IDENTITY AND WISDOM OF YOUNG ADULTS IN CANADA AND PAKISTAN WITH ASPERGER SYNDROME: A CROSS-CULTURAL STUDY

by

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Abstract

This cross-cultural study investigates identity and wisdom in people with Asperger syndrome (AS). The diagnostic characteristics of Asperger syndrome are universal, as they are manifest in particular outward behaviours (DSM-4). One of the aims of this study is to explore whether or not identity and wisdom are also universal in people with AS. Interviews were conducted that asked participants about their own lives, as well as about the acquaintances and historical figures to whom they look to for wisdom. Some self-report measures of identity, values, wisdom, and well-being were also administered to the participants. Forty-six male participants (half diagnosed with Asperger syndrome) were recruited from Karachi, Pakistan, and the Greater Toronto Area (GTA), Canada. People with AS were matched with non-autistics according to age. The results of this study showed that the Canadian Asperger group was significantly higher in social identity, and lower in personal integrity, as compared to the Pakistani Asperger group. The value of conservation was significantly higher in the Asperger groups than in the control groups. Mean scores on the 3-dimensional wisdom scale differed significantly between the Asperger and control groups, but remained the same between the two Asperger groups. People with AS were equally satisfied with their lives as compared to non-
autistics. There was a greater emphasis on the theme of communion for the Pakistani Asperger group than for the Canadian Asperger group. Results also found a greater emphasis on the theme of personal agency in both the Asperger groups, as compared to the control groups. The Pakistani Asperger group mainly considered religious figures to be the wisest in history, whereas the Canadian Asperger group primarily nominated scientists as the wisest figures in history. Both the Asperger groups considered family members to be the wisest among their acquaintances. The concept of wisdom centered on the theme of cognition for both Asperger groups. The study was limited to male participants only, and future research should study both genders.
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1. **Introduction:**

Personality psychologists have long sought to construct a comprehensive framework for understanding the whole person (e.g., Allport, 1937; Murray, 1938; Kluckhohn, & Murray, 1953; Goldberg, 1993; Costa, & McCrae, 1994; Hooker, 2002). Drawing from McCrae & Costa’s (1999) five-factor theory and the scholarly writings of Hooker (2002) and Sheldon (2004), McAdams and Pals (2006) propose five guiding principles for understanding the whole person: (1) *evolution and human nature* (i.e., individual biological variations and developmental patterns), (2) *dispositional traits* (i.e., personal characteristics such as friendliness, loneliness, straightforwardness, dutifulness) (3) *characteristic adaptations* (i.e., the personal goals and values required for social roles), (4) *life narratives*; (i.e., individuals’ personal life stories that help to understand their behaviour and establish their identity), and (5) *cultural context*, which influences personal traits and characteristic adaptations, and also affects life stories. This study adapts McAdams and Pals (2006) approach to explore the unique identity and wisdom of people with Asperger syndrome, in order to distinguish them from the *general population*.

**Asperger Syndrome.** Asperger Syndrome is part of a spectrum of pervasive developmental disorders commonly called “autism”. Epidemiological studies of autism show an uneven male-to-female ratio of about 4:1, meaning autism is far more common in men (e.g., Fombonne, 2003; Constantino & Charman, 2012). According to the diagnostic and statistical manual, 4th edition (DSM-IV), published by the American Psychiatric Association (APA, DSM-IV, TR, 2000), autism spectrum disorder (ASD) encompasses five distinct conditions: *autism,*
Asperger syndrome (also known as high functioning autism\(^1\)), childhood disintegrative disorder, Rett’s syndrome, and pervasive developmental disorder-not otherwise specified (PDD-NOS). Classical autism is associated with learning difficulties, below average IQ, and language delays. Asperger syndrome shares the features of autism but lacks the associated learning difficulties or language delays, showing normal or even above average IQ (e.g., Asperger, 1944; Wing, 1981; Atwood, 2010). Studies have also found that people with Asperger syndrome have a tendency to focus on details (e.g., Frith, 2003; Atwood, 2007, 2010; Baron-Cohen, 2009) and show an inclination to maintain norms and routines (e.g., Asperger, 1944; Wing, 1981). Many famous historical figures are thought to have been on the autistic spectrum (today they would probably be diagnosed with Asperger’s syndrome, or high functioning autism), including, Bertrand Russell, Albert Einstein, and Isaac Newton (Loan, 2006).

Individuals with autism spectrum disorders are known for a triad of impairments that include difficulties in social, communicative and behavioural domains (DSM-IV, TR, 2000). The clinical identity of individuals with Asperger syndrome is linked to their biology and psychology (e.g., Wing, 1981; Frith, 1994; Cohen, et al., 2005; Edmonds, 2008). For example, studies have found growth abnormalities in the cerebellum, cerebrum and amygdale regions of the brain (e.g., Hazlet, et al., 2005; Carper et al., 2006). Frith (1989, 1994) claimed that due to a weak central coherence in individuals with autism spectrum disorders they exhibit an inability to process information globally.

\(^1\) Despite some debate over the term (see Attwood, 1998, 2007, 2010 and Gilberg, 1998), in this thesis Asperger Syndrome and high functioning autism are considered synonymous. The term high-functioning autism is not included in the DSM under the category of pervasive developmental disorder. However, most researchers use the term high functioning autism interchangeably with Asperger syndrome (e.g., Colle et al, 2008; Wakabayashi et al, 2007; Baron-Cohen, 1997, 1995).
Autism spectrum disorders can be understood from various perspectives, including those of teachers (Al-Shammari, 2006), parents (Parsons et al., 2009), psychologists (Wing, 1981), and clinicians or researchers (Kanner, 1943; Asperger, 1944; Mehler, 1952; Bettelheim, 1967; Baron-Cohen, 2002; Frith, 2003). We can also learn from the autobiographies (e.g., William, 1992, 1994; Lawson, 2000, 2003) of people diagnosed with Asperger syndrome. These autobiographies (e.g., Williams, 1992, 1994; Grandin, 1995a, 1995b, 1995c; Gerland, 1997; Lawson, 2000, 2003, 2006; Dumortier, 2004; Purkis, 2006; Robinson, 2008) remind us that it is imperative to understand autism through the eyes of people who have the condition, and who can voice the experienced advantages and disadvantages of being autistic. Most research, however, ignores the perspectives of people with autism spectrum disorders. This study will fill this gap by exploring the identity and wisdom of people with Asperger syndrome through self-report questionnaires and through personal interviews.

