A Comparative Study of Individuals Attitude towards Intellectual Disability in Rural and Urban Population

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2018

MS
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1/ Mental retardation
2/ Intellectual process
3/ men

"A COMPARATIVE STUDY OF INDIVIDUALS ATTITUDE TOWARDS INTELLECTUAL DISABILITY IN RURAL AND URBAN POPULATION"

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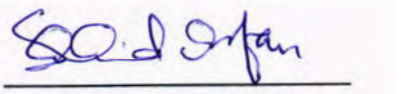

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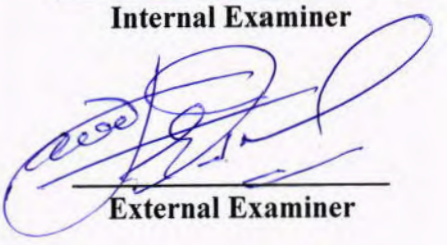

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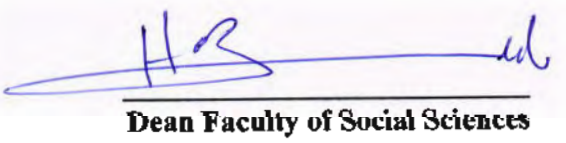

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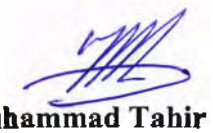
SUPERVISOR CERTIFICATE

Certified that MS Dissertation on "A comparative study of individual's attitude towards intellectual disability in rural & urban population" prepared by Nazar Muhammad has been approved for submission.



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STUDENT DECLARATION

This dissertation is the result of an independent investigation where my work is indebted to others. I declare that is has not been accepted in substance for any other degree, nor is being submitted in candidature for any other degree or examination.

Nazar Muhammad

ACKNOWLEDGMENTS

First of all, I am very thankful to Almighty Allah, who bequeaths his blessing on me for the completion of this research work.

I would like to acknowledge my supervisor Prof. Dr. Muhammad Tahir Khalily who assisted me in the whole process of research accomplishment and encouraged me for self-learning and self-exploration.

I am grateful to all of them who allowed me for data collection, especially all research participants.

I am extremely thankful to my all friends who supported me a lot during my research. Finally, I would like to thank my parents; they remained a constant source of emotional support and affection. Without their prayers, I couldn't be able to accomplish this work.

Nazar Muhammad

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Abstract

Background: The present study intends to assess the attitudes of rural and urban populationtowards the people with intellectual disability. Ultimately, it would result the integrity of community with persons having intellectual disability in order to get the required target services and public awareness program.

Objective: There have been two broader objectives set to achieve for this current study: (1) To evaluate attitudes towards intellectual disability along with affective, cognitive and behavioral dimensions in rural and urban population of Pakistan; (2) to compare attitudes according to characteristics of sample such age, gender, level of education completed, and socio-economic status.

Method: This is a descriptive study using survey method to retrieve the data by applying "Attitudes towards intellectual disability"questionnaire developed by D. Morin et al., in 2012 on the sample of 200. Respondents were adults of age 18 years and/ or above.

Results: Overall pattern of attitudes towards intellectual disability seems identical in term of affective, cognitive and behavioral dimensions, in both rural and urban areas. Moreover, Participants reported more *discomfort* than *sensitivityortenderness*; their responses were neutral on behavioral dimension; and compared to factor of *knowledge of capacity and rights of person with intellectual disability*, they held very little *knowledge of causes of Intellectual disability.*

Conclusion: Study suggested comprehensive awareness campaigns and educational program.

Chapter 1

Introduction

The world is currently changing its rights for people with disabilities. The foundation of the worldwide intense activity of the disability movement was laid in the last two decades particularly.Many governments in different parts of the world are busy in legislation of disability laws within their respective legal systems in order to integrate them with the main-stream. The years of invisibility, removal and insufficiency of basic human rights have already been incorporated in the resolution of the UN General Assembly for 2005, which reinforces the rights of people with disabilities and joining them with public awareness. This resolution deals with human rights for people with intellectual disabilities based on the perspective of international human rights.

By this, it hopes to bolster the discourse in three fundamental ways: first, to spell out unequivocally that physical and mental differences do not license deprivation of inalienable human rights nor justify discriminatory treatment and lesser dignity; second, to supply interdisciplinary and cross-cultural perspectives that are indispensable to create or influence ; and third, to elucidate the tangible "fine line" that domestic and international standards must find to balance the pluralism of opinions within the disability movement, between those who favor segregation or assimilation as ideals, between prevention strategies or claims for diversity, between remediation or habilitation and on questions of capacity versus choice. Ultimately, this leads to keep the norms of equality and respect for human dignity at the forefront of mass thinking. For difference need not mean legal difference, when those with intellectual disabilities are treated as they should be—as human beings who are and could be different but fully equal.

Attitudes and attitude formation

Attitudes can be seen as a set pattern of an individual to think, feel and act in a particular style (favorable or disfavorable) towards a particular object. It could also be classified either into explicit attitudes and implicit attitudes. The first type of attitudes is consciously monitored and accessible, while the other configurations are evaluations that are automatically activated and executed effortlessly or unintentionally (Prestwich, Kenworthy, Wilson & Kwanat, 2008). Several theories have proposed various dual models to explain how these different attitudes influence people under different circumstances (Chaiken, 1980, Brewer, 1988, and Trope, 1986). In general, all such theories seem to share a common principle i.e., to describe a certain object that is executed in two different ways, depending on whether it has a social-emotional and cognitive ability to consciously view the environment or not.

Strack and Deutsch (2004) have proposed a dual-process type model to understand the influence of attitudes on behavior and vice-versa. According to this model, there are two information processing systems: one reflective processing system and the other an impulsive processing system. The reflective processing system consciously takes the relevant information; while the impulsive processing system is always activated and does not require many cognitive skills.It has been observed that the two-processing system are not depending upon one another, rather they work in parallel, depend upon the environmental circumstances and requirements that which system has to prevail and which has to subside and determine the individual's behavior (Stack, & Deutsch, 2004). The reflective system prevails and influence behavior when a person has time to appreciate and consider the consequences of their behavior and motivation. On the other hand, the impulsive system affects behavior if resources are not available (For example, time to consider the consequences of behavior) and / or motivation for them is small (Stack, & Deutsch, 2004) and is closely related to the idea of

spontaneous behavior under the influence of hidden settings (Dovidio, Kawakami, & Gaertner, 2002).

In recent decades, many studies have examined explicit and implicit attitudes via various different ways. One way to do so is by using self-report questionnaire which look at the various parameters and sensitivity, which measure both explicit as well implicit attitudes. It is assumed that self-report type measures include explicit attitude questionnaires and implicit attitude questionnaires. The explicit attitude questionnaires are having an access to conscious evaluations that an individual believes to be true, while the implicit attitude questionnaires access into behaviors which are not conscious and are more like involuntary in nature (Bohner, & Dickel, 2011). Between the measures of both implicit and explicit attitudes is complicated relationship, some researchers suggest factors such as social desirability, cognitive resource availability, and the effect of attitudes on the importance of association among them (Karpinski, Steinman, & Hilton, 2005). It is also suggested that the extent to which a person develops an explicit attitude is also related to it, which indirectly affects the implicit attitude - more development has led to a weaker relationship between implicit and explicit attitudes (Bohner, & Dickel, 2011). In general, due to the complexity of processes and structures, it is natural to examine in depth an implicit attitudes and explicit attitudes.

Association between contact, attitudes and social distance

Social distance indicates the desire of an individual to engage a member of other group in more or less intimate situations (Bogardus, 1959). In the opinion of various researchers, social distance is considered as the parameter of external stigma towards various stigmatized groups, including people with mental health problems and people with learning difficulties Ouellette-Kuntz, Burge, Brown, & Arsenault,.2010; Scior, Addai-Davies, Kenyon, Sheridan,.2013). Contact among members of different social groups helps to reduce prejudices (Allport, 1954). The relationship between contact and attitude is reported in

several other studies. This contact, be it voluntary, intimate, direct and/ or indirect, help to improve negative attitudes (Corrigan, Morris, Michaels, Rafacz, & Rüsch,.2012; Islam, Hewstone,.1993; Pettigrew, Tropp, 2006). This applies to people with intellectual disabilities, with research findings show that those who have more contact with people with disabilities have more favorable explicit attitude to them, but those who are less in contact (Gill, Stenfert Kroese, Rose,.2002; Slevin.1995; Slevin, Sines,.1996; Yazbeck, McVilly, Parmenter,.2004). In addition, it has been reported that contact can reduce the desire for social distance outside of group members (Jorm, Oh,.2009; Ouellette-Kuntz, Burge, Brown, Arsenault,.2010).

