitating social inclusion and identifying contextual factors that may limit experience of social inclusion would be useful for rehabilitation professionals and other service providers to design and implement appropriate intervention programs to enhance the social inclusion of young adults with intellectual disability. This would be also helpful for disability advocacy workers and policy makers to take effective community-based policy level initiative to remove identified barriers of social inclusion and to create inclusive social situation to young adults with intellectual disability.

### **Statement of the Problem**

The aim of the present research was to explore the experience of social inclusion of young adults with intellectual disability and explore various factors that act as facilitators of social inclusion and barriers for social inclusion. Also to explore the perceived benefits of social inclusion of young adult with intellectual disability.

So, the current study is entitled as “***STUDY ON SOCIAL INCLUSION OF YOUNG ADULTS WITH INTELLECTUAL DISABILITY***”

### **Objectives of the Study**

1. To understand the current life status of young adults with intellectual disability.
2. To explore domains of social inclusion of the young adults with intellectual disability.
3. To identify the process and factors facilitating social inclusion of young adults with intellectual disability.
4. To identify the perceived benefit of social inclusion of young adults with intellectual disability.
5. To identify the barriers of social inclusion of young adults with intellectual disability.
6. To explore the community members attitude as a barrier to social inclusion of young adults with intellectual disability.

### **Method**

#### **Research Paradigm and Research Design**

This research used both objective and subjective data simultaneously. To explore and understand the participants' current life status, activities, the different aspects of social life, and community participation the researcher used an objective/positivistic approach to enquiry. At the same time, the researcher also used a subjective/constructive approach of enquiry for the exploration of personal experience of social inclusion and to explore dynamics of enabling and disabling factors of social inclusion. In this, the researcher combines both data from the personal experience of participants and contextual factors in the different phases of the study. To collect and analyze both subjective and objective data, the researcher adopted different quantitative and qualitative research methodologies. In this study, qualitative approaches helped to understand the subjective experience of social inclusion by exploring through tools like interviews whereas quantitative approaches help to derive objective components of social inclusion such as level of community



participation and details of interpersonal relationships, etc. by using tools like a questionnaire and scales. In addition, in this study, the researcher adopted the pragmatist position as this approach provides liberty to choose various research methods or strategies that can best answer the research questions of this present study by combining both positivism and interpretivism. Therefore, the main reason for adopting a pragmatist position in this study is to permit a pluralistic stance of collecting all types of data to best answer the research problem.

This study used the mixed method design which is the combination of qualitative and quantitative approaches to collect and analyses data. Quantitative results can be triangulated with qualitative findings and vice versa. The mixed method research design used in this study most closely resembles the convergent parallel mixed-method design as described by Creswell and Plano (2011). In the mixed-method study, to select the appropriate design, researcher had carefully adopted three major aspects while planning such as weighing, timing, and point of integration.

### **Phases of the Research Process**

In the present study, the researcher examines the experiences and expression of social inclusion of young adults with intellectual disability. To obtain the objective of the study, along with the convergent parallel mixed method, researcher designed the study in multi-phase and multilevel strategies, i.e., data collected completed in three main phases as mixed method and also data collected in different levels of participants such as; young adults with intellectual disability, their parents/caregivers, teachers, and community members. Phase-I attempted to explore current life status of a young adults with intellectual disability and exploration of domains of experience of social inclusion among young adults with intellectual disability. Phase II attempted to identify the process and facilitating factors of social inclusion, benefits of social inclusion, and the exploration of barriers to social inclusion of young adults with intellectual disability. Phase III involved a detailed exploration of community members' attitudes as a barrier to social inclusion of

young adults with intellectual disability. Details of each of the three phase of research process have been demonstrated in Table 36.

**Table 36**

*Phases of the Study*

Phase	Part	Participants (Group)	Sample number	Sampling techniques	Data collection method	Data analysis
Phase-1	Part-1	Care giver/ parents	500	Purposive sampling	Survey questionnaire on the life Status of YAID	Descriptive analysis
	Part-2	Young adults with intellectual disability and their parents	150	Purposive sampling	1. Survey Questionnaire on community participation of YAID 2. Freindship status questionnaire 3. Perceived social support questionnaire	Descriptive analysis
Phase-2	Part-1	Care giver/ parents	50	Purposive sampling	Semi structured Interview	Thematic analysis
	Part-2	Community members	100	Purposive sampling	Semi structured Interview	
	Part-3	Professional group	30	Purposive sampling	Semi structured Interview	
Phase-3	Part-1	Community members	360- for EFA 400- for CFA	Purposive sampling	Test construction process (Scale development through psychometry process including factor analysis –EFA & CFA)	Descriptive & inferential analysis
	Part-2	Community members	350	Convenient sampling	Attitude towards person with intellectual disability scale	Descriptive & inferential analysis

### **Test Construction**

To explore the community member's attitudes toward young adults with intellectual disability, the study used the 'Attitude towards intellectual disability scale' developed by the researcher. This 18 items scale helped to identify the four dimensions of the attitude of community members such as inclusion, expectation, independency, and acceptance. Confirmatory Factor Analysis (CFA) revealed that the four-factor model is a good fit for the data. The scale had good internal consistency with Cronbach's alpha coefficients ranging from 0.6 to 0.7 for the four factors and 0.79 for the overall scale.

### **Result and Discussion**

The result & discussion was discussed in six sections in accordance with the objectives of the study as given below. As the researcher has used mixed method of research design, researcher had integrated and discussed findings derived from different phases of study in the various sections of results. In this study, researcher used both the result point of integration and the analytical point of integration across three phases.

Section-1: Life status of young adults with intellectual disability.

Section-2: Domains of social inclusion of young adults with intellectual disability.

Section-3: Process and factors facilitating social inclusion among young adults with intellectual disability.

Section-4: Perceived benefit of social inclusion of young adults with intellectual disability.

Section-5: Barriers to social inclusion of young adults with intellectual disability.

Section-6: To explore the community members attitude as a barrier to social inclusion of young adults with intellectual disability

## **INFERENCES FROM THE STUDY**

### ***Section-1: Life Status of Young Adults with Intellectual Disability***

- There is poor representation of women and girls with intellectual disability in community participation. It may be due to the gender-based discrimination experienced by girls and women with disability. Parents have reluctance in engaging their daughter with intellectual disability in community participation in fear of social rejection. Role of gender has been a neglected issue in research on intellectual disability.
- Severity of intellectual disability varies among young adults with intellectual disability and significant majority of the participants belong to a mild level of intellectual disability category. The scope of intervention for enhancement of social inclusion is high among mild level of intellectual disability compared to other category.
- Majority of caregivers of young adults with intellectual disability belong to the background of low level of education status and were unemployed or were daily wage workers. Due to their limitations in level of awareness and resources, caregivers often fail to recognize the special needs required for their wards. Financially rich often hesitate to talk about their family members who have intellectual disability.
- Only very few number of young adults from the participants were engaged in age appropriate activities and majority of them were involved in age inappropriate activities. They were going to school even after 18 years of age and they spent time with children who were younger than them. It inhibited them from developing age appropriate social skills and establishing age appropriate relationships. It also limits them to get exposure to and getting involved in age appropriate activities. A significant numbers of young adults were sitting idle at home and not involved in any activities. This group of young adults were often treated by parents, teachers and society as an 'eternal child' and were not accepted as an adult. These unjustified

segregation from age appropriate life activity and lack of choice for young adults with intellectual disability are considered as a form of discrimination for social inclusion.

***Section-2: Domains of Social Inclusion of Young Adults with Intellectual Disability***

- Compared with peer groups without disabilities, young adults with intellectual disability had lower levels of participation in education, employment, and recreational activities. Majority of young adults with intellectual disability were not involved in any form of job or productive activity. They have poor level of friendship with non disabled peer. Lack of friendship with non disabled peers may hinder them from learning new skills, and skills necessary for social interaction through observation and imitation. Majority of young adults with intellectual disability were faced with difficulty in utilizing facilities of community which would facilitate their independent life particularly shopping and travelling in public transportation facilities.
- As individuals with intellectual disability become unable to find an opportunity to be involved in age-appropriate activity, they lose their chances to be involved in social interactions. It indicated their exclusion from social participation and affected their experience of social inclusion.
- Developing and sustaining reciprocal interpersonal relationships is the second component of social inclusion for young adults with intellectual disability. Young adults with intellectual disability shared significantly fewer numbers of friendships with non-disabled individuals in the same age group and most of their friends were their classmates. They are not able to get a chance to form friendships with other non-disabled individuals in the same age group and it is a clear indication of social exclusion.
- Only few young adults with intellectual disability get opportunity to meet their friends in settings outside of school. They are mostly involved in the

structured, curriculum-based activities and training activities in school and only have a few opportunities to form interpersonal relationships and experience social inclusion.

- Perceived social support and a sense of belongingness were the third component of social inclusion. Four factors of the perceived social support system were identified, they were, availability of friends, help from friends, support from friends during difficult times, and readiness to share joy and sorrow.
- Perceived social support and sense of belongingness was low for young adults with intellectual disability in the area explored. It was found that lack of perceived support from friends was more important both in terms of social inclusion and quality of life of young adults with intellectual disability.

### ***Section-3: Process and Factors Facilitating Social Inclusion of Young Adults with Intellectual Disability***

- Social inclusion of young adults with intellectual disability is identified as a multidimensional process and can be influenced by individual, interpersonal and community-level factors, along with structural factors and policy factors.
- Age-appropriate skill training has been identified as one of the core factors of social inclusion of young adults with intellectual disabilities in the personal level. Three important skill training area were identified under factors i.e., 1) functional skill training, 2) pre-vocational skill training and 3) self-advocacy training. Adequate training in the mentioned skills would enable young adults with intellectual disability to be independent and facilitate their social participation and community involvement.
- Age appropriate social skill training to young adults with intellectual disability has been identified as a significant contributing factor to social interaction and also to build meaningful interpersonal relationships. Pre-

vocational skill training would enable them to be prepared for and fit for vocational training and productive community participation. Self-advocacy training was identified as an important component of social inclusion of young adults with intellectual disabilities.