In the next section, I begin by framing identity in general before moving on to a discussion of people with AS and their wisdom.

1.1. Identity:

In psychology, identity describes who or what a person is. Identity can refer to the distinctive characteristics of a person or to distinctive group affiliations. The experiment of the minimal group paradigm (Tajfel, 1970) provided the basis for social identity theory. Later, Tajfel and colleagues (1971) conducted a series of experiments to examine how individuals responded to group membership even in the absence of their prominent identity. Traditionally, the identity
of an individual has been divided into two major categories: personal and social (e.g., Miller, 1963). Personal identity refers to one’s self-knowledge and the unique attributes one possesses (e.g., Schwartz et al., 2005), while social identity refers to sociological aspects like race/ethnicity, religion, or feelings of belonging to a community (e.g., Tajfel et al., 1971; Turner, 1996; Spear, 2011).

Hogg & Vaughan (2002) also take up Tajfel and Turner’s notion of social identity, arguing that it comes from perceived membership in social groups and an individual’s self-concept comes out of the group membership where social identity is concerned. Identity is multidimensional and may include various orientations, traits, and values. Identity can be better understood through the life stories embedded in one’s culture. This dissertation employs McAdams and Pals’ (2006) framework to explore personal identity by going beyond cognitive psychology, exploring human nature first.

**A. Human biological identity and human nature:**

Drawing on McAdams & Pals’ (2006) first principle for understanding the whole person, we need to consider variations in human biology; for example, some human behaviours have biological underpinnings such as Asperger syndrome (e.g., Cohen, et al., 2005; Freitag, 2007; Sutcliffe, 2008). Scientists have provided evidence that each human being has distinct DNA that is not identical to any other person’s DNA. Although this genetic distinction is considered to be the biological identity of a person for various biological investigations, in psychological investigations identity is understood through individuals’ self-understanding.
B. Identity traits:

People’s identities have been studied through self-reports and questionnaires to discover general traits, such as personality or identity characteristics. More specifically, identity can be examined through their understanding of self (personal identity); their understanding of self in social context (social identity); their understanding of self in relation to their community, country and religion (collective identity); and their understanding of self within intimate relationships with friends or romantic partners (relational identity). These four categories of identity (private, public, collective, and relational) constitute people’s concepts about who they are. For example, Cheek and Briggs (1982) developed a two-dimensional (personal and social) identity scale. The items on their scale were adapted from Sampson’s (1978) personality and location of identity study. Later, Cheek and colleagues (2002) developed a fourth version of the Aspect of Identity Questionnaire which included four aspects of identity: (1) personal identity, e.g., ‘My dreams and imagination (2) social identity, e.g., ‘My popularity with other people’ (3) collective identity, e.g., ‘My race or ethnic background’, and (4) relational identity, e.g., ‘My desire to understand the true thoughts and feelings of my best friend or romantic partner’. Conceptually, Cheek and colleagues’ (2002) last three aspects of identity are closely related to Tajfel and colleagues’ (1971) notion of social identity (also see Turner, 1996; Hogg & Vaughan; 2002; Spear, 2011).

McAdams and Pals (2006) argued that beyond personal traits, individual’s lives vary due to motivational and developmental adaptations and diverse goals and values. Thus, personal
and social identities require values because values are among the motivational factors that shape individual dispositional traits.

C. Values:

To understand a person’s identity it is crucial to understand their values. Hitlin (2003, 2011) maintained that understanding human values is crucial if researchers wish to explore the relationship between individual identity and society. Earlier, Parsons (1937) similarly speculated that studying values is the best way to understand identity.

Building on Parson’s (1937) ‘theory of action’, Rokeach (1973, 1979) explored how values are instrumental in the behavioral responses of individuals. People hold values that are important to them in varying degrees. Drawing from Rokeach’s (1973, 1979) formulation of values, Schwartz (1992, 1994) constructed a comprehensive model of basic human values that was used to compare more than 60 different nations to allow for cross-cultural acceptance (Schwartz, et al., 2001). Schwartz (1992, 1994, 2005) argued that taking values into account helps us to understand the motivational bases of an individual’s behaviour and attitude. Values are important to understanding people’s identities and wisdom.

Schwartz’ ten values include value theories, common values in different cultures, values that are important in various religions, and the values that are highlighted in philosophical discussions. The basic core elements contained in Schwartz’ Basic Human Values Scale are: (1) self-direction, which refers to independent thought and action (2) stimulation, which refers to having an exciting life (3) hedonism, which entails taking pleasure in life (4) achievement, which connects with ambition (5) power, which connects to social status and authority (6) security and
safety, which connects to stability in society and in relationships (7) conformity, which refers to being self-disciplined in maintaining social norms (8) tradition, which shows inclination to maintain customs (9) benevolence which refers to being helpful, and, finally, (10) universalism, which involves being broadminded.

Values are crucial for understanding people’s traits. Schwartz’s (2003) basic human values can be considered the motivational force for individual’s dispositional traits. Exploring people’s traits through questionnaires is one of the ways to investigate identity. However, people’s traits can also be expressed through life narratives by asking them to describe various aspects of their lives (Bruner, 1986, 1987, 1990; McAdams, 1993; Ricoeur, 1984, 1992). Through narratives of identity, individuals make meaning of their lives (McAdams, 2011).

D. Personal Narratives:

In the beginning of the 1980s the idea of narrative identity emerged in the social sciences through the scholarly writings of many philosophers and social scientists (e.g., Tomkins, 1979; McAdams, 1980, 1982; Runyan, 1982; Pondy et al., 1983). However, understanding identity through autobiography—in the form of a full theoretical model of narrative identity—was first introduced by McAdams’ (1985) ‘Personological Inquiries Into Identity’. He, among others, thought that people’s identity could be best perceived through their self-organized life stories. Recently, many studies have claimed that people living in a social world understand themselves through their own life stories (e.g., Adler, 2012; Kogler, 2012; McLean et al., 2012; Fivush et al., 2011; McAdams, 2011; Pasupathi & Hoyt, 2009; Lieblich & Zilber, 2008; McAdams, & Pals, 2006;
McAdams’s (1985) life story model of identity was influenced by Erikson’s (1963) developmental concept of ego identity, the fifth of the seven stages of psychosocial development. Earlier, Erikson (1956, 1963) argued that late adolescence and young adulthood is the period when individuals develop their ego identity through social, occupational, and ideological commitments. Erikson and Erikson (1997) expressed that ego identity provides the basis for an individual’s uniqueness, which begins one’s self-commitment to prove their individuality in society. At this point, people explore their ideology and choose their occupation; they perceive themselves with relation to their academic achievements, occupation, gender roles and sexuality. During the late adolescence and emerging adulthood period of life, people’s individuality and the construct of their identity can be understood subjectively through their life stories (McAdams, 1985, 1996). In this context, one approach to depicting identity through narrative is to formulate a structural interview of important life events. People’s personal accounts provide clues to their narrative identity.