The role of emotions in the contact-attitude relationship

Emotions are considered as one of the three main components of attitudes (Swain J, Lawrence,.1994). A number of studies found the significant impact of emotions on attitudes during ethnic interactions (Prestwich, Kenworthy, Wilson, & Kwan-tat,.2008), friendship within the groups (Binder, Zagefka, Brown, Funke, Kessler, & Mummendey A, et al.2009; Turner, Hewstone, Voci,.2007) and among people with as well as without disabilities at school settings (Sirlopú, González, Bohner, Siebler, Ordó□ez, & Millar et al.,2008). Emotional reactions also play an important role in the contact-attitude relationship (Jasinskaja-LahtI, Mäh□nen, Leibkind,.2010; Turner, Hewstone, Voci, Vonofakou,.2008) and the desire for social distance from an out-group (Angermeyer, Holzinger, Matchinger,.2010). Increased communication is connected with less inter-group anxiety and more desirable attitude towards out-group (Jasinskaja-Lahti, Mäh□nen, Leibkind,.2010; Turner, Hewstone, Voci, Vonofakou,.2008) and it further improves acquaintance with an out-group and hence less or absence of negative emotional response towards an out-group and less desire for social distance from them (Angermeyer, Holzinger, Matchinger,.2010).

The studies examine the emotional responses towards intellectual disabilities often focus on the emotional response of care staff to challenging behaviors (Bromley,

Emerson,.1995; Jones, Hastings,.2003; Rose, Horne, Rose, Hastings,.2004). There is scarcity of studies which either investigate emotional reactions, not dealing with episodes of challenging behavior or which explores the emotional reactions of common people towards intellectual disabilities.

Conceptual Background of the Study

In spite of timely legislation across the globe, specifically in Europe and other developed countries, there has always been a challenge to modify the attitude of masses towards the equal rights and inclusion of people with intellectual disabilities. The most obvious changes are the closure of long-term facilities in favor of community care and the transition from separate learning environments for comprehensive education in many countries around the world. Despite these changes, this population is one of the most susceptible, vulnerable and prone to be victimized (Emerson, Davies and Spencer, 2003). Despite the increase in physical integration, the lack of promiscuousinclusion into the mainstream of these people is identified as a major problem (Abbott & McConkey, 2006, Cummins & Lau, 2003). Such studies like ours will help the community in large to understand social attitudes, in general, about people with intellectual disabilities and identify ways to measure social responses in a reliable and meaningful way of population.

Intellectual disability is characterized by significant limitations in both mental as well as adaptive behaviors, which contain many everyday social and practical skills. This damage occurs before the age of 18. Assessment and classification of intellectual disability is rather a herculean task. For this, one has to keep, at least, three main criteria in mind for the classification of intellectual disability: intellectual skills associated with significant constraints, significant limitations in adaptive behavior and onset during the puberty years (Linda, W 2012). The expression "Intellectual disability" includes the same population as people with mental illnesses who have already been diagnosed with the number, kind, level,

type, duration and the need of the people with disability to receive services, assistances and support at individual level. In addition, all those who have a legitimate diagnosis of mental retardation are also the correct diagnosis of intellectual disability (Rosa, 2013; & Clare, A. 2010).

Intellectual functioning. Intellectual functioning – in common man's language it is also known as intelligence – include general mental abilities, such as learning, reasoning, problem solving, and so on. Intellectual functioning could also be measured through intelligence tests, the same way as we measure IQ. In general, an intelligence test of around 70 or as high as 75 show a limit of intellectual functioning. Standardized tests can also determine the limits of adaptive behavior.

Adaptive behavior. Adaptive behavior (Heward, 2010; Nikolić, 2014) is a set of conceptual, social and practical skills that people learn in their daily lives and accomplish. Following are its key components:

i. Conceptual skills – it incorporates language skills and knowledge; Concept of money, time and number, and self-direction.
ii. Social skills – it incorporates social skills, social responsibility, self-esteem, gratitude, naivety (ashes), solving of social problems and the ability to follow the rules/ laws and to avoid losses.
iii. Practical skills – it incorporates daily activities including personal care, Professional, Health, Travel / Transport, Schedule / Routine, Security, Use of Money, Use the Phone etc.

IQ tests are important tools for measuring intellectual skills including mental/ cognitive ability to learn, solve problems, reasoning and so on and so forth. The score in these tests showing below the limit 70 or 75 indicate retardation in the intellectual functioning (Daily, Ardinger, Holmes, 2000).

The ultimate purposes of the present study are: (i) to avoid discrimination attitudes of common people towards the intellectually disable people; (ii) to socially include the intellectually disabled people into the main stream so that they may have equal and same opportunities as others have; (iii) to provide inclusive education opportunities to intellectual disabled people as other people have anywhere in the world, specifically in Pakistani community; (iv) to have legal capacity and access to justice to the intellectual disable so that they may treated fairly and equally before the law; (v) to allow independent living to intellectual disable people, wherein they can decide by themselves where to live and with whom to live their lives; (vi) to provide freedom of expression and self-advocacy to the people of intellectually disable people, so they can raise their voice to preserve their due rights and maintain their wellbeing and express their feelings, emotions and knowledge to actualize their potential; and (vii) to for have accessibility to the things, people, places and information to the intellectual disable people to improve their functioning, environment and knowledge for a successful and fulfilling life potential. Part of this improvement is thinking about self-esteem, well-being, pride, personal participation in political action and other principles of identity.

Intellectual disability is a condition, characterized by impairment in intellectual functioning and adaptive behavior, so people with intellectual disability need alternative support in domains that are important to them. In general, it has been assumed that public attitudestowards persons with intellectual disability have a significant effect on potential community integration. Therefore, a better understanding of these can help target service provision and public awareness programs.

Pakistan is in south Asia, created and gained independence in 1947. It is an ethnically and linguistically diverse state; comprised of four provinces Punjab, Khyber Pakhtunkhwa, Sindh, and Baluchistan, Further,constitutedon Federal Tribal areas; and its population is

divided in rural and urban population. More than 70%- people lives in rural areas. Majority (96.28%) of the population is Muslim while 1.9% Christian, 0.2% Ahmadi and 0.001% Sikhs (ONS,2001). Urdu, Punjabi, Sindhi, Pashto, Balochi, Kashmiri, Siraiki, Hindko, Birahvi and other languages are spoken in Pakistan. However, Intellectual disability effected about 3% of the world population (World Health Organization (WHO), and 7.6% in Pakistan, of the total disable population i.e. 5.035 million of total 180.7 million of general population (Helping Hand for Relief and Development, 2012). If we compare these number with population census held in 1998 wherein the ratio was counted 2.49% (Pakistan Census Organization, 1998), is an alarming growth of the disabled population, which seeking attention of policy maker, legislature and services provider organizations specially at local level in Pakistan. Further, it has been recognized that negativeattitudes impact negatively on their community integration, social inclusion and services provided to them.

It has been observed globally that people with disabilities have generally poor health status, hence they have very few educational achievements, limited economic opportunities and higher rates of poverty than compared to the people without disabilities, and facing negative attitude like bullying, lack of support by bus drivers, employee's discrimination, and mocking by strangers to people with disabilities (World report on disability, 2011). Similarly, person(s) with disabilities in Pakistan(Rathore FA *et al.,* 2005), are generally disrespected and rarely function as useful members of society. Such attitude influence negatively on the interpersonal relationship, rights and motivation of the person with intellectual disability; even can cause of their isolation, and affect those who are associated to people with intellectual disability. People who feel harassed because of their disability sometimes changing their routines, moving from their homes, and they avoid going to places. Even Health, educational and employment policies have been formed for their well-being can be effected. Researchers believed that negative attitudes lead to stigmatization towards person(s)

with intellectual disability.In Pakistan, stigma and discrimination has been associated with intellectual disability in various settings (A. Ali *et al.* 2012; see also Mirza, Tareen, Davidson, and Rahman 2009). Stigma occurs though a combination of stereotyping, prejudice and discrimination (A. Ali *et al.* 2012; see also Rusch, Angermeyer, & Corrigan, 2005). The stereotype also has been found in Pakistan that personswith intellectual disability are abnormal (*Pagal*)(S. Ahmed *et al.*, 2013).