- Three factors facilitating social inclusion of young adults with intellectual disability were identified in the inter-personal and community level. They were 1) attitude and behavior management towards young adults with intellectual disability, 2) awareness creation and 3) creating opportunities for social participation.
- Positive attitude of community members has potential role for creating an inclusive environment for young adults with intellectual disability. Positive attitude change caused reduction of discriminative behaviour and this brought about inclusive behaviour automatically. Attitude, level of involvement and orientation of parents influence the social inclusion process of their intellectually disabled wards.
- Community members who have higher level of knowledge and awareness about needs of person with disability would have better attitude toward them. Awareness creation needed to be provided on an informational level, but there should also be opportunities for physical interaction with intellectually disabled individuals to eradicate the misconceptions about disabled individuals in the community.
- Creating opportunity to participate in various community activities and peer interaction has been identified as a vital factor that facilitates the process of social inclusion of young adults with intellectual disability. Participation in the community would provide opportunities in using community resources. Even though the opportunities were created, young adults with disability were rarely utilizing these opportunities due to the lack of expectations and readiness.
- Three factors facilitating social inclusion of young adults with intellectual

disability were identified under the system and policy levels. i.e., 1)create appropriate training opportunities, 2)create opportunities for employment and 3)create inclusive policy. There is a potential need for inclusive curriculum appropriate for students with an intellectual disability as they require more specific skill training programs than non-disabled young adults. Also there is need to create accessible and affordable skill training centres to ensure their employability and social inclusion.

- Providing adequate and suitable employment opportunities, and creating an inclusive work environment to help young adults with intellectual disabilities to achieve social participation, social interaction and financial independence, may help to reduce the family burden and help them in leading an independent life. There is a significance of policy level intervention to foster the inclusive social values and practices based on the core concept of ‘society for all and every individual has an active role to play’. These identified factors of facilitating the process of social inclusion were often seen as mutually interacting and social inclusion takes place through the process of complex reciprocal interactions of various factors from each level.

#### ***Section-4: Perceived Benefit of Social Inclusion of Young Adults with Intellectual Disability***

- There are three levels of perceived benefits of social inclusion of young adults with intellectual disability. They were personal level of young adults with intellectual disability, family level and community level.
- There are three personal level perceived benefits of social inclusion young adults with intellectual disability i.e., 1) self-empowerment, 2) increase social participation and 3) financial independence. These personal level benefits of social inclusion may collectively contribute to a better quality of life for them.
- Feeling of belongingness and perceived social support has identified as an



outcome of social inclusion of young adults with intellectual disability. Perceived social support would help them to gain confidence and happiness as members of society, knowing that they won't be rejected and develop positive feelings as part of a system.

- Increased social participation is identified as a benefit of social inclusion of intellectually disabled young adults. Increased social participation would help to get involved in mainstream social functions such as employability, recreational activities, productive activities, and other day-to-day activities. Inclusive social situations also help them to utilize the available resources and services needed for meaningful participation in society.
- Financial independence of young adults with intellectual disability was identified as one of the outcomes of social inclusion at a personal level. Social inclusion often enable young adults with intellectual disabilities to involve in adequate productive and livelihood based employment. It would facilitate as a sustainable source for income. It would also enable them to recognize themselves as a financial support for their family and as a productive member in society.
- There is a link of social inclusion of young adult with intellectual disability on the support and satisfaction among their parents and caregiver. Social inclusion would facilitate the ability for independent living among young adults with intellectual disability and further it may help to reduce the worries and concerns and increase satisfaction among parents.
- There are various benefits of social inclusion of intellectually disabled young adults at the community level, i.e., to become a productive member and human resource of society. Through social inclusion, intellectually disabled young adults could earn a sustainable income and become a good workforce in the community. This potential human resource could be utilized for community development through different developmental initiatives.

### **Section-5: Barriers to Social Inclusion of Young Adults with Intellectual Disability**

- There are three core factors which act as the barrier of social inclusion of young adults with intellectual disability, i.e., (1) the attitude and behaviour of others towards young adults with intellectual disability, (2) the lack of opportunity for social inclusion, and (3) skill deficit in young adults with intellectual disability.
- The community members often viewed young adults with intellectual disabilities as dependent and cannot do things independently. This idea that they are dependent on others in all areas of life resulted in perceiving them as children. The consequence of such an attitude is the denial of their adult life and age appropriate social life.
- Society often has viewed young adults with intellectual disabilities with a stigmatized attitude. Stigmas, stereotypical view and fear may act as barriers to the social participation and to availing their right to full participation in community activities. It contributes to the discrimination and exclusion experienced by people with disabilities and their families. These identified attitudinal barriers may lead to denying their right for meaningful participation in community and ignoring their potential. It would lead to the greatest obstacles to achieving equality of opportunity and social inclusion. Community member's discriminative behavior may create a feeling of distance among young adults with intellectual disabilities from the community and decreases feelings of belongingness.
- Lack of awareness among community members about person with intellectual disabilities has been identified as a barrier for social inclusion. The lack of awareness may lead to many myths and negative attitudes about intellectually disabled individuals, as a result, it has created barriers to their social inclusion.

- Restrictive behaviors of parents due to fear of rejection has been identified as a barrier to social inclusion of young adults with intellectual disability. Parent's negative attitude and restrictive behaviour may be due to their lack of adequate knowledge and awareness about their wards, negative attitudes imposed by others, and the fear of abuse and misuse by community members.
- Young adults with intellectual disability tend to experience a significant level of scarcity in the required opportunity for community participation than their peer non-disabled group. It has identified that intellectually disabled young adults mostly spend their time with disabled peers or children below their age group. Study also shows that young adults with intellectual disabilities often experience difficulty to get age-sensitive higher education and training facilities.
- There is a lack of suitable employment opportunity for young adults with intellectual disability and most of the career options offered to them are of the type that makes them disabled, not ensuring their empowerment and are monotonous or repetitive works that are not productive.
- Deficits in social skills and independent mobility skills have been identified as important skill deficit that influences the experience of social inclusion directly or indirectly. Difficulty in travelling independently would create a barrier to participate in community activities which are known to be significant contributors of social inclusion.

#### **Section-6: Exploration of the Community Member's Attitude as a Barrier to Social Inclusion of Young Adults with Intellectual Disability**

- Community members have comparably more inclusive acceptance towards young adults with intellectual disability. However, they have less expectation from young adults with intellectual disability and they perceive them as more

dependent on others. This indicates that the community has a prevailing attitude that young adults with intellectual disability are incapable of an independent life and they need support always.

- There is significant difference in attitude towards young adults with intellectual disability between the age group below 18 years and all other age groups. It indicates that attitudes toward young adults with intellectual disabilities follow a developmental trend i.e., people show more positive attitudes by increase age.
- There is a difference in community member's attitude towards young adults with intellectual disability according to their gender, education, and their relationship with young adults with intellectual disability.
- Females have more positive attitude than male participants. People with lower educational qualification have more negative attitudes toward people with disabilities than people with higher educational qualification. From this it could be inferred that enrolment in higher educational system often provide more inclusive perspective and it would encourage acknowledgement of the diverse nature of disability in terms of ability and prospectus. Increased contact and interaction with young adults with intellectual disability would promote more inclusive attitudes toward such individuals among the public.

CHAPTER 6  
**RECOMMENDATIONS OF THE STUDY**



The present study offers various practical recommendations for researchers, rehabilitation professionals, and care givers of young adults with intellectual disability as well as policymakers in concerned field.

### **Adequate Opportunity for Community Participation**

- Study implies that to ensure social inclusion of young adults with intellectual disability, there is a potential need to provide adequate opportunities for them to be actively involved in age-appropriate community activities and go beyond being only passive recipients of services.
- Need to create opportunities to participate in various activities inside and outside the family setting such as arts fest, ability festival, special sports, career selection pathways, and job fairs for young adults with intellectual disabilities. They must be given opportunities to take on some responsibilities in small neighbourhood activities like marriage, culturally sensitive functions, or occasions.
- Study shows that, even though the opportunities were created, persons with disability were rarely utilizing these opportunities due to a lack of expectations and readiness. Thus, it is recommended that young adults with intellectual disabilities must be enabled to use the opportunities provided. Encouragement needs to be given to those involved in productive, interpersonal, social, and recreational groups of social participation. As part of this encouragement, initially specially designed structured programs could be implemented.

### **Attitude Management Programme**

- Community members' negative attitude towards young adults with intellectual disability has been identified as a potential barrier to their social inclusion. Thus, study implies the need of developing and implementing an effective and sustainable attitude management programme to address various

identified negative attitude and discriminative behaviours of community members towards young adults with intellectual disability.

- Study recommends that an effective attitude management programme requires a combined strategy of providing accurate information about disability and enforcing rewarding contacts between the 'non-disabled' and people with disabilities.
- The study suggests that lack of awareness influences negative attitudes and discriminative behaviours of community members towards young adults with intellectual disability, thus study implies the need for awareness programs, specifically targeted at each level of the community, to be implemented. Awareness creation can be done through different modes like specific or usual educational training programs or behaviour-changing communication strategies etc. This awareness program can be included as part of the curriculum in schools and colleges and as public awareness programs. Different methods to create awareness can be stipulated with legal aid.

### **Adequate Skill Training Programme**

- Age-appropriate social skills and independent living skills training for young adults with intellectual disability have been identified as significant contributing factor to social interaction and participation. The study implies the need of providing appropriate skill training at the early ages of children with disability and the need for including social skills and pre-vocational skill training as part of the inclusive school curriculum.
- Pre-vocational skill training would enable them to be prepared for and fit for vocational training and productive community participation. Pre-vocational training and vocational selection needed to be done individually by considering individual interests and aptitudes.
- The study recommends designing and implementing evidence-based interventions to promote age-appropriate intimate relationships to young adults with intellectual disability which would help them to achieve



autonomy and self-care with regard to their own sexuality, positive sexual identities, and mating relationships.

- The study emphasizes the need for providing self-advocacy training to young adults with intellectual disability as part of the skill training, as an empowering movement. It was vital for them to have a voice, make decisions for themselves, and influence positive change in the community.

### **Family Empowerment Programme**

- Parental empowerment programs have to be implemented to overcome worries and reduce the restricting behaviour of parents. Parents should be included in programs promoting the social inclusion of young adults with intellectual disabilities. Community-based programs to address parents' attitudinal, behavioural, and readiness levels should be introduced. The psychological stress as caregiver's burden should also be addressed in such programs. Parental support groups for young adults with intellectual disabilities should be formed to help reduce the burden and increase perceived social support.
- As the study reported that the difference in the involvement of both parents in the care of their ward's special needs, consistent involvement of the father along with the mother has to be ensured. The parental-mediated intervention programme should focus on all family members, especially family members such as grandparents and siblings and available relatives.

### **System and Policy Level Intervention to Promote Social Inclusion**

- The study implies the potential role of inclusive school curriculum and environment. It demands the need for the appropriate initiative on part of schools and training centres to implement programmes of skill training that equip students with intellectual disabilities for social inclusion in the true sense. These inclusive activities should be more than just educational activities. Accessibility, zero-reject, non-discrimination, and reasonable accommodation are to be key features of an inclusive school curriculum.