Narrative identity organizes an individual’s story as a timeline. Many studies have claimed that identity can be best understood through life stories (e.g., Adler, 2012; Bruner, 1986; Kogler, 2012; McLean et al., 2012; Fivush et al., 2011; McAdams, 2011; Pasupathi & Hoyt, 2009; Lieblich & Zilber, 2008; Singer, 2004; McAdams, et al. 2004; Ricoeur, 1992). Narrative identity is the integration of one’s past memories and the present.

People’s day-to-day life experiences construct internalized life stories. Many studies (e.g., Bakan, 1966; McAdams, 1980; Mansfield & McAdams, 1996) describe themes of agency
and communion in people’s life stories and their forms of being. The theme of personal agency is associated with life accomplishments independently, whereas the theme of communion includes others in one’s life accomplishments and a sense of belongingness (McAdams, 1993). Ideally, people live with the balanced integration of agency and communion (Bakan, 1966).

Studying a large sample of adults and college students in a community, McAdams and his colleagues (1996) noticed that autobiographical accounts they assembled emphasized personal agency and communion. Drawing on Bakan’s (1966) definitions of these terms, McAdams and his colleagues (1996) coded the theme of agency as: (1) self-mastery, (2) status/victory, (3) achievement/responsibility, and (4) empowerment. They coded the theme of communion as: (1) love/friendship, (2) dialogue, (3) caring/help, and (4) unity/togetherness.

Drawing on from Erikson’s work (1963), many studies of psychosocial development (e.g., McAdams, 1985, 1996; Arnett, 2000; Dusek & McIntyre, 2003; Erikson & Erikson, 1997; Harter, 1998; Kroger, 2003) have argued that late adolescence and young adulthood are the crucial times when people construct narrative identities, while also emphasizing that the process of self-understanding continues across the life span. People’s life narratives provide a very detailed picture of their identity. However, according to McAdams and Pals (2006) it is imperative to understand one’s culture in order to understand one’s life stories.

**E. Cultural Context:**

Culture plays an important role in self-identity formation (Bruner, 1990). Cultural differences surface in the traits people associate with their identity. For example, people in collectivist
societies share common goals, group harmony, and collective identity (Markus & Kitayama, 1998; Hammack, 2008, 2011). People in individualistic societies focus on individualism and emphasize personal uniqueness (Fiske et al., 1998). Thus, the narrative identity of a person, which includes the themes of personal agency and communion, can be influenced by the culture of the narrator. However, exploring agentic and communal themes cross-culturally has been relatively overlooked in the literature until recent. This study contributes to both of these conceptions of narrative identity.

People’s life stories reflect prevailing cultural norms and images that are at play when developing narrative identity. Building on Erikson’s theory of psychosocial development (Erikson, 1956, 1963; Erikson & Erikson, 1997), Hammack (2008, 2011) argued that the self is highly connected to society and that narrative identity can be better understood by keeping culture and the social environment in mind.

As mentioned earlier, McAdams and Pals (2006; also see McAdams & Walden, 2010) provide the most comprehensive account of how biology, traits, values, narrative, and culture interact to create a comprehensive personal identity. This combination of human nature, individual differences in behaviour, characteristic adaptations such as values, evolving life stories, and cultural experience contribute to people’s understanding of their own identity. This is particularly important when considering clinical populations like those with Asperger Syndrome.
1.2. **The identity of people with Asperger syndrome:**

This dissertation adapts McAdams & Pals’ (2006) approach to illuminate the personal identity of people with Asperger syndrome. The next five sections will explore Asperger syndrome in accordance with the five principles developed by McAdams & Pals.

**A. Clinical identity of people with Asperger syndrome:**

Recent studies (e.g., Cohen, et al., 2005; Freitag, 2007; Sutcliffe, 2008) have found genetic (biological) links to autism spectrum disorders (ASD). ASD impacts the typical development of the brain in the areas of social interaction and communication skills (e.g., Edmonds, 2008). Functional MRI abnormalities were also detectable in people with ASD; for example, people with AS have difficulties around facial perception (e.g., Langdell, 1978; Klin, et al., 2002).

The Diagnostic Statistical Manual (DSM-4) helps create a clinical identity for people with ASD. Autism spectrum conditions are diagnosed when a child has abnormalities in a triad of behavioural domains: (1) social development, (2) communication, and (3) repetitive behaviour/obsessive interests (APA, DSM-4, TR, 2000; WHO, ICD-10, 2010). Autism is associated with learning difficulties. Children and adults with autism spectrum disorders typically experience difficulties in everyday life. When communicating with others, they often do not understand verbal and nonverbal cues; when interacting socially, they often do not understand other’s intentions; and they often do not have plans for leisure or play activities. Asperger Syndrome, a subgroup conceptualized as part of the autism spectrum, shares the features of autism, but without the associated learning difficulties. People with AS have normal or even
above average IQ and do not suffer from any language delays (e.g., Wing, 1981, Atwood, 2007, 2010).

B. Dispositional traits of people with Asperger syndrome:

Individuals with AS have a distinct pattern of life; they socialize and communicate with their friends and partners in ways different from the general population (e.g., Gutstein & Whitney, 2002; Edmonds, 2008). Many people with this condition prefer to live alone rather than intermingling with others (e.g., Tantam, 2012; DSM-4 TR, 2000). Consequently, many individuals with high functioning autism/Asperger syndrome develop great computer, mathematics, and engineering skills that require minimal human interaction (Baron-Cohen et al., 1998). People with AS also commonly display attributes such as honesty, perseverance, and a strong sense of justice (McMullen, 2000). We may recognize many of the classic traits of individuals with Asperger syndrome as representing part of a unique Asperger culture. However, those with Asperger syndrome do not intentionally pass this characteristic culture on to their descendants, as do many other cultural groups. This distinctive Asperger culture involves a particular identity that may be different from the identities of non-autistics.