Therefore, this study was aimed to understand attitudes towards intellectual disability in a multidimensional perspective, which can help in intervention strategies for de-stigmatizing intellectual disability. In our knowledge, earlier to thisa surveywas conducted in Karachi, Pakistan found more positive attitude among staff as compared to community members, but the study lacking participation of rural population as well as general population. However,authors administered the Community Living Attitudes Scale (Henry et al., 1996), thatconsists of four factors i.e. (1) empowerment:the degree to which an intellectually disable person consider himself/ herself stronger and more confident, especially in controlling one's life and claiming one's rights; (2) similarity: the degree to which an intellectually disable person consider himself/ herself similar and share a common humanity with others; (c) exclusion: the degree to which an intellectually disable individual desires to segregate or exclude himself/ herself from the people of the same community life; and (d) sheltering: the degree to which an intellectually disable individual believesthat (s)he has adequate protection from harm (Mazna, *et al.,* (2013). Public attitudes towards intellectuals have changed significantly over time as a result of social changes, new treatments and changes in the definition of disability (Ouellette-Kuntz*et al.* 2003, 2010).Thus, we used recently developed the instrument"the Attitudes Towards Intellectual Disability (D. Morin *et al.* 2013) Questionnaire",addressing affective, behavioral and cognitive dimension of attitudes towards intellectual disability. affective dimension contains two factorsdiscomfort

and sensibility/ tenderness, behavioral dimension consists on the factor of interaction, and cognitive dimension encompasses two factors, knowledge of capacity and rights, and knowledge of causes,all these five factors overlapping the tri-partite model of attitude.

Literature Review

This chapter provides an overview of attitudes towards peoples with intellectual disability with reference to qualitative and quantitative studies from different regions of the world, and describe historical back ground and cross-cultural aspects of attitudes towards intellectual disability.

Intellectual Disability

Intellectual disability is characterized by deficits in intellectual and adaptive functioning, during developmental period, and adaptive functioning determines the level of support required to person with intellectual disability (DSM-5, 2013). The term intellectual disability also encompasses with mental retardation, learning disability as well as cognitive disorder (Joanna k. Ferrara, 2012). However, there is opinion of researchers that the general public's responses to people with intellectual disabilities influence the likely success or failure of policies aimed at increasing social inclusion of people with intellectual disability.

Attitudes towards intellectual disability

In Canada, Ouellette-Kuntz et al., (2003) investigated attitudes of psychiatry residents, students and community members, and managers and professionals working in the field of intellectual disabilities; Empowerment and Similarity were endorsed over Exclusion and sheltering by Psychiatry residents as compare to other study groups. Similar findings were observed in the study of C. Schwartz & R. Armony-Sivan (2001), assessed attitudes of students in Israel, as students endorsed Empowerment and Similarity more than Exclusion and sheltering subscales of the Community Living Attitudes Scales (CLAS; Henry et al.,

1996). Another study conducted by M.Patka et al. (2013) in Pakistan, revealed alike finding that staff had significantly higher endorsement on empowerment and similarity, and significantly lower endorsement on exclusion and sheltering subscales of the questionnaire Community Living Attitudes Scale (Henry et al., 1996). However, these finding support the idea regarding the degree to which people with intellectual disability are permitted to make their own decisions; and the degree to which individuals believe that people with intellectual disability share a common humanity with others (person without disability).

Further, studies focused on structure of the attitudes, conducted in Japan (Horner-Johnson et al. 2002); Pakistan (M. Patka et al. 2013) and in Australia (Y. Marie, M. Keith, and P. Trevor R., 2004); instruments such as the Scale of Attitudes Towards Mental Retardation & Eugenics-Revised (AMR&E-R; Antonak et al.,1993), The Mental Retardation Attitude Inventory (MRAI; Antonak & Harth, 1994), the Community Living Attitudes Scale-Mental Retardation (CLAS-MR; Henry et al.,1996), and Marlowe–Crowne SocialDesirability Scale (MCSDS; Crowne & Marlowe, 1960) were used in these studies. The Community Living Attitude Scale -Mental Retardation (CLAS-MR; Henry *et al.*1996) measuring four dimensions of attitudes, (a) Empowerment, the degree to which people with intellectual disability are permitted to make their own decisions; (b) Similarity, the degree to which individuals believe that people with intellectual disability share a common humanity with others; (c) Exclusion, the degree to which individuals desire to segregate people with intellectual disability from community life; and (d) Sheltering, the degree to which individuals believe people with intellectual disability require protection from harm (Henry et al.,1996); the Mental Retardation Attitude Inventory (MRAI; Antonak & Harth 1994) consistof four subscales including: (a) Integration–Segregation- this deals with the beliefs about being included or excludedin people with ID in various aspects of community life; (b) Social Distance- this deals withthe desire/ will or reluctance to be associated with someone

with ID; (c) Private Rights- this deals with the feelings and concerns the rights of individuals who wish to exclude people with ID; and (d) Subtle Derogatory Beliefs- this deals with negativity bias or the degrading views of the abilities and character of people with ID; the Attitudes Towards Mental Retardation and Eugenics (AMRE; Antonak et al.1993) tapping beliefs about the reproductive rights of people with ID; and the Marlowe-Crowne Social Desirability Scale—Short Form (MCSDS_SF; Strahan & Gerbasi 1972) predict a participant'stendency to select socially desirable responses on the above three inventories. However, although finding of all three attitude scales replicated the attitudes structures found in the USA, and support the idea of Horner-Johnson et al. (2002) that there are some cross-cultural components of attitudes towards people with Intellectual disability which can be compared, but these instruments didn't provide an opportunity to express "neutral" attitude, as this issue has been addressed in the "Attitudes Towards Intellectual Disability (ATTID) questionnaire developed by D. Morin et al. (2012).

Impact of demograpbic variables and attitudes towards intellectual disability

Several demographic factors may influence attitudes towards people with intellectual disabilities, such as age, sex, education attainment, socio-economic status, and marital status are related to individual's attitudes regarding Intellectual disability.Ouellette-Kuntz et al. (2010) used the Social Distance Subscale of the Multidimensional Attitude Scale on Mental Retardation (MASMR; Harth 1971) in Ontario, Canada for assessing attitudes of Community members towards people with intellectual disability, impact of attitudes Characteristics of sample such as age and education associated with negative attitude, older and less educated participants shown more social distance attitudes, while participants who had a close family member with an intellectual disability and those who perceived the mild level of disability, shown less social distance. A Canadian study (D. Morin et al. 2013) also revealed impact of age and education on attitude that that 60 years and over, and less educated had a more

negative attitude towards people with intellectual disability. D. Morin et al. (2013) further elaborated that education level was not significantly associated with knowledge ofcauses of intellectual disability (factor of ATTID), while highly educated adults were aware of capacity and rights of person with intellectual disability. Contrary to this M. Patka et al. (2013) found that higher educated participant held more positive attitudes towards people with intellectual disability. Regarding impact of gender on attitudes towards people with intellectual disability Yuker and Block, (1986), stated that attitudes varied across culture in same region by gender, for example men held more positive attitude than women towards ID in India, Contrary to this, women held more positive attitude than men in west and in Pakistan.