- Inclusive and rights-based approaches should be considered while developing appropriate curriculum adaptations to match learners' needs instead of the learners fitting into the curriculum. The evaluation system should be skill-based rather than based on academics. The individualized education programme and flexible curriculum are essential for an inclusive curriculum.
- The study implies the need for creating a completely inclusive environment for young adults with intellectual disabilities, appropriate intervention at the policy and administrative levels are required. In this line, disability inclusion should be understood and acknowledged as an important human rights concern. Inclusion should be the main agenda of disability mainstreaming and empowerment initiatives. Effective enforcement of disability rights principles and political support for policies can also help to mitigate existing social inequality toward people with disabilities.
- Governments and other stakeholders should design public policies and programmes for social inclusion and combat inequalities, disparities, and social exclusion of persons with disability. Systematic and evidence-based strategies and policy measures are required to foster an inclusive social milieu for the person with disability.

## **LIMITATIONS AND FUTURE RESEARCH**

### **Limitations of the Research**

- In this study the researcher used qualitative research design in the second phase, which posed limitations to generalize findings due to the contextual and subjective nature of data.
- The study has identified various factors that act as barriers to the social inclusion of young adults with intellectual disability from the qualitative data. However, researcher could only conduct a detailed empirical exploration of only one factor i.e., attitudinal barrier. This is primarily

because of the reason that unavailability of culturally validated appropriate tools and time constrains for research.

- Social inclusion and disability are multidimensional and culturally sensitive concepts and are influenced by various individual and collective factors. However, in this study researcher was able to explore only very few factors in detail. More researches need to explore the influence of each factors that contribute to social inclusion of young adults with intellectual disability.
- Even though the study focused on the social inclusion of young adults with intellectual disability, there searcher was not able to collect self-reports of their experience of social inclusion. This is due to the deficit in verbal and cognitive abilities among young adults with intellectual disability in self-reflection. This has made it difficult for them to recognize and express these factors evaluated in this study.

#### **SUGGESTIONS FOR FURTHER RESEARCH**

- The study identified various factors facilitating the process of social inclusion of young adults. However, to understand the pathway of interaction and the effect of these factors, there is a need to do an in-depth exploration of the potential causal and/or mediating effect of identified facilitators that promote social inclusion of young adults with intellectual disabilities, by conducting rigorous empirical investigations.
- The study has identified various potential barriers to social inclusion of young adults with intellectual disability. Future research should be conducted to systematically evaluate of impacts of their barrier to social exclusion in their personal and social life.
- There is also a need for research and evidence-based policy-level intervention to address the less discussed and neglected area of social exclusion of young adults with intellectual disabilities such as denial of their adult independent living, intimate relationship, marriage, etc.

*Recommendation of The Study*

- To explore the subjective experience of friendship among young adults with intellectual disability, a detailed study of the quality of these reported friendship activities has to be done. The results of these studies should be analysed with the limitation that young adults with intellectual disability have in expressing their emotional need and their interpersonal skill.
- There is potential needed to develop an alternate research tool and research design to explore the personal experience and social exclusion of people with intellectual disability, to whom the traditional research method is inaccessible due to limitation in self-reflection due to their cognitive limitations.
- There is a need to conduct research that identifies the facilitators of the process of social inclusion of people with other types of disabilities, including women and economically deprived groups with disability who often experience double disadvantages.
- It was observed from the study that role of gender had been a neglected issue in research on intellectual disability. While planning any type of research and intervention for individuals with intellectual disability, gender-based discrimination and experience has to be considered.

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## **APPENDICES**





**APPENDIX 1**

**DEPARTMENT OF PSYCHOLOGY**

(University of Calicut)

**ഗവേഷണത്തിൽ പങ്കെടുക്കുന്നതിനുള്ള സമ്മതപത്രം**

(Informed consent sheet)

ഭിന്നശേഷിക്കാരുടെ സാമൂഹ്യപങ്കാളിത്തം ഉൾച്ചേരൽ (inclusion) എന്ന വിഷയത്തിൽ കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി മനശാസ്ത്രവിഭാഗത്തിൽ നടക്കുന്ന ഗവേഷണ പ്രവർത്തനത്തിൽ പങ്കെടുപ്പിക്കാൻ എനിക്ക് പൂർണ്ണ സമ്മതമാണ്. ഇതിന്റെ ഭാഗമായി ശേഖരിക്കുന്ന വിവരങ്ങൾ ഗവേഷണപരിശീലന പ്രവർത്തനങ്ങൾക്ക് മാത്രമേ ഉപയോഗിക്കുന്നു എന്നും ഞാൻ മനസ്സിലാക്കുന്നു.

ഈ ഗവേഷണപദ്ധതിയിൽ എന്റെ പങ്കാളിത്തം സ്വമേധയാ ഉള്ളതാണ്. എന്റെ പങ്കാളിത്തത്തിന് എനിക്ക് പ്രതിഫലം ലഭിക്കില്ലെന്ന് ഞാൻ മനസ്സിലാക്കുന്നു.

എപ്പോൾ വേണമെങ്കിലും എനിക്ക് പങ്കാളിത്തം പിൻവലിക്കുകയും നിർത്തുകയും ചെയ്യാം. പഠനത്തിൽ പങ്കെടുക്കാനോ പിന്മാറാനോ ഞാൻ വിസമ്മതിക്കുകയാണെങ്കിൽ, എനിക്ക് യാതൊരു ബുദ്ധിമുട്ടും വരില്ല എന്ന് ഞാൻ മനസ്സിലാക്കുന്നു..

ഈ ഗവേഷണത്തിൽ നിന്നും ലഭിച്ചവിവരങ്ങൾ ഉപയോഗിച്ച് ഏതെങ്കിലും റിപ്പോർട്ടുകളിൽ ഗവേഷകൻ എന്നെക്കുറിച്ചുള്ള വ്യക്തിഗത വിവരങ്ങൾ നൽകില്ലെന്നും ഈ പഠനത്തിൽ പങ്കാളിയെന്ന നിലയിൽ എന്റെ വ്യക്തിവിവരങ്ങൾ സുരക്ഷിതമായി തുടരുന്നതും ഞാൻ മനസ്സിലാക്കുന്നു.

ഈ ഗവേഷണത്തെക്കുറിച്ച് എനിക്ക് നൽകിയ വിശദീകരണം ഞാൻ മനസ്സിലാക്കുകയും ചെയ്തു. എന്റെ എല്ലാചോദ്യങ്ങൾക്കും എന്റെ സംതൃപ്തിക്ക് ഉത്തരം ലഭിച്ചിട്ടുണ്ട്. ഈ പഠനത്തിൽ പങ്കെടുക്കാൻ ഞാൻ സ്വമേധയാ സമ്മതിക്കുന്നു.

- പേര് :
- തിയ്യതി :
- സ്ഥലം :

**DEPARTMENT OF PSYCHOLOGY**  
(University of Calicut)  
(English form)  
**INFORMED CONSENT SHEET**

I am will to participate in the research work being done in the Department of Psychology, University of Calicut on the topic of social inclusion of young adult with intellectual disability

I also understand that the information collected as part of this will only be used for research and training purposes.

I understand that researcher would not give any monitory compensation for my participation. My participation in this research project is voluntary.

I can withdraw and stop participating at any time. I understand that if I refuse to participate or withdraw from the study, I will not face any difficulty from the side of researcher,

I understand that, the researcher will not identify any personal information about me in any part of the reports of this research. I also understand that my personal information will remain secure as a participant in this study.

I understand all the information given to me about this research. All my questions have been answered to my satisfaction.

I voluntarily agree to participate in this study.

Signature

Name :

Date :

Place :

**APPENDIX 2**  
**DEPARTMENT OF PSYCHOLOGY**  
**UNIVERSITY OF CALICUT**  
**(Survey Questionnaire on life status of YAID)**

18നം 25 വയസ്സിനും ഇടയിൽ പ്രായമുള്ള ബുദ്ധിവികാസവൈകല്യമുള്ളവരുടെ സാമൂഹ്യ ഉൾചേർച്ചയെ സംബന്ധിച്ചപഠനം

**Part-1: വ്യക്തിഗതവിവരങ്ങൾ (നിങ്ങളുടെ മകന്റെ/മകളുടെ)**

പേര്:	
ലിംഗം:	പുരുഷൻ /സ്ത്രീ /മുനം ലിംഗം
വയസ്:	
രക്ഷിവിന്റെ പേര്:	
സ്ഥലം & ജില്ല:	
മൊബൈൽ നമ്പർ:	
പിതാവിന്റെ വയസ്സ്	
2.മാതാവിന്റെ വയസ്സ്	
3.പിതാവിന്റെ വിദ്യാഭ്യാസ യോഗ്യത	<input type="radio"/> SSLC താഴെ <input type="radio"/> SSLC to +2/ Pre-degred <input type="radio"/> ബിരുദം <input type="radio"/> ബിരുദത്തിന് മുകളിൽ
4.മാതാവിന്റെ വിദ്യാഭ്യാസ യോഗ്യത	<input type="radio"/> SSLC താഴെ <input type="radio"/> SSLC to +2/ Pre-degree <input type="radio"/> ബിരുദം <input type="radio"/> ബിരുദത്തിന് മുകളിൽ
5.പിതാവിന്റെ ജോലി	

**Part-2: വൈകല്യവുമായി ബന്ധപ്പെട്ട വിവരങ്ങൾ (മെഡിക്കൽ സർട്ടിഫിക്കറ്റ് പ്രകാരം)**

1.വൈകല്യ അവസ്ഥ	
2.വൈകല്യത്തിന് ശതമാനം	
3.മറ്റുവൈകല്യങ്ങൾ ഉണ്ടോ?	
4.ഉണ്ടെങ്കിൽ ഏതെല്ലാം	

**Part-3 : കഴിഞ്ഞ ആറ് മാസമായി, നിങ്ങളുടെ മകൻ/മകൾ എന്താണ് ചെയ്യുന്നത്. (ഉചിതമായ ഇനം ടിക്ക് ചെയ്യുക)**

- പൊതു വിദ്യാലയത്തിൽ പഠിക്കുന്നു
- സ്പെഷ്യൽ വിദ്യാലയത്തിൽ പഠിക്കുന്നു
- കോളേജിൽ പഠിക്കുന്നു
- പ്രീ-വൊക്കേഷണൽ നൈപുണ്യ പരിശീലനത്തിൽ പങ്കെടുക്കുന്നു
- തൊഴിൽ നൈപുണ്യ പരിശീലനത്തിൽ പങ്കെടുക്കുന്നു
- ചെറിയ ജോലികൾ ചെയ്യുന്നു
- പ്രത്യേകിച്ച് ഒന്നും ചെയ്യുന്നില്ല