According to Fitzgerald (2004), many famous people showed signs of autism, but were still very successful in various fields, including, philosophy (Ludwing Wittgenstein), politics (Sir Keith Joseph), mathematics (Ramanujan), leadership (Eamon de Valera), poetry (William Butler Yeats), and fiction (Lewis Caroll). Furthermore, the personalities of many autistic people include positive traits such as, honesty, straightforwardness, perseverance, and a non-judgmental
attitude (McMullen, 2000). They are also extremely trustworthy and loyal (Lawson, 2006). Due to their ability to identify the elements of a system (but not human interaction, Baron-Cohen, 2002) people with Asperger syndrome are known for job related attributes such as being committed, dependable, reliable, accurate, and thoughtful (Kanner, 1972). People’s dispositional traits are highly associated with their values. This is also true in the case of people with AS.

C. Values of people with Asperger syndrome:

Due to their distinctive identity orientations, individuals with Asperger syndrome may hold values that are unimportant to others. For example, Hirvela and Helkama (2011) explored Schwartz’ value scale (1992) and found that people with Asperger syndrome value tradition and security, and have a tendency to conform compared to non-autistics of similar ages and with equivalent levels of education. Hirvela and Helkama’s results also showed that people with AS scored lower in the values of stimulations and benevolence compared to non-autistics. Many of the dispositional traits of people with AS, such as honesty may be due to a high level of conformity. Traits and values provide a window into personality. However, as McAdams and Pals (2006) argue, it is also crucial to understand life narratives in order to make sense of an individual’s behaviour and interactions.

D. Personal narratives of people with Asperger syndrome:

Autobiographical methods are a unique way of understanding personal identity. Through everyday life experiences, people not only gain wisdom, they also make sense of their lives
through their life stories. Building on Erikson’s (1963) point that the organization of life stories in a time frame is the key element of identity, McAdams (1985, also see McAdams and Pals, 2006) also argues that identity can be best understood in the context of a life story.

Autobiographical accounts enrich understandings of narrative identity. However, attempts to explore autism spectrum disorders through autobiography are relatively recent (e.g., Grandin, 1984, 1995b; Happe, 1991; William, 1992, 1994; Bernard, 1994; Tammet, 2006; Lopez-Duran, 2007). The life stories of people with AS have helped researchers recognize their extraordinary abilities in mathematics (e.g., Tammet, 2006; Newport, 2001) and creative writing (e.g., William, 1992, 1994; Holliday, 2001; Lawson, 2006). Temple Grandin (1995a, 1995b), for example, emphasizes her strength in visual learning and her enjoyment of visually stimulating objects. Grandin (1995b) also enjoys vestibular sensations. She explains that:

Rocking and spinning were other ways to shut out the world when I became overloaded with too much noise. Rocking made me feel calm. It was like taking an addictive drug. The more I did it, the more I wanted to do it. My mother and my teachers would stop me so I would get back in touch with the rest of the world. (pp. 44–45).

The sensory issue that Grandin is articulating is very common among individuals with autism spectrum conditions. They often have hypo- or hyper-sensory difficulties. This condition may be due to a deficit in the regular flow of neurotransmitters in the brain, which produces an inability to process stimuli properly (Waterhouse, et al., 1996). This condition explains why some people with autism spectrum engage in self-stimulating behaviour such as fixated rocking and spinning activities. According to Grandin, rocking and spinning are a response to being overloaded with noise because they help disconnect her from a noisy environment (Grandin, 1995b). This behavioural understanding also connects with McAdams & Pals’ (2006) framework,
illustrating that various behaviours and dispositional traits can be better understood by taking human biology into account.

As mentioned earlier, honesty and straightforwardness are prominent features in most people with autism spectrum conditions (McMullen, 2000). Their honesty is often a source of great pride. For example, Gerland (1997) wrote “I always said exactly what I meant, neither more nor less”. Honest and to-the-point expressions are part of the personal identity of many individuals with autism. Within the context of being honest, many people with AS display an inability to lie that may be due to their deficiency in “theory of mind” abilities (Baron-Cohen, 1995).

Many people with AS try to appear normal (e.g., William, 1992, 1994; Spicer, 1998), but find it unnatural. For example, Donna William felt that her identity was rooted in the “being-state” (living with autistic characteristics) rather than the “appear-state” (efforts to live life like non-autistics). She simply wanted to be accepted as she was. Some autobiographies also suggest that people with autism spectrum reject the idea that they need to be “cured” (e.g., Holiday Willey, 1999; & Sinclair, 1992, 1993). They do not consider autism to be a disease or disability, but rather a distinct way of being. Grandin (1995b) likewise explained that even if she was given a chance to be non-autistic, she would not take it.

Many biographies of people with autism spectrum make clear that they dislike the idea of ‘person-first’ language (e.g., Sinclair, 1992; Grandin, 1995b). They consider themselves ‘autistic persons’ rather than ‘persons with autism’. This is because they are proud of being autistic and consider it part of their identity. The idiosyncratic attributes people with AS exhibit,
for example being honest, systemized, and enjoying rocking behaviours, have causes linked to some theories of autism. Understanding autistic traits is a challenge for members of the general population, who view autistics as eccentric. Similarly, some people with autism spectrum consider non-autistics eccentric and do not understand their behaviour. Temple Grandin once said “Much of the time I feel like an anthropologist on Mars” (Sacks, 1995: p. 295). Sinclair (19932) argued on behalf of autistic children that “it is not the child, but parents and other ‘neurotypicals’, who are aliens. The ‘alien’ and the human community are then symmetrical: for people with autism neurotypicals are aliens and vice versa”.

A few studies (e.g., Vuletic, 2010; Bruck et al., 2007) have explored the autobiographical memories of people with autism spectrum condition through structured questionnaires. Bruck and colleagues (2007) are among the few to have asked children with ASD to provide them with narratives of their life events. Their results showed that children with ASD recalled fewer life events, that their memories lacked detail, and that the participants had difficulty recalling personal factual knowledge.

**E. Cultural context:**

Little research has examined Asperger syndrome cross-culturally (e.g., Wakabayashi et al., 2006, 2007; Chung et al., 2012). Autism spectrum disorders are clinical conditions. The diagnostic manual provides a baseline to assess people with ASD. The Autism Quotient (AQ) was also constructed to assess individuals with ASD by Baron-Cohen and his colleagues in 2001.