Impact of socio-economic, socio-cultural and environmental factors on Attitudes towards intellectual disability

In several studies, effects of social-class, socio-cultural factors and environmental factors, has been established. Pakistani societies can be represented by family system (S. Khan Mohamand and Haris Gazdar; 2007) such as joint family (extended family) and nuclear family (immediate family). In rural areas, mostly people live in joint family (extended family), and nuclear family structure (immediate family) was seen in large cities of Pakistan. Shakeel (2014) noted a series of problems such as social exclusion, strain relation and family breakdown, extra fatigue, all these have been associated with nuclear family structure wherein parents are full-time involved with their child having intellectual disability, whereas, in joint family structure parents are found relaxed for having an extended familial support in childcare & household activities. Contrary to this, L. Arusa, G. Irma, Y. Aisha et al. (2013) described that mothers reported positive contribution to family life because of caring for a child with intellectual disability, but authors didn't focus on family structure. Further, it was found that culture has more influence on attitudes rather than level of education, knowledge or training regarding intellectual disability, such as Mary T. Westbrook et al. (1993) found

that health practitioner from German community shown more acceptance as compare to other communities (Chines, Italian, Greek, Arabic and Anglo Australian communities) despite all health practitioner (whole sample of study) were working in a same health care system in Australia. The Questionnaire that was used in this study described five degrees of social distance or community acceptance, which are expanded from complete absence of acceptance or social distance to the complete acceptance or community acceptance. Following are the five degrees deal in this questionnaire: (1) *No acceptance*- at this degree, the people around prefer a person with Intellectual disability to be kept in an institution or out of sight; (2) Low acceptance-at this degree, people around try and avoid a person with Intellectual disability; (3) Moderate acceptance- at this degree, people around accept the persons with Intellectual disability with dead hearts; (4) High acceptance- at this degree, people aroundhappily accept the persons with Intellectual disability as a friend, co-worker, and a fellow; and (5) Full acceptance-at this degree, people aroundverily accept a person with Intellectually disability and ready to marry him/ her into their immediate family. In another study, somehow 20 disabilities were included in the list, among which people with AIDS, mental retardation, psychiatric illness and cerebral palsy were found least acceptable in all communities. This reflect negative attitudes in term of social distance towards people with intellectual disability in a multicultural society. Moreover, Katrina (2011) found in a systematic survey that people want a greater social distance from people with intellectual disabilities than people with physical disabilities. A few other studies also suggest the same that people are disinclined to come into contact with intellectually disable, not for any other reason but to avoid discomfort and anxiety. However, these studies have not studied information on mental disabilities because positive data and links can sometimes influence the attitude of people with Intellectual Disability (Kersh, 2011).

Furthermore, an Israel based study, revealed (Aminidav & Weller, (1995) differences in social-class in term of breath of knowledge regarding intellectual disability, such as middle-class respondents reported accurate information about intellectual disability than the lower-class respondents. Authors administered the Breadth of Information questionnaire, the questionnaire comprised on open open-ended question such as "what is mental retardation?". The responses were categorized into five categories (1) intellectual functioning, (2) causes of mental retardation, (3) stereotype of the mentally retarded individual, (4) problems of adaptive behavior), and the attitudes of society towards the mentally retarded. However, the study didn't focus on severity level of intellectual disability. While in Australian (L. Gilmore, J. Campbell & M.Cuskelly (2003) reasonably accurate knowledge about Down syndrome and their developmental millstone were observed among community members and experienced teachers. The authors using the questionnaire of Wishart and Manning (1996) that measures general information on Down syndrome including (i) the causal factors, the effect of development and life expectancy, (ii) developmental milestones, expectation about adult attainments like work and marriage; (iii) perceptions about personality attributes of people of Down Syndrome. Responses of participants report Down syndrome is a genetic disorder and found often in older parents. Majority of respondents in this survey reported that people with Down syndrome cannot live independently, won't be able manage relationship with opposite sex partners, and have poorer communication skills, while the most of them reported and believed that people with Down syndrome cannot continue their marital life. On the contrary, a small percentage of the sample were of the view that parental rearing styles, and emotional trauma to the mother during pregnancy are the causal factors of Down Syndrome. Interestingly, participants in this study reported that life-expectancy of people of Down Syndrome is almost half than average life of common people in any community. However, researchers did not take into account the level of education and the social class of

respondents according to the previous results. In addition, L. Gilmore, J. and Campbell Cuskelly (2003) found that the people believe that inclusion of people of Down syndrome to mainstream is helpful to educational, social and emotional wellbeing. While almost 20% respondents were of the view that regular classroom settings are best settings for the children with Down syndrome.

Moreover, finding of R. Sermier Dessemontet et al. (2014) supported the views of Siperstein et al. (2006) that preservice or in-service teacher training should incorporate relevant information to deal effectively and efficiently to students with Intellectual disability. The findings of the study suggested that such trainings would not only be helpful to have a better knowledge about the rights as well as the potential of students with Intellectual Disability but also to avoid discomfort and aggravation when dealing persons with ID, rather such trainings help them to incline in a better way when communicate to persons with ID. Knowledge of ability, skills and rights is the cognitive part of attitudes, while positive contacts in the past influence the affective or behavioral elements. W. Horner-Johson et al. (2002) in their scientific investigation show that people show their positive attitudes and rendered their support towards the people having ID who are already having some sort of prior experiences and/ or who have an Intellectually Disable relative, friend, or fellow as compared to those who are not having all these. Students who have had previously worked with IDs seemed more inclined to take a more positive position. Mental health professionals and students interested in their professional identity as being mental health professionals respond stronger tendency in all their responses in all attitude measurement questionnaires. Wilson, M.C., and Scio, K. (2015) explained the implicit attitudes towards people with intellectual disabilities and their relationship with explicit attitudes, social distance, emotions and connections. It was an internet search online and respondents with adult Britishers. Authors found that implicit attitudes were not significantly associated with explicit attitudes, social distance or emotional

reactions; and resemblance by contacts, gender or educational attainment has been observed in implicit attitudes towards people with intellectual disability. However, small to moderate correlations between explicit attitudes and social distance have been found. Alem etl al. (1999) assessed attitudes, awareness, and practices of a rural community regarding mental disorders in Butajira, Ethiopia by using the Key Informant questionnaire developed by World Health Organization (WHO). According to authors, 100 key informants (religious leaders, community elders, edir leaders) interviewed, who were selected on the suggestion of enumerators of Butajira Rural Health Projects, as their opinion was assumed a reflection of the community. According to the results of the study, seven neuropsychiatric disorders were presented to key informants, and they were asked about the frequency and seriousness of these disorders. Among seven disorders, most common condition was Epilepsy and most serious problems were schizophrenia and mental retardation to them. Moreover, they believed that most of prototype symptoms of mental illness are talkativeness, aggression and strange behavior. Traditional treatment methods were preferred more often for treating symptoms of mental disorders and modern medicine was preferred more often for treating physical disease or symptoms. However, results reflect a misconception about treatment of mental retardation in rural Ethiopian community.

Rational of the Study

The disability has been observed as great problem not only for person with disability but also for their family members around the world included Pakistan. According to Rathore FA *et al.,* (2005) person with disabilities are generally disrespected and rarely function as useful members of society in Pakistan. Moreover, they found as burden, mostly in lowest income group (Aslam *et al.*, 2011). Stigma (Mirza I, *et al.*, 2009), erroneous stereotype (S. Ahmed *et al.*, 2013) have been associated with intellectual disability in Pakistan. Such attitude influence negatively on community integration, social inclusion, and independence of

the person with intellectual disability. In our knowledge, few studies such as (M. Patka, *et al.*,2013) assessed attitudes of staff and community members in Karachi, Pakistan, using the Community Living Attitudes Scale (Henry *et al.*, 1996) comprised of four subscales: (1) empowerment, (2) similarity, (3) exclusion, and (4) sheltering, but study lacking participation of rural societies and general population as well. Ouellette-Kuntz*et al.* (2003, 2010) found that public attitudes towards people with intellectual disability have changed significantly over time because of social changes, new treatments and changes in the definition of disability. Thus, we used recently developed the instrument "the Attitudes Towards Intellectual Disability (D. Morin *et al.* 2013) Questionnaire", addressing affective, behavioral and cognitive dimension of attitudes towards intellectual disability. affective dimension contains two factors discomfort and sensibility/ tenderness, behavioral dimension consists on the factor of interaction, and cognitive dimension encompasses two factors, knowledge of capacity and rights, and knowledge of causes, all five factors overlapping the tri-partite model of attitude. Further, this study carried out comparisons between rural and urban population in term of attitudes towards intellectual disability, on the questionnaire generally and in its parts (factor to factor of the questionnaire). In our knowledge, no such study conducted, particularly in Pakistan.