**APPENDIX 3**

**DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF CALICUT**

**Survey Questionnaire on community participation of YAID**

18നും 25 വയസ്സിനും ഇടയിൽ പ്രായമുള്ള ബുദ്ധിവികാസവൈകല്യമുള്ളവരുടെ സാമൂഹ്യ ഉൾചേർച്ചയെ സംബന്ധിച്ചപഠനം

18നും 25 വയസ്സിനും ഇടയിലുള്ള ബുദ്ധിവികാസ വൈകല്യമുള്ളവരുടെ സാമൂഹ്യ പങ്കാളിത്തവും സാമൂഹ്യ ഇടപെടലുകൾ എന്നിവ മനസ്സിലാക്കുന്നതിനു വേണ്ടിയുള്ള ചോദ്യാവലിയാണ് താഴെ നൽകിയിരിക്കുന്നത്. കഴിഞ്ഞ ആറ് മാസമായി, നിങ്ങളുടെ മകൻ/മകൾ താഴെ നൽകിയ ഏതെല്ലാം പ്രവൃത്തികളിൽ പങ്കെടുക്കാറുണ്ട് (ഉചിതമായ ഇനം ടിക്ക് ചെയ്യുക

Sl No.	A. Productive activity (Age appropriate)		
1	പ്രീ-വൊക്കേഷണൽ നൈപുണ്യ പരിശീലനത്തിൽ പങ്കെടുക്കുന്നു	ഉണ്ട്	ഇല്ലാ
2	തൊഴിൽ പരിശീലന കേന്ദ്രത്തിൽ പരിശീലനത്തിൽ പങ്കെടുക്കുന്നു	ഉണ്ട്	ഇല്ലാ
3	ചെറിയ ജോലികൾ ചെയ്യുന്നു	ഉണ്ട്	ഇല്ലാ
4	കോളേജിൽ പോകുന്നു	ഉണ്ട്	ഇല്ലാ
	B. Interpersonal/Recreational		
5	ബുദ്ധിപരമായി വെല്ലുവിളികൾ ഇല്ലാത്ത സമപ്രായക്കാരുമായി സൗഹൃദം പങ്കു വെക്കാറുണ്ടോ ?	ഉണ്ട്	ഇല്ലാ
6	സമപ്രായക്കാരുടെ കൂടെ കളിക്കുക ( പ്രായത്തിനു യോജിക്കുന്ന)	ഉണ്ട്	ഇല്ലാ
7	സമപ്രായക്കാരുടെ കൂടെ പൊതുഇടങ്ങളിൽ ചുറ്റിനടക്കൽ( Park, movis & Hangout etc.)	ഉണ്ട്	ഇല്ലാ
	C. Consumption of facilities(domestic)		
8	മാർക്കറ്റിൽ ഷോപ്പിംഗിൽ ഏർപ്പെടുന്നു	ഉണ്ട്	ഇല്ലാ
9	പൊതുഗതാഗതത്തിൽ യാത്ര ചെയ്യുക	ഉണ്ട്	ഇല്ലാ
	D. Cultural/Social activity		
10	സ്ഥലത്തെ പൊതു ക്ലബുകളിൽ അംഗങ്ങളാകുക	ഉണ്ട്	ഇല്ലാ
11	സ്ഥലത്തെ പുതുവായ പ്രവർത്തനങ്ങളിൽ സന്നദ്ധ പങ്കാളികളാകുക	ഉണ്ട്	ഇല്ലാ



**APPENDIX 4**  
**DEPARTMENT OF PSYCHOLOGY**  
**UNIVERSITY OF CALICUT**  
**(Friendship status questionnaire)**

18നം 25 വയസ്സിനും ഇടയിൽ പ്രായമുള്ള ബുദ്ധിവികാസവൈകല്യമുള്ളവരുടെ സാമൂഹ്യ ഉൾചേർച്ചയെ സംബന്ധിച്ചപഠനം

**Instruction to be read by interviewer**

നിങ്ങളുടെ സുഹൃത്ത്ബന്ധങ്ങളെ കുറിച്ചും സാമൂഹ്യ ജീവിതത്തെക്കുറിച്ചുമുള്ള ചില ചോദ്യങ്ങൾ/ പ്രസ്താവനകളാണ് ഞാൻ നിങ്ങൾക്കായി വായിക്കുന്നത്. ഇവ ഓരോന്നും ശ്രദ്ധാപൂർവ്വം കേട്ട് ഉത്തരം പറയണം. മനസ്സിലാക്കാത്ത ചോദ്യങ്ങൾ ഉണ്ടെങ്കിൽ ആവർത്തിക്കാനും പറയണം.

**Instruction to parents :**

തന്നിരിക്കുന്ന ചോദ്യങ്ങൾ വായിച്ചു മനസ്സിലാക്കാൻ അവർക്ക് ബുദ്ധിമുട്ടുണ്ടെങ്കിൽ, മാതാപിതാക്കൾ അവർക്കായി ചോദ്യങ്ങൾ വായിച്ച് വിശദീകരിച്ചു നൽകാം. ഒരുകാരണ വശാലും മാതാപിതാക്കളുടെ അഭിപ്രായങ്ങൾ തങ്ങളുടെ മകന്റേയോ/ മകളുടെയോ അഭിപ്രായങ്ങളായി നൽകരുത്.

1.	സമപ്രായക്കാരായ കൂട്ടുകാർ ഉണ്ടോ?	
2	എത്ര കൂട്ടുകാർ ഉണ്ട്	
3	ഭിന്നശേഷിക്കാരല്ലാത്ത കൂട്ടുകാരുണ്ടോ	1.
4	അവർ ആരെല്ലാം ആണ്	A. അടുത്ത ബന്ധുക്കൾ (വീടിൽനിന്നുള്ള) B. അയൽപക്കത്തെ കൂട്ടുകാർ C. കൂടെപഠിക്കുന്ന/ പഠിച്ചിരുന്ന കൂട്ടുകാർ
5	ഇവരെ എവിടെവെച്ചാണ് കാണാറുള്ളത്	A. സ്കൂൾ/ പരിശീലനകേന്ദ്രങ്ങൾ B. തൊഴിൽ കേന്ദ്രങ്ങൾ C. കളിസ്ഥലങ്ങളിൽ D. ക്ലബ്ബുകൾ, E. ആരാധനാലയങ്ങൾ etc

<p>6.</p>	<p>ഒഴിവുസമയങ്ങളിൽ സൂഹൃത്തുക്കളോടൊപ്പം സാധാരണചെയ്യാറുള്ള പ്രവർത്തനങ്ങൾ എന്തെല്ലാമാണ്.</p>	<p>A. സംസാരിച്ചിരിക്കുക          B. കളിക്കുക          C. ഒരുമിച്ചിരുന്ന് മൊബൈലിൽ വിവിധ വിനോദങ്ങളിൽ ഏർപ്പെടുക          D. അവരോടൊപ്പം ചെറിയ ദൂര യാത്രപോവുക          E. നാട്ടിൽ കൂട്ടുകാരോടൊത്ത് വിവിധ വിനോദങ്ങളിൽ ഏർപ്പെടുക          F. നവമാധ്യമങ്ങളിലൂടെ സൗഹൃദങ്ങളിൽ ഏർപ്പെടുക</p>
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**APPENDIX 5**

**DEPARTMENT OF PSYCHOLOGY**

**UNIVERSITY OF CALICUT**

**(Perceived social support questionnaire)**

18നം 25 വയസ്സിനും ഇടയിൽ പ്രായമുള്ള ബുദ്ധിവികാസവൈകല്യമുള്ളവരുടെ സാമൂഹ്യ ഉൾചേർച്ചയെ സംബന്ധിച്ച പഠനം

**Instruction to be read by interviewer**

നിങ്ങളുടെ സുഹൃത്ത്ബന്ധങ്ങളെ കുറിച്ചും സാമൂഹ്യ ജീവിതത്തെ കുറിച്ചുമുള്ള ചില ചോദ്യങ്ങൾ/ പ്രസ്താവനകളാണ് ഞാൻ നിങ്ങൾക്കായി വായിക്കുന്നത്. ഇവ ഓരോന്നും ശ്രദ്ധാപൂർവ്വം കേട്ട് ഉത്തരം പറയണം. മനസ്സിലാക്കാത്ത ചോദ്യങ്ങൾ ഉണ്ടെങ്കിൽ ആവർത്തിക്കാനും പറയണം.

**Instruction to parents :**

തന്നിരിക്കുന്ന ചോദ്യങ്ങൾ വായിച്ചു മനസ്സിലാക്കാൻ അവർക്ക് ബുദ്ധിമുട്ടുണ്ടെങ്കിൽ, മാതാപിതാക്കൾ അവർക്കായി ചോദ്യങ്ങൾ വായിച്ച് വിശദീകരിച്ചു നൽകാം. ഒരു കാരണ വശാലും മാതാപിതാക്കളുടെ അഭിപ്രായങ്ങൾ തങ്ങളുടെ മകന്റേയോ/ മകളുടേയോ അഭിപ്രായങ്ങളായി നൽകരുത്.

1	ഞാൻ ആഗ്രഹിക്കുന്ന സമയങ്ങളിൽ കൂട്ടുകാരെ ലഭിക്കാറുണ്ട്	A. എല്ലായ്പ്പോഴും B. ചിലപ്പോഴൊക്കെ C. ഒട്ടുമില്ല
2	എന്റെ സുഹൃത്തുക്കൾ എന്നെ സഹായിക്കാറുണ്ട്	A. എല്ലായ്പ്പോഴും B. ചിലപ്പോഴൊക്കെ C. ഒട്ടുമില്ല
3	എനിക്ക് ബുദ്ധിമുട്ടാകുമ്പോൾ എന്റെ സുഹൃത്തുക്കളെ ആശ്രയിക്കാം	A. എല്ലായ്പ്പോഴും B. ചിലപ്പോഴൊക്കെ C. ഒട്ടുമില്ല
4	എന്റെ സന്തോഷവും സങ്കടവും പങ്ക് വെക്കാവുന്ന സുഹൃത്തുക്കൾ എനിക്ക് ഉണ്ട്	A. എല്ലായ്പ്പോഴും B. ചിലപ്പോഴൊക്കെ C. ഒട്ടുമില്ല

**വ്യക്തിഗത വിവരങ്ങൾ**

പേര്:	
വയസ്:	ലിംഗം:
രക്ഷിവിന്റെ പേര്:	ജില്ല:
വൈകല്യശതമാനം (മെഡിക്കൽ ബോർഡ് സർട്ടിഫിക്കറ്റ് പ്രകാരം):	



**APPENDIX 6**  
**DEPARTMENT OF PSYCHOLOGY**  
**UNIVERSITY OF CALICUT**

**18നം 25 വയസ്സിനും ഇടയിൽ പ്രായമുള്ള ബുദ്ധിവികാസവൈകല്യമുള്ളവരുടെ സാമൂഹ്യ ഉൾചേർച്ചയെ സംബന്ധിച്ച പഠനം**

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**Interview Guideline**  
**Phase 2**

18നം 25 വയസ്സിനും ഇടയിലുള്ള ബുദ്ധിവികാസവൈകല്യമുള്ളവരുടെ സാമൂഹ്യപങ്കാളിത്തം സാമൂഹ്യഉൾചേർച്ച എന്നിവയെക്കുറിച്ചുള്ള പഠനം നടത്തുന്നു. ഇതിൽ താഴെ പറയുന്ന മേഖലയിൽ താങ്കളുടെ അഭിപ്രായം പങ്കുവെക്കാൻ താല്പര്യപ്പെടുന്നു.