The AQ includes 50 questions in 5 different areas: social skills, attention switching, attention to detail, communication, and imagination. Wakabayashi and colleagues (2006) found similarities in the AQ of Japanese and British participants diagnosed with ASD.

Chung and colleagues (2012) investigated challenging behaviours including aggression, self-injurious behaviour, and stereotypical behaviour in children with ASD cross-culturally. 285 participants diagnosed with ASD were recruited from the USA, South Korea, Israel, and the United Kingdom. The study found relatively few differences in the presence and severity of challenging behaviours between the participants from the four countries. This consistent pattern shows that challenging behaviours exhibited by children with ASD have a high degree of universality even when diverse contexts are taken into account. The results initially revealed that the participants from the UK exhibited more challenging behaviours than the participants from the U.S.; however, further investigations revealed that the differences between the participants were mainly due to recruitment procedures. Specifically, the participants in the UK were contacted because they were attending schools specializing in the treatment of challenging behaviours.

Wakabayashi and colleagues (2007) found cross-cultural stability in the empathy and systemizing theory of sex differences, and extreme male brain theory of autism between participants from the UK and Japan diagnosed with ASD. They found that individuals with ASD had significantly higher scores on the Systemizing Quotient (SQ) than non-autistics. Their results also revealed that the non-autistic group had significantly higher scores on the Empathizing
Quotient (EQ) than the ASD group. They also found that males scored higher than females on the SQ, and females were substantially higher than males in terms of the EQ.

Personal identity, and in particular one’s life story and how it is negotiated, requires wisdom to pursue the best possible quality of life, and wisdom is an important aspect of personal and social identity. I consider wisdom in relation to people with Asperger syndrome in the following section. I begin with general understanding of wisdom-identity through following McAdams and Pals’ (2006) five guiding principles.

1.3. General understanding of wisdom:

Wisdom is the apex of human development (Staudinger & Pasupathi, 2003), and the desire for wisdom is an ideal for human beings (Proverbs 8:11, Waltke, 2004, 2005). The term wisdom has several dimensions, including cognitive, conative\(^3\), affective, reflective, metacognitive, and judgmental abilities, as well as problem solving skills (Birren & Fisher, 1990; Ardelt, 2003; Sternberg, 1990; and Kitchener & Brenner, 1990). Wisdom concerns important truths about fundamental human experiences, including ultimate truths about religious objects, spiritual understanding, and worldly matters needed to live a good life. For instance, wisdom deals with crucial tasks such as mentoring others, managing social institutions, and governing countries (Kramer, 2000). Wisdom is also revealed by God to His chosen people. This kind of wisdom is considered divine/theological wisdom and is distinct from humanistic wisdom.

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\(^3\) The term “conation” derives from the Latin word conatus. This is one of the three parts of the mind, (1) cognitive, (2) affective, and (3) conative. Birren and Fisher (1990) used this word in their definition of wisdom.
Theological/divine wisdom is called *hikma* or *hikmah* in Arabic literature, and *hikmat* in Urdu⁴ (Pakistani language). Gutas (1981) has quoted the meaning of wisdom (hikma) from the Quranic commentators. He listed the following meanings of wisdom: prophetic practice (sunna), knowledge of religion, following the religion, comprehending the religion, understanding the Quran, and having a fear of God. In other words, wisdom is whatever God revealed to the prophet. Hikma is also connected to proper speech and deeds. It is something that God puts in one’s heart to illuminate it. It is trustworthiness (or something committed to somebody’s trust), and it is the knowledge of the Prophetic traditions. In the Arabic language, those who have *hikma* (wisdom) are called *hakeem* (wise person). As with Jesus in the New Testament, the Quran presents Muhammad as wise, and says in surah Al Asra #17: ⁵ *ayat 39 (The Quran, 17:39) “This is (part) of Al Hikmah (wisdom, good manners and high character, etc.) which your Lord has inspired to you (O Muhammad peace be upon him)”.

In the Western tradition, the Greeks explored wisdom through philosophical and secular reasoning. However, in ancient Greek times religions have taken their own stance towards understanding wisdom. The concept of wisdom has been carried down through the ages in both the Middle Eastern and Western culture. Historically, two periods of particularly rapid change in Western culture that influenced ideas of wisdom were the medieval Christian church and the Renaissance. The Renaissance view of wisdom continues to inform science and wisdom today, but the term wisdom was largely abandoned after the Renaissance, as scholars turned from the pursuit of wisdom and happiness to the pursuit of truth and usefulness (Gaukroger, ⁴ Urdu is one of Pakistan’s official languages that has adapted many Arabic and Persian words (Alam, 1998) 
⁵ An ayat is a complete sentence in a surah, whereas, a surah is a chapter (theme) in the Quran. The Quran has 114 surahs (chapters).
By the nineteenth century, what would have been considered the pursuit of human wisdom became the social sciences of anthropology, sociology, and psychology, each with its own methods of empirically studying human life. In the late 20th c., these methods were turned to the study of the concept of wisdom itself, as understood by people of different ages, genders, professions, and ethnicities. Modern science explores wisdom empirically.

A. Dispositional traits:

Ardelt (2003) studied wisdom as a disposition that integrates cognitive, reflective, and affective dimensions of personality. Building on early data provided by Clayton and Birren (1980), Ardelt (2003) developed a 39-item self-report questionnaire, the Three-Dimensional Wisdom Scale (3D-WS), that identifies three distinct dimensions of wisdom in people’s personality: cognition, or truth-seeking; reflection, or perspective-taking; and affect, or emotional concern for the well-being of others. The scale has become among the most widely used to assess wisdom and shows good internal reliability (alphas for the three dimensions range from .71 to .85), test-retest reliability (.85 at 10 months), as well as good ecological validity, with wisdom nominees scoring significantly higher than non-nominees.

Ardelt (2003) applied her "Three-Dimensional Wisdom Scale" (3D-WS) to a sample of 180 adults, 73% of which were female, and 27% of which were male. Her results suggested that the 3D-WS correlated significantly with other scales such as mastery, general well-being, purpose in life, and subjective health. The 3D-WS was also positively correlated with levels of education and longest job held. She also found that the 3D-WS was significantly negatively
correlated with depressive symptoms, feelings of economic pressure, and avoidance and fear of death. Scores did not correlate with marital or retirement status, gender, race, income, or the social desirability index.