CHAPTER 2

Method

Objectives

There have been two broader objectives set to achieve for this current study:

1. To evaluate attitudes towards intellectual disability along with affective, cognitive and behavioral dimensions in rural and urban population of Pakistan;
2. To compare attitudes according to characteristics of sample such as age, gender, level of education completed, and socio-economic status.

Hypotheses

Following hypotheses are designed to be tested in the study:

H_1: The rural population has significantly positive attitude towards individuals with intellectual disability as compared to urban population.

H_2: The rural population has significantly negative attitude towards individuals with intellectual disability on the attitudinal factor of 'knowledge of capacity and rights' as compared to urban population.

H_3: The rural population has significantly negative attitudes towards individuals with intellectual disability on the attitudinal factor of 'knowledge of causes' as compared to urban population.

H_4: The rural population has more positive attitude towards individuals with intellectual disability on the attitudinal factor of 'sensibility/ tenderness' as compare to urban population.

H_5: The rural population has more positive attitude towards individuals with intellectual disability on the attitudinal factor of 'discomfort' as compare to urban population.

H_6: The rural population has more positive attitudes towards intellectual disability on the attitudinal factor of 'interaction' as compare to urban population

Research Design

Convenience Sampling technique was used based on cross-section survey.

Sample

Data collected from urban and rural areas of Islamabad and Koh-e-Murree, Rawalpindi. Sample was adult population with age of 18 years and above. The questionnaires were distributed among 260 individuals, who voluntarily participate in the study. However, 34 participants (15 males and 19 females) out of 130 respondentsfrom rural areas didn't answer on all items of the questionnaire. 26 participants(17 malesand 9 females) out of 130 respondents from urban areas left many items unanswered simultaneously. Hence, 60 incomplete questionnaires were discarded. Finally, 200 questionnaires were included in the study. Socio-demographic characteristics of sample presented in the Table-1.

Instrument

Author used the instrument the Attitudes Towards Intellectual Disability(we translated and adopted in Pakistan before administration) to measure the attitudes of individuals towards people with intellectual disability. Originally, questionnaire was developed by D.Morin et al., (2012), addressing affective, behavioral and cognitive dimensions of attitudes towards intellectual disability. According to D. Morin et al., (2012) affective dimension contains two factors discomfort and sensibility/ tenderness refers to positive and negative emotions, behavioral dimension consists on the factor of interaction represents the tendency to act in a certain way in the presence of the person with intellectual disability, and cognitive dimension encompasses two factors of knowledge of capacity & rights and knowledge of causes, refers to thoughts, ideas, perceptions, beliefs, opinions and the mental conceptualization. All of five

factors overlapping the tri-partite model of attitude. Subject were asked to select the statement by marking the most appropriate category on a five-point Likert scale ranging from 1= agree completely to 5= disagree completely.Questionnaire measures attitudes into three categories: more positive (scores of 1 and 2), more neutral (score of 3) and more negative (scores of 4 and 5). There are 67 items in the questionnaire, out of which 23 items represent affective dimension (17discomfort and 6 sensibility/tenderness factors), 17 items behavioral dimension (interaction factor), and 27 items cognitive dimension (20 knowledge of capacity & rights and 7 knowledge of causes).The questionnaire had good internal consistency with Cronbach's alpha coefficients ranging from 0.59 to 0.89 for the five factors and of 0.92 for the overall questionnaire.Test–retest reliability yielded correlations from 0.62 to 0.83 for the five factors.

Ethical approval

Ethical approval granted to the scholar by Ethical Committee of Department of Psychology, International Islamic University, Islamabad. Participants had been debriefed well about the study and its aims in advance before asking to fill or response to the questionnaire and their explicit consent were sought orally as well as in written. They had the right to withdraw from the study at any stage/during filling the questionnaire. Confidentiality was assured that they will not be exposed anywhere and data will not be misused. Participants were providing consent for their data to be used for the purposes of the study. All of them participated voluntarily in the study and some cordial thanks was paid and equally acknowledged their true participation.

Procedure

D. Morin et al., (2012) is author the of Attitudes Towards intellectual disability was approached who approved request for translation of the questionnaire into Urdu language is

the National language of Pakistan, and adopted in a pilot study. For the main study participants were approached at different areas included rural and urban areas of Islamabad and Koh-e-Murree, Rawalpindi. First, participants were informed about the purpose of research and its benefits and they were assured that the information obtained from them would be kept confidential and would only be used for research purpose.After getting their informed consent, questionnaire was handed overto each participant for taking their responses on each item, and same wastaken back after completion by them. They were instructed thoroughly that how questionnaire should be filled. No time limit was given. Participants also were apprised that there is no right or wrong answer. Prior to this, Demographic information was obtained on the demographic Sheet, such as gender, age, level of education, and socio-economic status, belongingness of rural and urban population.Data was analyzed on SPSS-21.

CHAPTER 3

Results

The data of current study was analyzed to compare attitude of rural and urban population, towards people with intellectual disability. Difference and similarity between rural and urban population were also explored. Cronbach Alpha Coefficient was calculated to see the reliability of the Attitude towards intellectual disability ATTID), and its five factors. The values of Skewness and kurtosis were measured to check distribution of data. Mean and strand deviation was calculated to measure attitude into three categories: more positive (scores of 1 and 2), more neutral (score of 3) and more negative (scores of 4 and 5).Independent sample *t*-testand One-way ANOVA were used to seedifferences between rural and urban population on the variables of the study. The results are as follows: -

How rural and urban population differ in terms of attitudes towards intellectual disability?

On the factor of discomfort, mean score of 3.04 (SD = 0.57), and 3.07 (SD 0.54) were obtained by participants from rural and urban population respectively. These scoresshow neutral fecling of discomfort about people with intellectual disability. Cohens *d* of 0.09 was calculated, indicates a non- overlap of 0% in the two groups.

Secondly, the knowledge of capacity &rights of person with intellectual disability was assessed, respondents from rural population scored mean of 3.06 (SD = 0.58), and from urban population they scored mean of 2.91 (SD = 0.59). Cohens *d* of 0.25 was calculated, indicates a non- overlap of 14.7% in the two groups.

Third, participant from rural population obtained mean score of 3.10 (SD = 0.64), whereas urban population reported mean scores of 3.00 (SD = 0.62) on the factor of *interaction*.These scores show neutrality in term ofinteractiontowards people with intellectual disability.Cohens *d* of 0.15 was calculated, indicates a non- overlap of 7.7% in the two groups.

Fourth, respondents from rural population got mean score of 2.58 (SD = 0.57), whereas urban population obtained mean score of 2.71 (SD = 0.62) on the factor of *sensibility/tenderness*.These scores were compared and obtained Cohens *d* of 0.19,indicates a non- overlap of 14.7% in the two groups.

Finally, participant from rural population scored mean of 4.54 (SD = 1.2) and from urban population they scored mean of 4.13 (SD = 1.2). These scores show negative attitudes regarding causes of intellectual disability. Thus, Cohens *d* 0.34was calculated, indicates a non- overlap of 27.4% in the two groups.

Effects of demographic variables such as age, gender, educational level, and socio-economic status on the attitudes towards people with intellectual disability.

The demographic variables such as age, gender, educational attainment, and socio-economic status were associated with attitudes towards intellectual disability. For the factor of *Discomfort*, Cohens *d*0.18 was calculated, which indicates a nonoverlap of 14.7% in the two age groupsof early adulthood and middle adulthood. Only,education F (2,197) = 4.16, $p<.01$significant differencesassociated with this factor(shown in the tables - 4, and 7respectively). However, Post-hoc comparison using Hochberg's GT2 indicated the mean was significantly higher for Bachelor degree holders (M = 3.22, SD=0.52) than matriculated (M = 2.88, SD= 0.62), while the result was not significant among other groups.