- ചോദ്യം 1 : 18 വയസ്സിനും 25 വയസിനും ഇടയിലുള്ള ബുദ്ധിവികാസ വൈകല്യമുള്ളവർ ആരോഗ്യപരമായ വ്യക്തി ബന്ധങ്ങളും സാമൂഹ്യ ഇടപെടലുകളും സാമൂഹ്യ ഉൾചേർച്ചയും ഉണ്ടാവേണ്ടതുണ്ട്, പക്ഷേ ഇതിന് തടസ്സമാകുന്നവ എന്തെല്ലാമാണ്? വിശദീകരിക്കാമോ? ( കുടുംബപരമായ കാരണങ്ങൾ, സാമൂഹ്യപരമായ കാരണങ്ങൾ).
- ചോദ്യം 2 : ഇവരുടെ ആരോഗ്യപരമായ സാമൂഹ്യ പങ്കാളിത്തവും സാമൂഹിക ഉൾചേർച്ചയും ഉറപ്പുവരുത്തുവാൻ എന്തെല്ലാം മാർഗ്ഗങ്ങൾ കൈക്കൊള്ളണം എന്നാണ് താങ്കളുടെ അഭിപ്രായം?
- ചോദ്യം 3 : ഇവരുടെ ആരോഗ്യപരമായ സാമൂഹ്യ പങ്കാളിത്തവും സാമൂഹിക ഉൾചേർച്ചയും ഉണ്ടായാൽ വ്യക്തി തലത്തിലും കുടുംബത്തിലും സമൂഹത്തിലും ഉള്ള ഗുണങ്ങൾ എന്തെല്ലാമാണ് ആണ്? വിശദീകരിക്കാമോ?



**APPENDIX 7**

Final 18 item scale

**DEPARTMENT OF PSYCHOLOGY**

**UNIVERSITY OF CALICUT**

**Attitude towards person with intellectual disability scale**

**ബുദ്ധിപരമായവെല്ലുവിളികൾ നേരിടുന്ന വ്യക്തിയോടുള്ള മനോഭാവം**

ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്നവരെ നിങ്ങൾക്ക് പരിചയം കാണുമല്ലോ. അവരുടെ സാമൂഹ്യജീവിതവുമായി ബന്ധപ്പെട്ട ചിലകാര്യങ്ങൾ മനസ്സിലാക്കുന്നതിന് വേണ്ടിയാണ് ഈ ചോദ്യാവലി തയ്യാറാക്കിയത്. ഓരോ പ്രസ്താവനയും ശ്രദ്ധാപൂർവ്വം വായിച്ച് താങ്കളുടെ മറുപടി രേഖപ്പെടുത്തുക. നിങ്ങളുടെ പ്രതികരണം രഹസ്യമായി സൂക്ഷിക്കും. ഗവേഷണ ആവശ്യത്തിനമാത്രമേ ഉപയോഗിക്കുകയുള്ളൂ

Note: ഈ ചോദ്യാവലി ബുദ്ധിപരമായ വെല്ലുവിളികൾ (Intellectual disability) നേരിടുന്ന 18നും 25നും ഇടയിൽ പ്രായമുള്ളവർ കുറിച്ചാണ്, താഴെപ്പറയുന്ന പ്രസ്താവനകളിൽ “ഇവരുടെ / ഇവരെ” എന്ന് സൂചിപ്പിക്കുന്നത് ബുദ്ധിപരമായ വെല്ലുവിളികൾ ഉള്ളവരെ വരെ കുറിച്ചാണ്

	പ്രസ്താവനകൾ	യോജിക്കുന്നു	അറിയില്ല	വിയോജിക്കുന്നു
1	ഇവരെ പൊതുവിദ്യാലയങ്ങളിൽ ചേർത്ത് പരിശീലിപ്പിക്കുന്നത് അഭികാമ്യമല്ല.	1	2	3
2	ഇവരിൽ നിന്നും മറ്റുള്ളവർ കൂടുതലൊന്നും പ്രതീക്ഷിക്കരുത്.	1	2	3
3	സമൂഹത്തിൽ നടക്കുന്ന വിവിധപ്രവർത്തനങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തുന്നത് ഗുണകരമല്ല.	1	2	3
4	ഇവർക്ക് ധാരാളം ആനുകൂല്യങ്ങൾ ലഭിക്കുന്നതിനാൽ ഇവരുടെ കഴിവിനനുസരിച്ച് പോലും സ്വന്തമായി ജോലി ചെയ്യുവാൻ ശ്രമിക്കുന്നില്ല.	1	2	3
5	സാമൂഹ്യസാഹചര്യങ്ങളിൽ ഇവരുമായി ഇടപെടുന്നതിന് എനിക്ക് താല്പര്യം കുറവാണ്.	1	2	3
6	സമൂഹത്തിന്റെ മുഖ്യധാരയിലേക്ക് ഇവരെ എത്തിക്കുക എന്നുള്ളത് ഒരു വിഹല ശ്രമമാണ്.	1	2	3
7	ഇവർക്ക് മറ്റുള്ളവരെ അപേക്ഷിച്ച് പ്രതീക്ഷകൾ കുറവാണ്.	1	2	3

8	ഇവർക്ക് ആവശ്യത്തിൽ കൂടുതൽ പരിഗണന സമൂഹത്തിൽ നിന്നുലഭിക്കുന്നുണ്ട്	1	2	3
9	സാമൂഹ്യസാഹചര്യങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തുവാൻ ഞാൻ കാര്യമായി ശ്രമിക്കാറില്ല.	1	2	3
10	സ്കൂളുകളിലെ പഠനപ്രവർത്തനങ്ങളുടെ ഭാഗമായുള്ള ഗ്രൂപ്പ് പ്രവർത്തനങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തിയാൽ കാര്യങ്ങൾ അവതാളത്തിൽ ആയേക്കാം.	1	2	3
11	നമ്മൾ ഇവരുടെ ഭാവിയെക്കുറിച്ച് ശുഭാപ്തിവിശ്വാസമോ പ്രതീക്ഷയോ പുലർത്തേണ്ടതില്ല	1	2	3
12	ഇവർക്ക് സ്വന്തം വൈകല്യാവസ്ഥകാരണം ആവശ്യത്തിലധികം ആനുകൂല്യങ്ങൾ ലഭിക്കുന്നു.	1	2	3
13	ഇവരെ സമൂഹത്തിൽ സ്വതന്ത്രമായി ഇറക്കിവിട്ടാൽ പലബുദ്ധിമുട്ടുകളും ഉണ്ടാവാറുണ്ട്.	1	2	3
14	ഇവരെ സമപ്രായക്കാരുമായുള്ള സൗഹൃദബന്ധം സ്ഥാപിക്കാൻ അധികം പ്രോത്സാഹിപ്പിക്കേണ്ടതില്ല.	1	2	3
15	ഇവർസമൂഹത്തിന് ഒരു ബാധ്യതയും ഭാരവും ആണ്	1	2	3
16	ഇവരെ എതിർലിംഗക്കാരുമായി സൗഹൃദബന്ധം ഉണ്ടാക്കുവാൻ അധികം പ്രോത്സാഹിപ്പിക്കേണ്ടതില്ല.	1	2	3
17	ഇവർക്ക് നിലവിൽ ലഭിച്ചുകൊണ്ടിരിക്കുന്ന ആനുകൂല്യങ്ങൾ അവരെ കൂടുതൽ പരാശ്രിതരാക്കുന്നു.	1	2	3
18	ബുദ്ധിപരമായ വെല്ലുവിളികൾ ഉള്ളവരുമായി സൗഹൃദം സ്ഥാപിക്കാൻ എനിക്ക് താല്പര്യം കുറവാണ്.	1	2	3

നിങ്ങളുടെ വ്യക്തിഗത വിവരങ്ങൾ

<p><b>നിങ്ങളുടെ വയസ്:</b> <input type="checkbox"/> സ്ത്രീ <input type="checkbox"/> പുരുഷൻ</p>
<p><b>നിങ്ങളുടെ വിദ്യാഭ്യാസം :</b> <input type="checkbox"/> SSLC താഴെ <input type="checkbox"/> SSLC to +12 <input type="checkbox"/> ബിരുദം <input type="checkbox"/> ബിരുദത്തിന് മുകളിൽ</p>
<p><b>ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്നവരെ നിങ്ങൾക്ക് പരിചയം എങ്ങിനെ?</b> (അനുയോജ്യമായത് ടിക്ക് ചെയ്യുക)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> നേരിട്ട് പരിചയം ഇല്ല</li> <li><input type="checkbox"/> നേരിട്ട് പരിചയമില്ലെങ്കിലും സമൂഹത്തിൽ പലപ്പോഴും ഇവരുമായി ഇടപഴകിയിട്ടുണ്ട്</li> <li><input type="checkbox"/> ഭിന്നശേഷി പുനരധിവാസമേഖലയിലെ പ്രഫെഷണൽ ആണ്</li> <li><input type="checkbox"/> വീട്ടിൽ /ബന്ധുവീട്ടിൽ ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്നവരുണ്ട്</li> </ul>

**APPENDIX 8**

**DEPARTMENT OF PSYCHOLOGY  
UNIVERSITY OF CALICUT**

**Attitude towards person with intellectual disability scale (Draft)**

**ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്ന വ്യക്തിയോടുള്ള മനോഭാവം**

**(36 item)**

ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്നവരെ നിങ്ങൾക്ക് പരിചയം കാണമല്ലോ. അവരുടെ സാമൂഹ്യ ജീവിതവുമായി ബന്ധപ്പെട്ട ചില കാര്യങ്ങൾ മനസ്സിലാക്കുന്നതിന് വേണ്ടിയാണ് ഈ ചോദ്യാവലി തയ്യാറാക്കിയത്. ഓരോ പ്രസ്താവനയും ശ്രദ്ധാപൂർവ്വം വായിച്ച് താങ്കളുടെ മറുപടി രേഖപ്പെടുത്തുക. നിങ്ങളുടെ പ്രതികരണം രഹസ്യമായി സൂക്ഷിക്കും. ഗവേഷണ ആവശ്യത്തിനു മാത്രമേ ഉപയോഗിക്കുകയുള്ളൂ

Note: ഈ ചോദ്യാവലി ബുദ്ധിപരമായ വെല്ലുവിളികൾ (Intellectual disability) നേരിടുന്ന 18 നും 25 നും ഇടയിൽ പ്രായമുള്ളവർക്കു കഠിനമാണ്, താഴെപ്പറയുന്ന പ്രസ്താവനകളിൽ “ഇവരുടെ/ഇവരെ” എന്ന് സൂചിപ്പിക്കുന്നത് ബുദ്ധിപരമായ വെല്ലുവിളികൾ ഉള്ളവരെക്കുറിച്ചാണ്.