In a follow-up study, Ardelt (2005) found that high scorers coped with challenging events in their lives and learned from them by using three ‘meta-strategies’: (1) distancing themselves from difficult events to relax and clam down; (2) actively coping to overcome obstacles; and (3) applying life lessons to new events. In contrast, low wisdom scorers used only distancing strategies to cope. Using the three dimensional wisdom scale Khan and Ferrari (2009) found that most participants in Pakistan hold a medium level of wisdom identity, as measured by both the *Adults Self-Transcendence Inventory* (ASTI) and the 3D-WS. However, they also found that those low in wisdom were mostly children, while those high in wisdom were mainly the elderly.

Levenson and colleagues (2005) developed the *Adult Self-Transcendence Inventory* (ASTI) to assess the extent to which people experience personal meaning as transcending their immediate lives; self-transcendence is understood as the developmental achievement necessary for wisdom. In a preliminary study, Le (2004) found no age or gender differences for self-transcendence. However, in a follow-up study, age was a significant predictor among undergraduates considered alone (Le & Levenson, 2005), as well as in a subsequent study comparing older Native-born Americans and Vietnamese immigrants to those in the USA (Le, 2008); this may reflect the smaller sample sizes per age group in Study 1, and effect sizes are not reported.
Bluck and Glück (2005) reviewed studies of implicit theories and identified five common dimensions: (1) a *cognitive* knowledge of life experience, (2) *insight*, or the motivation and ability to grasp the essence of a problem, (3) a *reflective attitude* needed to learn and grow through life experience, (4) *concern for others* and an ability to see things from their perspective, and (5) *real-world problem-solving skills* that include knowing one’s limitations and the ability to give good advice. Similar to Bluck and Gluck (2005), Khan and Ferrari (2009) found six themes that emerged from people’s perspectives on wisdom in Pakistan: (1) *cognitive knowledge of life experience*, (2) *insight* into the essence of a problem, (3) a *reflective attitude*, (4) *concern for others*, (5) *real-world problem-solving skills*, and (6) *personality traits*. They added a further distinction between Islamic and general knowledge (cognitive) and Islamic and general problem-solving abilities. These results support the view that implicit theories of wisdom are closely related to cultural ideology.

Similar to McAdams and Pals’ (2006) framework for understanding personal identity, which emphasizes that people’s dispositional traits closely link to their values, Le (2008), and Pushkar and colleagues (2010) make the important point that wisdom cannot be understood apart from a person’s values and their efforts to live according to them.

**B. Implicit theories of wisdom and values:**

Exploring Schwartz’ (2003) basic human value scale, Le (2008) found that the value of self-transcendence was negatively associated with conservatism as a core value among Europeans. He suggests that conservatism hinders learning from difficult life experiences: over half of Le’s
Vietnamese research participants had survived war and this may have led them to focus on survival, not personal growth and transcendence.

People define wisdom depending on the associations and values that matter most to them (Le, 2008; Le & Levenson, 2005). Khan and Ferrari (2009) found foundational values were positively correlated to wisdom. They also found that all participants scored themselves lower than the person they nominated as wisest on all five components of the foundational values scale developed by Jason and colleagues (2001), with no effect for age or gender. However, a one-way between-subject ANOVA found that people clustered at different levels of wisdom differed significantly on the value they accorded to intelligence and harmony (as attributes of the wise). Post hoc comparisons using the Bonferroni test indicated that those with low levels of wisdom scored these two attributes, intelligence and harmony, significantly lower than did those with high levels of wisdom.

Consistent with other studies (e.g., Khan & Ferrari, 2009; Ardelt, 2008; Baltes et al., 1995) all participants were more likely to nominate men as wise. Ferrari and Khan (2009) also found Pakistani participants valued religious factors when nominating men as wisest. The results showed that most women similarly nominated men as wise.

C. Exploring wisdom through life narratives:

Recently, some studies of implicit theory have begun to ask people about their views on personal wisdom (Ferrari et al., 2011; Khan & Ferrari, 2009; Yang, 2008a, 2008b; Khan, 2008; Glück, Bluck, Baron, & McAdams, 2005; Ardelt, 2005). The advantage of this method is that it
provides accounts of wisdom that are deeply contextualized, with the presumption that there is a range of meanings of wisdom that can only be understood within their situated contexts, not as abstracted traits or qualities. For example, Bluck & Glück (2004) looked at three different age groups (adolescents, adults, and the elderly), and collected autobiographical narratives on wisdom. They asked people to remember times in their lives when they have acted, thought, or said something wise. The majority talked about their life decisions, reactions to negative events, or life management strategies. Bluck & Glück identified three different forms of autobiographical narratives of wisdom: (1) empathy and support, which refers to seeing others’ perspectives and feelings; (2) self determination and assertion, which refers to taking control of a situation and standing by one’s goals, values, or priorities, and knowledge; and (3) flexibility, which refers to personal experience.

Bluck and Gluck (2004) noticed that it was very easy for people to describe the moments in their lives when they overcame their problems and acted wisely. Unlike adolescents, adults and the elderly related their experiences of wisdom to their life stories and felt that they learned important lessons about themselves or developed a life philosophy through these events. Exploring wisdom through people’s own stories is a very practical approach since people can remember and recognize their own wise moments more readily than they can another person’s. This is because they know exactly what they accomplished in their lives, and consider life accomplishment a central indicator of wisdom.

Yang (2008a) conducted a very similar study in Taiwan that examined narratives from 66 Taiwanese nominees for core components of the definition of wisdom (Yang, 2008a). These
included integration, embodiment, wisdom’s positive effects and the contexts in which wisdom is manifested in real-life (Yang, 2008b). Her results showed that autobiographical wisdom incidents were most often described in relation to: (1) resolving difficult work-problems; (2) doing the right thing in the face of adversity; (3) deciding upon and developing life paths; (4) achieving and sustaining a satisfactory life; and (5) striving for the common good. However, neither study compared the answers of people who are more or less wise to see whether wiser people point to different experiences in their lives or draw different lessons from similar experiences. The only existing research that looks at transcendent wisdom from an autobiographical perspective was a study of Sufi immigrants to Sweden. It found that quiet contemplation of God improved the quality of life and well-being in elderly immigrants, despite their physical isolation within their communities (Ahmadi, 1998, 2000). In all of these studies, however, no group of less wise individuals was selected for comparison.