Second factor is the *Knowledge of capacity & rights* associated with age groups of early adulthood and middle adulthood with medium effect size (Cohens *d*0.47), and gender

with small effect size (Cohens *d*0.30), Three groups of socio-economic status significantly differences F (2,197) =3.54, p<.05 associated with the factor (shown in the tables - 4, 5, and 6 respectively). Differences based on age, revealed by the mean comparison using independent sample *t*-test that there was significantly higher mean scorefor early adulthood (M=3.04, SD= 0.57) than middle adulthood (M= 2.75, SD = 0.64) t (198) = 2.64, p<.01. Similarly, found that female has higher mean scores (M= 3.08, SD= 0.60) than male (M= 2.90, SD = 0.57) t (198) = -2.16, p<.05. However, Post-hoc comparison using Hochberg's GT2 indicated that the mean was significantly higher for lower class (M = 2.76, SD= 0.64) than middle class (M = 3.05, SD =0.57),whereas upper class was not significantly associated with the factor.

The factor of *Interaction*was associated with age groups of early adulthood and middle adulthood with small effect size of (Cohens *d*0.32), and gender with small effect size of (Cohens *d*0.31)shown in the tables – 4, and 5 respectively. The mean (M = 3.08, SD = 0.64) was significantly higher for early adulthood than middleadulthood (M = 2.88, SD = 0.58) on the factor, while using independent sample *t*-test found significant differences between male and female as female scored higher (M= 3.15, SD= 0.64) than male (M=2.69, SD = 0.79) t (198) = -2.18, p<.05, with effect size of (Cohen *d*0.31). Socio-economic status and level of education were not significantly associated with the factor. However.Type-I error level was not guaranteed of this due to unequal sample size of the groups.

The factor of *Sensibility/tenderness* is the fourth factor of ATTIDquestionnaire, hasmedium effect size of (Cohens d 0.43) for two age groups early adulthood and middle adulthood, for gender group very small effect size (Cohens *d* 0.11) was calculated, and socio-economic status significantly F (2,197) = 3.77, p<.05,associated with the factor(shown in the tables - 4, 5, and 6 respectively. There were differences between groups such as mean was significantly higher for early adulthood (M=2.71, SD= 0.78) than middle adulthood (M=2.36, SD =0.83) t (198) = 2.40, p<.05. Similarly, gender differences were not found on the factor.

On the factor sensibility/tenderness the mean was significantly higher for upper class (M = 3.14, SD = 0.88) than lower class (M = 2.48, SD 0.85), while with middle it was not significant.

Factor 5- *knowledge of causes of intellectual disability*, there was a medium effect size for age (Cohens d 0.401215), and educational level F (2,197) = 3.69, $p<.05$, significantly associated with the factor (shown in the tables - 4, and 7 respectively. There was significantly higher mean score for early adulthood (M=17.68, SD= 5.21) than middle adulthood (M=15.70, SD = 4.78) t (198) = 2.12, $p<.05$. However, there were no differences based on marital status. Post-hoc comparison using Hochberg's GT2 indicated that on the factor, the mean was significantly higher for Bachelor (M = 3.94, SD 1.18) level of education than matriculation (M = 4.68, SD = 1.34) while the result was not significant among other groups.

Table 1

Socio-demographic Characteristics of the study population (N=200)

Variables	N	%
Age		
Early adulthood	163	81.5
Middle Adulthood	37	18.5
Gender		
Male	104	52.0
Female	96	48.0
Education		
Below Matric	8	4.0
Matriculate	56	28.0
Intermediate	69	34.5
Bachler	67	33.5
Socioeconomic Status		
Lower Class	37	18.5
Middle Class	148	74.0
Upper Class	15	7.5
Population		
Urban	104	52.0
Rural	96	48.0

Table-2

Psychometric Properties of the Attitude Towards Intellectual Disability (ATTID; Urdu version) questionnaire and its Subscales (N=200)

Scales	*K*	□	M	SD	Range		Skew	Kurt
					Potential	Actual		
ID Total	79	.89	2.94	1.25	0-00	123-260	-0.15	0.13
Discomfort			3.04	0.55	0-00	21-75	-0.32	0.81
Knowledge			2.98	0.59	0-00	22-94	-0.23	0.44
Interaction			3.05	0.63	0-00	22-79	-0.33	0.28
Sensibility			3.05	0.0.79	0-00	6-30	0.47	0.31
Causes			4.32	1.29	0-00	7-29	0.07	-0.82

Note: ID = Intellectual Disability; Skew= Skewness; Kurt= kurtosis; *k*= total numbers of items

Table 2 sbows the psychometric properties of study scale and its subtypes. The results indicated that the Attitudes Towards Intellectual Disability (ATTID; Urdu version) and its subscales has satisfactory reliability ranges from .xx -.89. The values of skewness and kurtosis shows that the data was normally distributed.

Table-3

Mean difference between Urban and Rural in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version) and its Subscale (N = 200)

	Rural (n = 96)		*Urban (n =104)*				*95% CI*		
Variables	M	(SD)	*M*	*SD*	*t (198)*	*p*	*LL*	*UL*	*Cohens d*
Discomfort	3.02	0.57	3.07	0.54	-.59	.55	-3.45	1.85	0.09
Knowledge	3.06	0.58	2.91	0.59	1.77	.07	-.35	6.29	0.25
Interaction	3.10	0.64	3.00	0.62	1.08	.28	-1.37	4.68	0.15
Sensibility	2.5	0.71	2.71	0.87	-1.17	.25	-2.13	.55	0.26
Causes	4.54	1.30	4.13	1.26	2.26	.02	.21	3.07	0.32

Table 3 shows that the mean was significantly higher for rural (M=4.54, SD= 1.30) than urban (M=4.13, SD = 1.26) t (198) = 2.26, p<.05, in terms of *Attitudes Towards Intellectual Disability (ATTID; Urdu version) questionnaire and its Subscale knowledge of* causes. However, rural and urban population does not differ on the questionnaire and its other subscale included discomfort, knowledge of capacity &rights, interaction, and sensibility/tenderness.

Table 4

Mean difference between Early Adulthood and Middle Adulthood in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version) and its Subscales (N = 200)

	Early Adulthood *(n=163)*		*Middle Adulthood* *(n= 37)*				*95% CI*		
Variables	M	(SD)	*M*	*SD*	*t (128)*	*P*	*LL*	*UL*	*Cohens d*
ID Total	199.42	28.83	184.54	27.57	2.93	<.01	4.63	23.70	0.527528
Discomfort	3.06	0.55	2.96	0.54	1.06	.29	-1.15	5.23	0.183479
Knowledge	3.04	0.57	2.75	0.64	2.64	<.01	1.42	9.83	0.478539
Interaction	3.08	0.64	2.88	0.58	1.73	.08	-0.48	7.26	0.327473
Sensibility	2.71	0.78	2.36	0.83	2.40	<.01	0.37	3.77	0.434573
Causes	4.42	1.30	3.92	1.19	2.12	<.03	0.14	3.82	0.401215

Table 4 shows that the mean was significantly higher for early adulthood (M=200.03, SD= 27.04) than middle adulthood (M=199.42 SD = 28.83) t (198) = 2.93, p<.01, in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), for early adulthood (M=3.04, SD= 0.57) than middle adulthood (M=2.75, SD = 0.64) t (198) = 2.64, p<.01, in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), and its subscale knowledge of capacity and rights, for early adulthood (M=2.71, SD= 0.78) than middle adulthood (M=2.36, SD = 0.38) t (198) = 2.40, p<.05, in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subtype sensibility/tenderness, for early adulthood (M=4.42, SD= 1.30) than middle adulthood (M=3.92, SD = 1.98) t (198) = 2.12, p<.05, in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subscale knowledge of causes. However, there was no difference between early adulthood and middle adulthood in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subtypes discomfort and interaction.