പ്രസ്താവനകൾ	യോജിക്കുന്നു	അറിയില്ല	വിയോജിക്കുന്നു
1. ബുദ്ധിപരമായ വെല്ലുവിളികൾ ഉള്ളവരുമായി സൗഹൃദം സ്ഥാപിക്കാൻ എനിക്ക് താല്പര്യം കുറവാണ്.	1	2	3
2. ഇവരെ പൊതുവിദ്യാലയങ്ങളിൽ ചേർത്ത് പരിശീലിപ്പിക്കുന്നത് അഭികാമ്യമല്ല.	1	2	3
3. ഇവർക്ക് സ്വന്തം വൈകല്യവസ്ഥ കാരണം ആവശ്യത്തിലധികം ആനുകൂല്യങ്ങൾ ലഭിക്കുന്നു	1	2	3
4. ഇവർക്ക് സൗഹൃദബന്ധം സ്ഥാപിക്കാൻ ആവശ്യമായ അവസരങ്ങൾ സമൂഹത്തിൽ കൂടുതൽ ഉണ്ടാകേണ്ടത് അത്യാവശ്യമാണ്.	1	2	3
5. സാമൂഹ്യ സാഹചര്യങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തുവാൻ ഞാൻ മറ്റുള്ളവരെ പ്രോത്സാഹിപ്പിക്കാറുണ്ട്.	1	2	3
6. ഇവരെ പ്രത്യേക സ്ഥാപനങ്ങളിൽ ആക്കി വിദഗ്ധരുടെ നിയന്ത്രണത്തിൽ ചിട്ടയായ പരിപാലനവും പരിശീലനവുമാണ് നൽകേണ്ടത്.	1	2	3
7. ഇവരിൽനിന്നും മറ്റുള്ളവർ കൂടുതലൊന്നും പ്രതീക്ഷിക്കരുത്.	1	2	3
8. സാമൂഹ്യ സാഹചര്യങ്ങളിൽ ഇവരുമായി ഇടപെടുന്നതിന്	1	2	3

എനിക്ക് താല്പര്യം കുറവാണ്.			
9. ഇവരുടെ സുരക്ഷ ഉറപ്പുവരുത്തുവാൻ ഇവരെ വീട്ടിൽതന്നെ സംരക്ഷിക്കേണ്ടതാണ്.	1	2	3
10. ഇത്തരക്കാരെ കുറിച്ചുള്ള തമാശകൾ ഞാൻ ആസ്വദിക്കാറുണ്ട്.	1	2	3
11. ഇവർ സമൂഹത്തിന് ഒരുബാധ്യതയും ഭാരവും ആണ്	1	2	3
12. ഇവരുടെ രക്ഷിതാക്കൾക്ക് അവരുടെ മറ്റു ജീവിത പ്രശ്നങ്ങൾ നിസ്സാരമായി കാണാൻ കഴിയുന്നു.	1	2	3
13. ഇവർക്ക് ധാരാളം ആനുകൂല്യങ്ങൾ ലഭിക്കുന്നതിനാൽ ഇവരുടെ കഴിവിനനുസരിച്ച് പോലും സ്വന്തമായി ജോലി ചെയ്യുവാൻ ശ്രമിക്കുന്നില്ല.	1	2	3
14. ഇവരെ സമൂഹത്തിൽ സ്വതന്ത്രമായി ഇറക്കിവിട്ടാൽ പലബുദ്ധിമുട്ടുകളും ഉണ്ടാവാറുണ്ട്.	1	2	3
15. ഇവരുടെ ബുദ്ധിമുട്ടുകൾ ഞാൻ പലപ്പോഴും ഗൗരവത്തിൽ കാണാൻ ശ്രമിക്കാറുണ്ട്.	1	2	3
16. ഇവരെ സഹായിക്കുക എന്നുള്ളത് സമൂഹത്തിന്റെ ബാധ്യത എന്നതിലുപരി ഒരു ജീവകാരുണ്യ പ്രവർത്തനം ആണ്.	1	2	3
17. സ്കൂളുകളിലെ പഠന പ്രവർത്തനങ്ങളുടെ ഭാഗമായുള്ള ഗ്രൂപ്പ് പ്രവർത്തനങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തിയാൽ കാര്യങ്ങൾ അവതാളത്തിൽ ആയേക്കാം	1	2	3
18. ഇവർക്ക് സൗഹൃദബന്ധം സൃഷ്ടിക്കാൻ ആവശ്യമായ അവസരങ്ങൾ സമൂഹത്തിൽ വേണ്ടത്ര ഉണ്ടാകേണ്ടത് അത്യാവശ്യമാണ്.	1	2	3
19. ഇവരുമായുള്ള എന്റെ സൗഹൃദങ്ങൾ കാരണം മറ്റുള്ളവർ എന്നെയും ബുദ്ധിപരമായ വെല്ലുവിളിയുള്ളയാളായി കരുതാം.	1	2	3
20. ഇവരെ സമപ്രായക്കാരുമായുള്ള സൗഹൃദ ബന്ധം സ്ഥാപിക്കാൻ അധികം പ്രോത്സാഹിപ്പിക്കേണ്ടതില്ല.	1	2	3
21. നമ്മൾ ഇവരുടെ ഭാവിയെ കുറിച്ച് ശുഭാപ്തി വിശ്വാസമോ പ്രതീക്ഷയോ പുലർത്തേണ്ടതില്ല	1	2	3
22. ഇന്നത്തെ സമൂഹത്തിൽ ഇവരുടെ പ്രശ്നങ്ങൾ പെരുപ്പിച്ച് കാണിക്കുന്ന പ്രവണതയുണ്ട്.	1	2	3
23. സാമൂഹ്യ സാഹചര്യങ്ങളിൽ പ്രശ്നങ്ങൾ സൃഷ്ടിക്കാതെ ഇവരെ പരിപാലിക്കേണ്ടത് ഇവരുടെ രക്ഷിതാക്കളുടെ ഉത്തരവാദിത്വമാണ്.	1	2	3
24. ഇവർക്ക് ലൈംഗികവിദ്യാഭ്യാസം നൽകേണ്ടതില്ല	1	2	3
25. ഇവർക്ക് ആവശ്യത്തിൽ കൂടുതൽ പരിഗണന സമൂഹത്തിൽ നിന്ന് ലഭിക്കുന്നുണ്ട്	1	2	3
26. ഇവരുടെ വിവാഹം ജീവിതം സ്വന്തം ഇഷ്ടപ്രകാരം നയിക്കുവാൻ പ്രോത്സാഹിപ്പിക്കേണ്ടതാണ്.	1	2	3



27. ബുദ്ധിപരമായ വെല്ലുവിളികൾ ഉള്ളവരുടെ രക്ഷിതാക്കൾക്ക് ഏത് പ്രതിസന്ധിയെയും നേരിടാൻ ഉള്ള കഴിവുണ്ട്.	1	2	3
28. ഇവരോട് ആളുകൾ അസഹിഷ്ണുത കാണിക്കുന്നതിൽ അസ്വാഭാവികതയൊന്നുമില്ല.	1	2	3
29. സമൂഹത്തിന്റെ മുഖ്യധാരയിലേക്ക് ഇവരെ എത്തിക്കുക എന്നുള്ളത് ഒരുവിഹലശ്രമമാണ്.	1	2	3
30. ഇവരുടെ രക്ഷിതാക്കൾക്ക് പ്രത്യേക പരിഗണനയോ അനുകൂല്യങ്ങളോ നൽകേണ്ടതില്ല.	1	2	3
31. സമൂഹത്തിൽ നടക്കുന്ന വിവിധ പ്രവർത്തനങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തുന്നത് ഗുണകരമല്ല.	1	2	3
32. ഇവരെ എതിർ ലിംഗക്കാരുമായി സൗഹൃദബന്ധം ഉണ്ടാക്കുവാൻ അധികം പ്രോത്സാഹിപ്പിക്കേണ്ടതില്ല.	1	2	3
33. ഇവർക്ക് മറ്റുള്ളവരെ അപേക്ഷിച്ച് പ്രതീക്ഷകൾ കുറവാണ്.	1	2	3
34. ഇവർക്ക് നിലവിൽ ലഭിച്ചുകൊണ്ടിരിക്കുന്ന ആനുകൂല്യങ്ങൾ അവരെ കൂടുതൽ പരാശ്രിതരാക്കുന്നു.	1	2	3
35. ഇവരുടെ ചെറിയ വൈകാരിക ആവശ്യങ്ങൾ പോലും ഗൗരവത്തിൽ കാണേണ്ടതുണ്ട്	1	2	3
36. സാമൂഹ്യ സാഹചര്യങ്ങളിൽ ഇവരെ ഉൾപ്പെടുത്തുവാൻ ഞാൻ കാര്യമായി ശ്രമിക്കാറില്ല.	1	2	3

**നിങ്ങളുടെ വ്യക്തിഗത വിവരങ്ങൾ**

<b>നിങ്ങളുടെ വയസ്:</b> <input type="checkbox"/> സ്ത്രീ <input type="checkbox"/> പുരുഷൻ
<b>നിങ്ങളുടെ വിദ്യാഭ്യാസം :</b> <input type="checkbox"/> SSLC താഴെ <input type="checkbox"/> SSLC to +12 <input type="checkbox"/> ബിരുദം <input type="checkbox"/> ബിരുദത്തിന് മുകളിൽ
<b>ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്നവരെ നിങ്ങൾക്ക് പരിചയം എങ്ങിനെ?</b> (അനുയോജ്യമായത് ടിക്ക് ചെയ്യുക) <input type="checkbox"/> നേരിട്ട് പരിചയം ഇല്ല <input type="checkbox"/> നേരിട് പരിചയമില്ലെങ്കിലും സമൂഹത്തിൽ പലപ്പോഴും ഇവരുമായി ഇടപഴകിയിട്ടുണ്ട് <input type="checkbox"/> ഭിന്നശേഷി പുനരധിവാസമേഖലയിലെ പ്രഫെഷണൽ ആണ് <input type="checkbox"/> വീട്ടിൽ /ബന്ധുവീട്ടിൽ ബുദ്ധിപരമായ വെല്ലുവിളികൾ നേരിടുന്നവരുണ്ട്