In our previous study (Khan & Ferrari, 2009), we asked similar questions to those formulated by Bluck and Gluck (2004) to 50 participants in five different age groups. We found Islamic figures were predominantly chosen as exemplifying wisdom historically. We discovered very little difference in how participants characterized the wisdom of their direct acquaintances, although men tended to attribute Islamic problem solving attributes to their wisest acquaintances. However, we also see a slight decline in the attributes related to Islamic problem solving as people get older. Personality was considered more important by the wisest participants (assessed through the 3D-WS, Ardelt, 2003), than it was by the less wise. We also found that about half of the participants of both genders considered their wisest decisions to
involve *general problem solving*, and this is increasingly true as people grow older — especially for the wisest participants.

Implicit theories seem particularly appropriate when considering what people think about wisdom or the views of people from different cultures.

**D. Cultural context:**

The American heritage dictionary defines culture as, “The totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought”. Studies reveal that people from different cultural backgrounds do have different implicit theories of wisdom (Takahashi, 2000; Takahashi & Bordia, 2000). For example, Takahashi and Bordia (2000) found differences in the meaning of wisdom for “Western” (American and Australian) and “Eastern” (Indian, and Japanese) samples. Westerners associated ‘wise’ with ‘experienced’ and ‘knowledgeable’, while Easterners associated ‘wise’ with ‘discreet’.

Implicit theories have faced challenges in defining wisdom, because people define wisdom in relation to their own perspectives and culture. Implicit theories in various parts of the world lead social actors to interpret wisdom differently: North Americans tend to think wisdom is a sort of knowledge or expertise, which is reflected in the theories of Baltes (Baltes & Staudinger, 1993, 2000), and Sternberg (1985, 1998, 2005).
Benedikovičova and Ardelt (2008) found that American students were higher in the cognitive and reflective dimensions of wisdom compared to Slovak students. They also found that the American students were lower in the affective dimension of wisdom than the Slovak students. In another study on American and Korean participants using the 3D Wisdom Scale (3D-WS), Bang (2009) found that American participants were higher in the reflective and affective dimensions of wisdom, whereas Korean participants were higher in the cognitive dimension. Khan and Ferrari (2009) found an overall gender difference in Pakistani participants, using the 3D-WS. Women scored significantly lower than men on the 3D-WS; however, these differences interacted with age. Post hoc comparisons using the Bonferroni test indicated that the elderly scored significantly higher levels of wisdom (assessed through the 3D-WS) than did children and adolescents.

In our recent cross-cultural study (Ferrari, et al., 2011) ANCOVA results showed that Jewish participants scored higher on *phronesis* (practical wisdom), while Muslim participants scored higher on *sophia/hochma* (philosophical wisdom or wisdom acquired through divine revelation). This study showed significant gender differences in terms of levels of wisdom (assessed through the 3D-WS, Ardelt, 2003). We also found that satisfaction with life and foundational values were significantly related to higher levels of wisdom.

Consistent with some earlier research (Denney et al., 1995; Jason et al., 2001), including a recent study with elementary school children (Glück, Bischof, & Siebenhüner, in press) our recent study (Ferrari et al., 2011) also found that regardless of the gender of the nominator, both Canadian and Pakistani participants nominated men as the wisest figures in history. The
results also found that of the 75 Jewish nominations for a wise historical figure, only 7 were female and of the 50 nominations given by Pakistani Muslim participants, only 2 were female. It is also interesting that all of the female nominations were from female participants. This suggested that women sometimes look to other women as role models for wisdom. The study also found that wisdom is correlated with psychological well-being.

Wisdom is also an important component of a good life (Baltes & Staudinger, 2000, & Clayton & Birren, 1980). Many investigations on wisdom found that wisdom has a strong positive correlation with psychological well-being (e.g., Ardelt, 2003; Bergsma & Ardelt, 2012; Khan & Ferrari, 2009; Ferrari et al., 2011). Taking McAdams & Pals (2006) principles for understanding wisdom-identity a step further, I view psychological well-being as a crucial element in understanding wisdom-identity.

E. Wisdom and psychological well-being:

Drawing on Ryff (1989), Ryff and Keyes (1995) and Ryff and Singer (2006), in this dissertation psychological well-being is understood as the essence of a good life. For examples, Diener and colleagues (1985) developed the satisfaction with life scale, and Frisch (1993, 1994) developed a comprehensive Quality of Life Inventory (QOLI) that included 16 sub-scales: health, self-esteem, goals and values, money, work, play, learning, creativity, helping, love, friends, children, relatives, home, neighbourhood, and community.

Studies have found that psychological well-being, including quality of life, greater life satisfaction and diminished feelings of alienation, are important fruits of personal wisdom (e.g.,
Khan & Ferrari, 2009; Seligman, 2002). There are many ways to assess quality of life. Diener and Pavot (1993) have developed a widely used *Satisfaction with Life Scale*. Khan & Ferrari (2009) found that Diener & Pavot’s *Satisfaction with Life Scale* is positively correlated with levels of wisdom (assessed through the 3D-WS). Levenson and colleagues (2005) developed the scale of alienation. The 3D-WS and the ASTI were negatively correlated with alienation (e.g. Khan and Ferrari 2009).

Implicit theories of wisdom are important in everyday life, as these theories shape people’s identity, values, life stories, culture, and their quality of life. Understanding these variables is important when considering clinical populations like those diagnosed with Asperger syndrome. I now explore the wisdom of people with Asperger syndrome.

1.4. **Wisdom & people with Asperger syndrome:**

People with Asperger syndrome often possess exceptional abilities such as an aptitude for political affairs (Sir Keith Joseph), a gift for solving tough mathematical problems (Ramanujan) and tremendous writing abilities (Lewis Caroll). No doubt, many people with high functioning autism or Asperger syndrome can be considered wise and those diagnosed with AS have no significant delays in cognition or language (DSM-IV). Furthermore, many individuals with high functioning autism /Asperger syndrome have demonstrated ability in philosophy, politics, poetry, and in many other fields (Fitzgerald, 2004). Ardelt (2003) studied wisdom as a disposition that integrates cognitive, reflective, and affective dimensions. People with AS have
challenges, however, when it comes to the affective element of wisdom, they do not completely lack understanding.

Moreover, studies of wisdom (e.g., Ardelt, 2000; Assmann, 1994) indicate that wise people are mature, satisfied in their lives, able to make decisions, and have the capability to deal with crises. Wisdom also helps in achieving a higher quality of life. These elements of wisdom have also been highlighted in some autobiographies (e.g., William, 1992, 1994; Lawson, 2001) of individuals with HFA/AS. Even with tremendous developments in human psychology, however, we are yet to understand the abilities, wisdom and identities of people with Asperger syndrome.