Table 5

Mean difference between Male and Female in terms of Attitudes TowardsIntellectual Disability (ATTID; Urdu version) and its Subscale (N = 200)

	Male (n = 104)		*Female (n =96)*				*95% CI*		
Variables	M	(SD)	*M*	*SD*	*t (198)*	*p*	*LL*	*UL*	*Cohens d*
ID Total	193.13	26.86	200.51	31.07	-2.07	.04	-15.29	-0.32	0.25412
Discomfort	3.03	0.50	3.06	0.60	-0.45	.65	-3.26	2.05	0.054321
Knowledge	2.90	0.57	3.08	0.60	-2.16	.03	-6.89	-0.31	0.307591
Interaction	2.95	0.62	3.15	0.64	-2.18	.03	-6.31	-0.32	0.31742
Sensibility	2.69	0.79	2.60	0.79	0.78	.43	-0.68	1.86	0.113924
Causes	4.28	1.19	4.38	1.39	-0.54	.59	-1.84	1.05	0.077288

Table 5 shows that the mean was significantly higher for female (M=193.13, SD= 26.86) than male (M=200.51, SD = 31.07) t (198) = -2.07, p<.05, in terms of intellectual disability,for male (M=3.08, SD = 0.06) than female (M=2.90, SD= 0.57) t (198) = -2.16, p<.05, in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subscale knowledge of capacity and rights, for male (M=3.15, SD = 0.64) than female (M=2.95, SD= 0.62) t (198) = -2.18, p<.05, in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subscale interaction. However, there was no difference between male and female in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subscales included discomfort, knowledge of cause, and sensibility.

Table 6

Mean difference between Socioeconomic Classes in terms of Attitudes Towards Intellectual Disability and its Subscale

Variables	F	Df	H	P	Hochberg's GT2
ID Total	1.37	2, 197	.01	.27	-
Discomfort	2.46	2,197	.02	.08	-
Knowledge	3.54	2,197	.03	.03	1>2*,3
Interaction	0.57	2,197	.01	.57	-
Sensibility	3.77	2,197	.04	.02	3>2*,1
Causes	0.92	2,197	.01	40	-

Note. N = 200; 1= Lower Class; 2 = Middle Class; 3= Upper Class.

One way ANOVA was used to compare the three groups of socioeconomic status in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version) and its subscales. The results indicated that there was a significant difference between groups in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subscale Knowledge of capacity and rights$F$ (2,197) = 3.54, p<.05, and sensibility F (2,197) = 3.77, p<.05. Post-hoc comparison using Hochberg's GT2 indicated that on knowledge of capacity and rights subscale the mean was significantly higher for lower class of socioeconomic status than middle while with upper class it was not significant. On subscale sensibility/tenderness the mean was significantly higher for upper class of socioeconomic class than lower while with

middle it was not significant. However, there was no difference between groups in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), total, subscale discomfort, interaction and knowledge of causes. Table 8 shows details.

Table 7

Mean difference between Level of Education in terms of Attitudes TowardsIntellectual Disability (ATTID; Urdu version) and its Subscale

Variables	F	Df	H	P	Hochberg's GT2
ID Total	0.39	2, 197	.01	.76	-
Discomfort	4.16	2,197	.06	<.01	4>2**,1,3
Knowledge	1.09	2,197	.02	.35	-
Interaction	0.57	2,197	.01	.64	-
Sensibility	2.22	2,197	.03	.09	-
Causes	3.69	2,197	.05	.01	4>2**,1,3

Note. N = 200; 1= Below Matric; 2 = Matriculate; 3= Intermediate; 4 = Bachler.

**p<.01

One way ANOVA was used to compare the four groups of level of education in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version),and its subscales. The results indicated that there was a significant difference between groups in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version), subscale discomfort F (2,197) = 4.16, p<.01, and causes F (2,197) = 3.69, p<.05. Post-hoc comparison using Hochberg's GT2 indicated that on discomfort the mean was significantly higher for Bachler level of education than matriculation while the result was not significant among others groups. On subtype causes the mean was significantly higher for Bachler level of education than matriculation while the result was not significant among others groups. However, there was no difference

between groups in terms of Attitudes Towards Intellectual Disability (ATTID; Urdu version) total, subscales knowledge of capacity and rights, interaction and sensibility/tenderness. Table 9 shows details.

CHAPTER 4

Discussion

Our goal was to examine individuals'attitudes towards intellectual disability, and compare the same in respect of rural and urban population, based on affective, behavioral and cognitive components of attitudes. It is necessary to state that general population consist of two distinct domains vis-à-vis rural and urban population. Therefore, it was assumed people belong to these two domains have two different mindsets and hence their attitude may be differed on aforesaid components. D. Morin et al., (2012) revealed five factors (discomfort, knowledge of capacity &rights, interaction, sensibility/tenderness, and knowledge of causes of intellectual disability)based onaffective, behavioral and cognitive components of attitudes towards intellectual disability. adapting this kind of approach the author has measured the attitude of general population of Pakistan. However, only differences between two mindsets (urban & rural) were found based on the factor of knowledge about the causesof intellectual disability.

The affective dimensions have two aspects of feeling towards ID these are discomfort and sensibility/tenderness respectively, and these two factors are major tool which makes it possible to become aware from that what affect the society most. Through this dimension we can evaluate that what sort of mindset or attitude of population having towards people with intellectual disability. In view ofD. Morin et al. believed that adopting only one factor either discomfort or sensibility/tenderness to measure the attitude of general public, will be biased and one sided.On these factors,results of current study showsneutral attitudes, which contradict with the finding of D. Morin et al. (2013), who revealed positive attitudes on the factor of discomfort, and neutral attitudes on the factor of sensibility/tenderness, However, despiterural and urban population not significantly differ on the two factors discomfort and sensibility/ tenderness, main score on the factor of discomfort was higher than the factor of

sensibility/tenderness.These finding stresses for future research to examine attitudes in relation to intellectual disability variables such as the frequency of contact with people with intellectual disability, quality of relationship and number of persons with ID known by the individuals. (D. Morin et al. 2013; Ouellette-Kuntz *et al.* 2010) also suggested that contact with person with intellectual disability influences attitudes particularly emotions and behavior of general population.

The factor,Knowledge of capacity &rightsis related to the cognitive component of the attitudes regarding intellectual disabilitywhich can highlight perception of a society at large about the mind-set of population knowing about the abilities and capacities of intellectual disabled person for self-determination. For this factor, participants reported more knowledge regarding capacitates and rights of person with intellectual disability.

The *Knowledge of causes* about intellectual disabilitythe factor of cognitive component,is purely important for the implementation of the purposes as we can get first-hand knowledge about the mind set of population knowing about the causes of intellectual disability and take certain necessary measures to inform the targeted segment of the society. However, the differences between rural and urban population were revealed on the factor of causes of intellectual disability as rural population has more negative attitudes on the factor than urban population.

Demographic variables and attitudes

The facts and figures drawn from demographic variables comprising age, sex, level of education and social status contributes a lot to measure the attitude of societytowards the people with intellectual disability. However, results based on demographic variables were consistent with general findings of current study. In some cases, small factorial differences

have emerged. This is purely significant to state that minimal effect size addressed by Cohens *d*cannot be considered as a good predictor of attitudinal differences between variables.

Two age groups of early adulthood and middle adulthood significantly associated with all five factors of the questionnaire. Significant differences between age groups were revealed on two factors such as sensibility/tenderness and Knowledge of causes of intellectual disability. Middle adulthood shown positive attitudes on the factor of sensibility/tenderness,this findingopposeswith (Lau & Cheung 1999) as well as with (D. Morin *et al.* 2013), whereas Early adulthood shows more negative attitude than middle adulthood on the factor of knowledge of causes, while other factors such as discomfort, knowledge of capacity & rights, and interaction polarized neutral attitudes towards IDs.

Impact of gender, the factor knowledge of causes of Intellectual disability associated with negative attitudes towards intellectual disability, there was no significant differences between men and women on these factors with addition of two other factors such as discomfort and sensibility/tenderness.However, individuals show neutral attitudes towards intellectual disability on all factors except factor of knowledge of causes of intellectual disability. In addition of that, significant differences were revealed on two factors, as women held less knowledge of capacity & rights, and have little interaction as compare to men. This contradict with the study of D.Morin et al. (2013), whichrevealed that compared to women, men had more negative attitudes on the factors of discomfort, while on the factor of knowledge of capacity & rights, women had more negative attitude than men.

When this study assessed educational impact on attitudes regarding intellectual disability, results indicated that there was a significant difference between groups on two factors such as discomfort and knowledge of causes.On the factor of discomfort, respondents

show neutral attitudes, in spite of that the mean was significantly higher for Bachler degree holder than matriculated while the result was not significant among other groups. In contrast of this, matriculated individuals scored mean higher than Bachler degree holder on the factor of knowledge of causes of intellectual disability while the result was not significant among other groups. However, there was no difference between groups in terms knowledge of capacity &rights, interaction and sensibility/tenderness. This mix picture of results, differ with other studies such as (Ouellette-Kuntz *et al.* 2010; Mac- Donald & MacIntyre 1999; Lau & Cheung 1999;) who revealed negative attitudes in association of less-education.