# APPENDIX 9

## PUBLICATION

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### Development and Standardisation of a Scale on Attitude towards Persons with Intellectual Disabilities-AT-PID

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Attitude of community members toward the person with intellectual disability affect the social life and community integration person with intellectual disability. Their Negative attitudes toward people with intellectual disabilities have remained relevant as these would act as a barrier to social, educational, and vocational integration as a result of discrimination and stigma. The objective of the present study is to develop and standardize a scale to understand community member's attitudes toward person with intellectual disability. The Attitude towards person with intellectual disability scale(AT-PIDS), consisting 36 items was administered to 360 participants from community members for pilot study and for finding factor structure through EFA. Another sample of 400 persons attempted the final 18 items scale to validate the four-factor structure through CFA. AT-PID yielded a four-factor structure as a first-order factor model of attitude. The four factors are Factor-1: Inclusion; Factor-2: Expectation; Factor-3: Interdependency; and Factor-4: Acceptance. CFA confirms that F-1, F-2, F-3, and F-4 are the first-order factors and overall attitude towards the person with intellectual disability as the second-order factor. The scale had good internal consistency with Cronbach's alpha coefficients ranging from 0.6 to 0.7 for the four factors and 0.79 for the overall scale. The AT-PIDS can be used to measure the attitude of the general population towards the intellectually disabled, allows comparisons over time for target service provision and public awareness programmes, and helps develop various intervention strategies for de-stigmatising ID

*Keywords:* attitude, person with intellectual disability, scale construction

Person with intellectual disability were often marginalized and mistreated, and they were considered a burden to their families (AL-Krenawi et al., 2011). However, in recent years due to the Government's new disability policies, there is an increasing push toward deinstitutionalisation and a recognition that people with disabilities deserve to live in the same community as those without disabilities, and as a matter of fact, "social inclusion" is discussed more (Narayan & John, 2017). Yet, attitudes and stigma surrounding disability, therefore, have long been considered an important part of the experience of having a disability by members of this community. Mainly because this has led to prejudice, discrimination, and negative attitudes toward people who are perceived as different from us (Barr & Bracchitta, 2014; Wang et al., 2021).

Attitude is one's judgment about a person, group, object, or idea and how he evaluates things (Becker, 1938). Attitude can create or remove barriers to the lives of persons with disabilities. People with disabilities are a significant minority group around the world, but their issues are rarely discussed in academic or public discourse. They often experience discrimination and social exclusion (e.g., Bonaccio et al., 2020). Multiple studies (e.g., Gill et al., 2002 ; Sharac et al., 2010) reported that negative attitude towards person with disability is one of

the main potential barriers to their empowerment and hamper achievement to full potential. As disability is a heterogeneous group of minorities, attitude towards a specific groups of persons with disabilities differ. Many studies (e.g., Verdonschot et al., 2009; Ashman et al., 1996; Buttimer et al., 2015) have reported that person with intellectual disability often experience high levels of social exclusion and poor participation in community activities compared to other types of disabilities, it may be due to prevailing negative attitude towards the person with intellectual disability. In comparison to other types of disability, the person with intellectual disability often experiences social isolation and loneliness, as they require constant support to access social opportunities and face both physical and attitudinal barriers (Gilmore et al., 2014) they frequently experience social isolation and loneliness because they require constant support to access social opportunities and face both physical and psychological barriers (Gilmore et al., 2014). Due to these negative attitudes, their chances of social interaction (which is a less developed skill among them) are affected and social skill development may decline. So, the disabled person may avoid chances of interaction.

Attitude towards persons with intellectual disability can vary across cultures (Scior, 2011). The exploration of various factors influencing the formation of attitudes towards the person with intellectual disability could help to design required intervention strategies to address the negative attitude. In this background, it is highly necessary to know the attitude of the public towards the intellectually disabled from the Kerala scenario. So, it will be helpful to develop appropriate awareness programmes and policies by the Govt. Hence, there is a need to develop standardized, cultural specific tools to measure the attitude towards Person with intellectual disability in a regional language (i.e., Malayalam). So, in this article, the development and standardization of Attitude towards person with intellectual disability scale is discussed. It includes preliminary analysis, EFA, and CFA.

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## Method

### Participants

Participants of this study were 360 persons from the general population of Kerala and included both males (155) and females (205) with varying socio-demographic characteristics. Among the total sample, 19 (5%) had education below 10th Std., 136 (38%) with 10th Std. to plus two qualifications, 121 (35%) with graduation, and 84 (23%) with above graduation qualification.

### Measures

Attitude towards person with intellectual disability scale (AT-PID) consisted of 36 items in the Malayalam language. Instructions and informed consent were clearly printed on the top of the scale. Using a 3-point Likert scale, participants were to indicate the extent to which they agree with statements describing their attitude towards person with intellectual disability. Participants took less than 20 minutes to respond to the statements.

*Personal Data Sheet:* Personal data sheet was used to collect information like age, sex, educational status, and relationship with person with Intellectual disability (if any).

*Preparation of Items (Writing Items):* In this study researcher adopted the protocol of self-report inventory for designing, administration, scoring, and interpretation of the scale. Based on the conceptual understanding, definitions and review of literature in the area of attitude towards person with disability, the researcher had prepared items in the regional language (Malayalam). The response category of the instrument is 3 point Likert type (Agreement format). Initially, the researcher prepared 48 items. Every item has been provided 3 response categories namely 'Agree', 'Neutral' and 'Disagree', and the score of each category was 1, 2 and 3 respectively.

After writing items, 48 number initial item pool was reviewed by experts in the field of psychology (Faculty members, professionals & researchers who are well experienced in psychometry) and also to disability advocacy volunteers working in the area of disability empowerment and Rehabilitation. Experts evaluated the items to check how relevant each item is and to what it intends to measure and to include any phenomenon that the investigator failed to include.

*Try Out:* An initial tryout was done on 40 participants from the target population through Google form to find out how they receive, perceive, and respond to each item. The participants did not suggest any corrections and responded that they had no difficulty in responding to the items and could understand the meaning of items without much difficulty.

### Procedure

During the period of conducting the study, covid-19 related protocol was in effect, thus to avoid personal contact, responses had collected through online by using 'Google form'. It was a self-administrative test and typically takes 1520 minutes to fill-up. The Google form had three parts, Part-1 was Informed consent sheet and general instructions, Part-2: Socio-demographic details and Part-3 consisted of Test items (Participants could mark their responses in the respective space provided).

The online link of the Google form was shared to targeted participants through group Email, and Whats App groups along with General instructions. Participation was voluntary and anonymous. After the completion of the test, participant had to submit their

response, and data were stored in Google drive of the investigator. All response sheets stored in Google drive were converted to Excel sheets. Data collection was completed within one month. After completion of the instruments, each response was checked for the omission. Then the scale was scored and coded as per the previously prepared scoring key for further statistical analysis.

## Results and Discussion

This study aims at the construction and standardization of a reliable and valid instrument on the Attitude Towards Person with Intellectual Disability. In order to establish its psychometric properties, the investigator used the following statistical methods for item analysis.

At first, the responses of a total of 360 participants were arranged in ascending order. 27 % of low scorers and 27 % of high scorers were selected as low and high groups respectively. 97 participants ended up as low scorers and another 97 samples were ended up as high scorers.

As a preliminary analysis, the mean of low scorers and high scorers were compared, and items whose mean scores were high for low scorers than high scorers were identified. Thus, items numbered 4 and 24 were eliminated (Table 1). Then, the investigator decided to calculate the item discrimination power of each item using Edward's (1957) method. According to this method, the 't value' greater than 2.58 indicates a good discriminating power, and such items were selected. Thus, based on the above criterion from Table 1, items with t values of less than 2.58 were rejected. Rejected item numbers are 10, 18, 26, and 30. After deleting these items the total score for each participant was calculated. Then corrected item-total correlation (Point Biserial Correlation) was also calculated. The best criterion for including an item in the test is that it should have a corrected item-total correlation of 0.25 or above. Based on the above criterion, item number 5,6,12,15,16, 22, 27, and 35 were rejected. Thus, a total of 14 items were marked for deletion from the initial 36 items. Finally, a total of 22 items were accepted.

The remaining 22 items were analysed for factor structure by the principal component method and Varimax rotation with Kaiser Normalization. The details of the factor analysis are presented in Table 2. Initially, the factorability of 22 AT-PID items was examined through the Kaiser-Meyer-Olkin measure of sampling adequacy. The value of this test was found to be 0.747. Bartlett's test of sphericity was found significant with  $p < 0.001$ .

From the initial factor analysis, eigen values indicated that the first four factors explained 21%, 8%, 7%, and 6% of the variance, respectively all with eigenvalues greater than 1). The fifth and sixth factors explained 5% and 4% of the variance, respectively.

The four-factor solution, which explained 42% of the variance, was preferred because of: (a) its previous theoretical support; (b) the 'leveling off' of eigen values on the scree plot after four factors (Figure-1); and (c) the insufficient number of primary loadings and difficulty of interpreting the fifth factor and subsequent factors.

A total of four items 28, 9, 19, and 23 were eliminated because they did not contribute to a simple factor structure and failed to meet the minimum criteria of having a primary factor loading of .45 or above. All the items in the scale satisfied the criteria of the factor loading, and hence it was decided to keep all 18 items in the scale. The final factor solution is presented in Table 2 and Table 3. The four factors now together explain 32% of the total variance.