Moreover, current study assessed attitudes towards people with intellectual disability with comparison of socio-economic status of participants. Participant (either from lower, middle or upper class) shown negative attitudes on the factor of *knowledge of causes of intellectual disability*, while lower class comparatively feel less *discomfort* thanmiddle and upper class, lower class also held more *knowledge of capacity and rights* as compare to individuals from middle and upper class. Regardless of socio-economic status, their responses on other factor of *sensibility or tenderness* were same as stated above in respect of groups created on the bases of age. Further, study revealed individuals from lower class have little interaction with intellectual disability.

Finally, impact of educational attainment and social class was revealed in term of discomfort factor, as individuals with higher education reported less fear in relation to intellectual disability. On the other hand, people with less or higher educated reported less positive attitudes towards people with intellectual disability. The implication of such affective differences are unclear, because we do not know the effects of frequency of contact and number of person with ID known, as well as religious impact has been associated with attitudes in Pakistani context (M. Patka et al. 2013). Current study added impact of socio-

economic status and found that individuals from lower class comparatively feel less *discomfort* thanmiddle and upper class, which might be consequences of family support and living or life style (Shakeel, 2014). Literature revealed that the large number of population is living in rural areas and even in them still larger number has very low social-and economic status However, to eliminate sense of discomfort and pity, there is need to create awareness and to build an environment in which a person could set an example for others to follow. Moreover, It is compulsory to elaborate the talent and skills of a person with intellectual disability to the group of people those who are unaware from this. It is also the responsibility of stakeholders to realize the urgency of the subject dealing with the capacity of self-determination. It also matters that the intellectual disabled must be given their due status in a society and be treated like an adult not as a child. The motive behind these educational programs still to bring change in the societal behavior. and should be evaluated for its effectiveness.

Factors, Knowledge of Capacity and rights, and knowledge of causes of Intellectual disability, encompassed the cognitive dimension of attitudes towards intellectual disability. The knowledge of causes of intellectual disability polarized negatively on all demographic variables such age, gender, educational attainment and socio-economic class, as well as in rural and urban population. However, finding suggesting that general population (either rural population or urban population) misunderstood certain causes of intellectual disability, and uncovered differences between rural and urban population, such as participant from rural areas reported more negative attitudes on the factor of knowledge of causes, and held more knowledge regarding capacitates and rights of person with intellectual disability as compare to urban population. In this regard, researchers suggested awareness and educational program, due to the causes of intellectual disability can help in understanding of who is a person with intellectual disability and also lightening our thinking to understand and

distinguish the differences he or she could present. It also one of the dogmatic belief in our society as revealed by Shakeel that in most of the cases intellectual disability is inherited from mother side due to certain reason. From above mentioned facts it is need of an hour that to inform and educate the public about the possible causes of intellectual disability.

Limitations of the Research Study:

Researcher has left no stone unturned to accomplish the best possible investigative study to explore the phenomenon in the true spirit. Following are a few influences that have been observed that they are beyond the control of researcher. But the anticipant researchers are recommended to consider them in the future endeavors:

Sample Size

The researcher has taken a sample of 200 (N=200) that seems very little to generalize the results upon the larger population. So the successors are recommended to go with the bigger, better, and bolder sample to retrieve the relevant data.

Sample Profile

The researcher has taken his sample from urban and rural areas of Islamabad. This seems that the participants' profile has not been considering other than this division. Future researchers should go with some other parameters in addition to retrieve a representative data from the participants.

Method

The researcher has opted with a survey method to access the existing data that how people, belonging either to urban or rural areas, render their attitudes towards Intellectually Deficient population. However, there are so many other methods of scientific investigation that can retrieve more valid, reliable and a representative data so a comprehensive conclusion could be drawn that could be even more useful in formulation of social policy.

Data Collection Process

Researcher has collected the entire data in person. Though he knows that this way, his physical presence and the respondents' approach to be socially acceptable can highly influence the authenticity, reliability and validity of data. Hence researcher recommends to take effective measures and materialize the process of data collection that could minimize the respective bias.

Equipment

The researcher has used a tool namely 'The Attitudes Towards Intellectual Disability Questionnaire (ATTID)'developed by D. Morin *et al.*in 2012. Though this has been back translated into Urdu and all other psychometric properties developed by conducting a pilot study but it is still highly recommended that future studies be carried using other tools in association with ATTID for the access of variant of information to have insight in the phenomenon.

Time

Human beings are such a complex creature and very hard to understand. Their behaviors, emotions, and thoughts keep on changing and developing. We hardly formulate the laws describing their behavior as we do in hard sciences. Data retrieved at a particular time has a poor reliability to generalize over a larger universe. So it is recommended that future studies be carried at different point of time and in follow up as well.

Timing of Study

The current study deals with exploration of attitudes of people towards Intellectual Disability. The researcher collected the relevant information on a given questionnaire from the desired population at a given time. As we know that attitudes are developed with the passage of time and strengthened by the respective experiences, they are recorded and measured the same way. So the future studies should be longitudinal in nature, see the way

attitudes are developed, recorded the essence of their strength not solely on a piece of paper but the procedures guided by experts.

Financial Resources

There is always a scarcity of monetary resources to make the ends meet the investigative requirements of elite technology. There are many paid analytical software that have a lot more to treat the data and bring many new things before the public.

Access to Literature

In spite of having too much literature available on the world-wide-websites, libraries, and periodicals but still it is all that the researcher needs to have and quench the thirst of literature. There are many websites cannot manage from this part of world and many have little or no access for various reasons.

Age of Data

The data retrieved in this study is not lasting. It should be replicated in different times, contexts, population, across cultures and across the age groups using one or other tool to describe, modify, predict and control the attitudes of people towards Intellectually Disability.

Conclusion

Literature review provides an insight into regarding conditions of people with intellectual disability and their family members such as they are at risk around the world including in Pakistan. It is because the person with disabilities are generally "disrespected" Rathore FA *et al.* (2005), "burden" Aslam *et al.*, (2011), "Stigma" Mirza I, *et al.*, (2009), "erroneous stereotype" S. Ahmed *et al.*, (2013). Such attitude impacts negatively on the community integration, social inclusion, and independence of the person with intellectual disability. However, in our knowledge, this is the first study aimed to investigate and compare the attitudes of general public regarding intellectual disability in rural and urban population of Pakistan. Earlier to this, a study was conducted by M. Patka, *et al.* (2013) who assessed attitudes of staff and community members in Karachi, Pakistan by using the Community Living Attitudes Scale (Henry *et al.*, 1996) comprising four subscales: (1) empowerment, (2) similarity, (3) exclusion, and (4) sheltering, but this study was largely confined to the urban centers and did not cover rural societies and general population.

As literature revealed that a move of deinstitutionalization compelled society at large to reconsider its attitudes towards person with intellectual disability, consequently several aspects to social attitudes towards the issue were considered. However, recently an instrument "Attitudes towards Intellectual Disability" Questionnaire developed has been by D. Morin *et al.* (2013)". The questionnaire addressed the affective, behavioral and cognitive dimension of attitudes towards people with intellectual disability. However, using this method of gauging the public attitudes found that overall pattern of attitudes of rural and urban population towards intellectual disability seems identical in term of affective, cognitive and behavioral dimensions. Affective dimension investigates the positive and negative emotions of individuals towards people with intellectual disability. As compared to discomfort factor, sensibility /tenderness seems to somewhat polarize the population. As for as, the cognitive dimension is concerned, overall negative attitude was found regarding the knowledge of causes of intellectual disability. This negative attitude was particularly associated with

less educated individuals and women. Lack of knowledge of capacity & rights of persons with intellectual disability is there across the genders and other divides. Obviously, our study emphatically suggests that comprehensive awareness campaigns and educational programs need to be launched from time to time to address the imbalances in the public attitudes/approaches towards this issue, to sensitize the society and boost the morale of the mentally retarded sections of society.

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