**Table 1**  
*Item Statistics (Item Total Correlation and Discriminating Index)*

Item No	Low score group		High score group		t value n=108	Corrected item total correlation
	Mean	SD	Mean	SD		
Item 1	2.13	.902	2.92	.269	7.900	.404
Item 2	1.60	.845	2.74	.628	9.929	.381
Item 3	2.23	.808	2.74	.628	7.602	.396
Item 4*	2.98	.148	2.98	.211	-	
Item 5*	2.71	.640	2.92	.308	3.003	.155
Item 6*	1.21	.571	1.80	.877	5.336	.180
Item 7	1.63	.827	2.68	.650	8.790	.353
Item 8	2.49	.811	3.00	.000	6.025	.360
Item 9	2.02	.936	2.80	.545	7.223	.350
Item 10*	2.64	.724	2.87	.479	2.534	.149
Item 11	2.80	.502	3.00	.000	3.762	.245
Item 12*	1.64	.798	2.16	.748	3.847	.139
Item 13	2.30	.800	2.84	.394	6.038	.271
Item 14	1.39	.665	2.52	.722	11.664	.426
Item 15*	2.64	.724	2.94	.313	3.212	.137
Item 16*	1.01	.105	1.22	.595	3.297	.166
Item 17	1.99	.828	2.82	.488	8.508	.460
Item 18*	2.94	.275	2.98	.211	.912	.035
Item 19	2.50	.783	2.89	.316	4.490	.262
Item 20	2.32	.832	2.96	.207	7.154	.379
Item 21	1.52	.622	2.50	.604	10.951	.402
Item 22*	1.84	.806	2.51	.797	5.199	.175
Item 23	1.39	.730	2.54	.796	9.464	.350
Item 24*	1.41	.634	1.31	.533	-	
Item 25	2.18	.773	2.91	.356	8.062	.356
Item 26*	2.38	.815	2.62	.646	1.901	.041
Item 27*	1.44	.705	2.04	.792	5.167	.193
Item 28	2.06	.879	2.88	.392	7.943	.393
Item 29	2.22	.818	2.93	.328	7.488	.443
Item 30*	2.70	.644	2.88	.392	2.353	.114
Item 31	2.27	.884	2.96	.207	7.163	.482
Item 32	2.02	.779	2.88	.362	10.009	.471
Item 33	1.59	.701	2.54	.656	9.467	.412
Item 34	2.12	.805	2.72	.520	6.806	.279
Item 35*	2.72	.600	2.90	.337	2.710	.068
Item 36	1.88	.934	2.79	.551	8.135	.337

Note. \* Rejected items

**Table 2**  
*Exploratory Factor Analysis of AT-PID Scale*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.114	14.206	14.206	5.114	14.206	14.206	3.746	10.406	10.406
2	2.570	7.139	21.345	2.570	7.139	21.345	2.849	7.913	18.319
3	2.133	5.925	27.270	2.133	5.925	27.270	2.591	7.196	25.515
4	1.792	4.977	32.247	1.792	4.977	32.247	2.423	6.732	32.247

**Table 3**  
*Rotated Component Matrix of AT-PID Scale*

Items	Components			
	1	2	3	4
AD31	.751			
AD29	.636			
AD20	.558			
AD32	.528			
AD17	.504			
AD21		.720		
AD33		.684		
AD14		.672		
AD7		.559		
AD2		.548		
AD13			.745	
AD34			.696	
AD3			.602	
AD25			.472	
AD8				.785
AD36				.605
AD1				.591
AD11				.472

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Further investigators named these derived four factors as follows

**Factor-1 is Inclusion:** The five items in this factor focus on the inclusion of Person with intellectual disability in the various part of community activities.

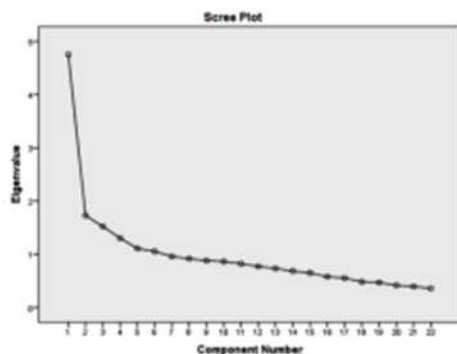
**Factor-2 is Expectation:** The five items under the second factor assess the level of expectation and hope of community members towards person with intellectual disability.

**Factor-3 is Independency:** The four items under the third-factor focus on the attitude of community members related to how much the person with intellectual disability is independent by not depending on a normal person.

**Factor-4 is Acceptance:** Four items under the last factor focus on the readiness of a person to accept a person with intellectual disability as a fellow being and friend.

**Figure 1**

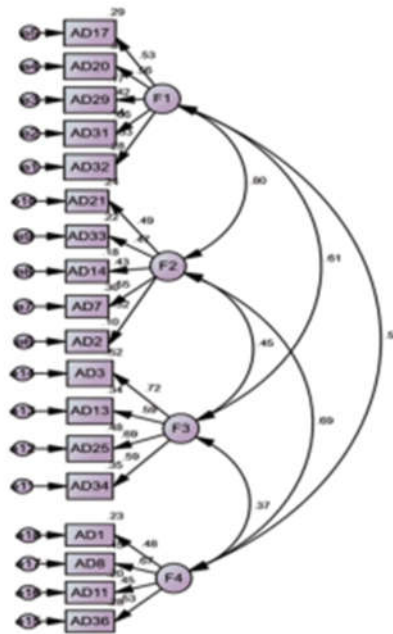
*Screen Plot for 22 AT-PID Scale*



This factor structure explains that F-1, F-2, F-3, and F-4 are first-order factors and Attitude towards person with intellectual disability as the second-order factor. A Confirmatory factor analysis (CFA) was carried out, and the results are presented in Figure 2 and Table 4. For the CFA, the questionnaire was completed by a total of 400 adults, 47% were men and 53% were women of the age range of 18 to 63. And all belonged to Kerala  
Screen plot for 22 AT-PID scale

**Figure 2**

*Confirmatory Factor Analysis of Attitude towards Person with Intellectual Disability Scale*



Note: F1:Inclusion, F2: Expectation F3:Independency F3: Acceptance

**Table 4**

*Goodness of Fit Indices for Four-Factor Structural Equation Model (SEM) of AT-PID Scale*

$\chi^2$	p	CMIN/DF	RMSEA	CFI	GFI
262.459	.000	2.035	0.065	0.838	0.896

Note: CMIN=Relative chi-square, RMSEA=Root Mean Square Error Approximation, CFI=Comparative Fit Index & GFI= Goodness of Fit Index

From Table 4, it can be seen that the overall model fit appears quite good, the value of chi-square was measured, which was 262.459 with  $p = 0.000$ , being statistically significant. CMIN/DF was 2.035, so it shows a good fit when the value is below 3.0. The CFI and the GFI have a range of 0 to 1, considering these values more valid when they are closer to one. In addition, the value of RMSEA is considered to indicate a good fit to the model if it is less

than 0.08 (Kline, 2005). In the study, the CFI was 0.838, the GFI was 0.896, and the RMSEA that was obtained was 0.065. Thus, based on Figure 2 and Table 4, it is concluded that the data show a reasonable fit for the hypothetical model.

In the draft scale, there were 36 items, and these item numbers

were used throughout the analysis process. The serial number of the items in the just-identified model was not continuous; hence the items were re-numbered and arranged from item one (1) to eighteen (18). The initial item number and newly assigned serial number (final item number), mean, SD, and variance of each item are presented in Table 6

**Table 5**  
*Initial Item Number, Final Item Number, and Descriptive Statistics of Each Item in the Self-Confidence Scale*

Initial Item Number	Final Item Number	N	Mean	S.D.	Variance
Item-2	Item-1	400	2.16	.939	.882
Item-7	Item-2	400	2.21	.903	.816
Item-31	Item-3	400	2.76	.598	.358
Item-13	Item-4	400	2.57	.660	.435
Item-8	Item-5	400	2.79	.563	.317
Item-29	Item-6	400	2.68	.629	.395
Item-33	Item-7	400	2.05	.809	.655
Item-25	Item-8	400	2.56	.685	.469
Item-36	Item-9	400	2.39	.841	.707
Item-17	Item-10	400	2.54	.691	.478
Item-21	Item-11	400	1.94	.763	.582
Item-3	Item-12	400	2.68	.624	.390
Item-14	Item-13	400	1.92	.852	.726
Item-20	Item-14	400	2.69	.613	.375
Item-11	Item-15	400	2.93	.321	.103
Item-32	Item-16	400	2.54	.675	.455
Item-34	Item-17	400	2.44	.702	.492
Item-1	Item-18	400	2.63	.700	.491

**Reliability**

To check the internal consistency of the scale, Cronbach's Alpha was obtained. The test has a coefficient alpha of 0.794 for 18 items on AT-PID. It indicates an acceptable level of internal consistency. The domain coefficient alpha are Inclusion: 0.701, Expectation: 0.702, Independency: 0.62, Acceptances: 0.6.

**Validity**

Present scale has face validity. Content validity is partly obtained by expert review of items in the item writing stage. By performing CFA the construct validity is also established.

**Scoring**

The AT-PID scale is a 3-point scale with categories such as "Agree" (1), "Undecided" (2), and "Disagree" (3). The sum of all item score constitutes the attitude of the individual subject towards person with intellectual disability. The formula for calculating the dimension-wise score is as follows,

*Add scores of items 3,6,10,14, and 16 = Inclusion*

*Add scores of items 1,2,7,1, and 13 = Expectation*

*Add scores of items 4,8,12, and 17 = Independency*

*Add scores of items 5,9,15, and 18 = Acceptances*

**Conclusion**

The objective of the present study was to construct standardize a scale to measure the attitude of Keralite towards intellectually

disabled. No published scale was available for Kerala population. Following the principle of scale construction yielded a four factor (component) 18 item scale which can measure attitude towards intellectually disabled which name as Attitude towards person with intellectual disability scale (AT-PID scale). Confirmatory Factor Analysis (CFA) revealed that the four factor model is a good fit to the data. The AT-PID scale can be used to measure the attitude of Kerala's general population towards the intellectually disabled, allows comparisons over time for target service provision and public awareness programmes, and helps develop various intervention strategies for de-stigmatising person with intellectual disability.

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## APPENDIX 10

### LIST OF PAPER PRESENTATION I SEMINAR AND CONFERENCE

<i>Sl No.</i>	<i>Topic</i>	<i>Date</i>	<i>Organizer</i>
1	Role of Early identification and intervention in the inclusive Curriculum of Children with Developmental Disability	17 <sup>th</sup> to 19 <sup>th</sup> November 2022	SCERT, HQ, Thiruvanthapuram
2	Disability Management during the Covid -19 Pandemic	9 <sup>th</sup> to 11 <sup>th</sup> February 2022	Department of Psychology, University of Calicut.
3	A paradigm shift in Community based Early Identification of Developmental Disabilities- An analysis of CEIISD model of CDMRP.	3 <sup>th</sup> to 5 <sup>th</sup> December 2018	Centre o for Disabilities studies, and The Kerala State higher education council.
4	Sexual well-being, marriage and parenting of Person with Intellectual Disability	22 <sup>th</sup> to 26 <sup>th</sup> August 2018	Directorate of Higher Secondary Education, CG& AC Cell, Govt. Of Kerala
5	Early identification and Intervention of Developmental Disability	7 <sup>th</sup> to 9 <sup>th</sup> October 2016	CDMRP, Department of Psychology, University of Calicut