1.5. Psychological well-being and Asperger syndrome:

The idiosyncratic culture and identity of people with Asperger syndrome results in distinct elements related to their quality of life as compared to non-autistics. Nota and his colleagues (2003) suggested that there are differences in Quality of Life (QoL) predictors across populations. Therefore, when assessing QoL for Asperger populations we need to consider their sensitivity and special needs. Few studies have investigated the QoL of people with AS (e.g., Asperger, 1979; Kanner, 1971, 1972; Tantam, 1991; Vuletic, 2010), and studies have found mixed life outcomes. Asperger (1979) reported that very few individuals with Asperger syndrome with high intellectual abilities did well in life, and Tantam (1991) showed low levels of success in life in 46 Swedish individuals with Asperger syndrome. In contrast, Kanner (1971, 1972) reported on the life outcomes of people with autism spectrum with whom he had worked earlier and found that most were very successful in later life. Recently, Vuletic (2010)
also reported a generally good quality of life when she asked people with Asperger syndrome about their own impressions of their quality of life.

Knowing that people with AS have a clinical condition, this study employs McAdams & Pals’ (2006) model of personal identity to explore their identity and wisdom.

1.6. The Present study:

Many scientific studies (e.g., Peterson et al., 2012; Happe & Charlton, 2012; Frith & Frith, 2011; Gold & Faust, 2010; Baron-Cohen, 2010, 2006; Dawson et al., 2004; 2003; Frith, 2003) have been conducted related to autism spectrum disorders. However, examining autism spectrum cases using a first-person perspective is a relatively recent approach (e.g., Gray, 2001; Losh & Capps, 2003; Diehl et al., 2006; Colle et al., 2008; Vuletic, 2010). This study investigates the identity and wisdom of people with AS by exploring their self-reported traits and life stories.

Ardelt (2003) understood wisdom as the integration of cognitive, reflective, and affective personality traits. The new big-5 model of identity (McAdams and Pals, 2006) identifies a biological link to people’s personality traits and behaviour. This model acknowledges that variations in human biology are crucial to make sense of human traits and actions motivated by human values or goals. Therefore, knowing that someone is diagnosed with Asperger syndrome we expect antisocial traits and behaviours of social withdrawal.

How to cope with life given one’s particular personal identity requires practical wisdom to have the best possible quality of life. Life narratives provide a clear and deeply
contextualized picture of individual traits and practical wisdom. Some traits and practical wisdom may be specific to cultural contexts, so accounting for an individual’s culture provides a richer picture of his or her identity and practical wisdom. Many scientific studies on identity and wisdom have been conducted on typically developed people (e.g., Khan, 2009; Ferrari et al., 2011). However, research has yet to explore identity and wisdom of a biologically-specific clinical population. This current study fills this gap by exploring the relation between wisdom and identity of people diagnosed with Asperger’s Syndrome.

Using McAdams & Pals’ (2006) five principles, I explore the identity and wisdom of people with Asperger syndrome. The interview questions used to explore narrative identity and contemplative and practical wisdom were derived from Ferrari and colleagues’ (2011) study, with some modifications. The diagnostic characteristics for people with Asperger syndrome are universal (DSM-4), due to particular biological characteristics (e.g., Sokol & Lahiri, 2011). Recent developmental theory considers personal identity to be the product of biology and experience (McAdams & Pals, 2006), but some aspects of human experience, for example, basic psychological abilities such as natural attention, or memory, or face recognition, appear to be universal. For this reason, whether to expect differences across cultures in how people are diagnosed with Asperger syndrome is a question pursued by this study. Another major aim of this study is to see whether personal identity and wisdom differ for people with Asperger syndrome living in different countries.

This mixed-methods study examines the identity and wisdom of people with AS by exploring their self-reported identity traits, values, and life stories. I will also investigate if these stories and traits differ by culture. Moreover, this study will investigate whom participants
identify as exemplars and whether people with AS seek to emulate the traits of their exemplars. This is important because respondents’ selection of different historical exemplars reflects how they remember and evaluate wisdom in their own lives.

1.7. Research questions:

Rationale 1: Identity:

People identify themselves by their personal, social, relational, and ethnic backgrounds (Cheek et al., 2002), and through their sense of autonomy and togetherness (McAdams, 2011). Individuals with AS experience a unique way of being and many prefer to live alone rather intermingling with others. Many identify as autonomous, though some describe a feeling of togetherness. Many of their attributes, such as honesty, systemizing ability, and detail-oriented skills can be considered central parts of their unique identities. Existing studies lack first-person perspectives on the identity of people with Asperger syndrome.

The following research questions will be used to explore the identity of people with Asperger syndrome:

1. How do people with AS self-identify?
2. What are the emerging themes of narrative identity for people with AS?
3. How does culture effect identity traits and narrative identity for people with AS?
Rationale 2: Values:

“Values” describe what is important to us in various aspects of our lives (Schwartz, 1992). People in all cultures hold values. However, the nature and significance of particular values vary from person-to-person and culture-to-culture. Values are desirable abstract goals that provide guiding principles for living a desirable life. Considering the clinical condition of people with AS, it is imperative to know what they value in life in order to have a bigger picture of their traits. Values are one of the elements to explore characteristic adaptations of a person (McAdams & Pals, 2006).

The following research questions will be used to explore the basic values of people with Asperger syndrome:

1. What basic human values do people with AS hold?
2. How does culture effect the values of people with AS?

Rationale 3: Wisdom:

Pakistani culture is heavily influenced by Middle Eastern culture. Middle Eastern culture comes from Abrahamic traditions that include the religious practices of Judaism, Christianity, and, predominantly, Islam. All Abrahamic traditions use hikma (theological wisdom) to understand the ultimate truths of the universe and to live a better life. Wisdom circles around Islam in Pakistan (Khan and Ferrari, 2009). The constitutional laws in Pakistan are strictly based on the Islamic religion. Canadian culture is greatly influenced by Western culture originating from Europe, with its roots from Enlightenment and Renaissance periods and links to Ancient Greek
times that endorsed experience-based wisdom that is secular in nature, and practices more *phronesis* than *Sophia* (Ferrari, et al., 2011). However, Canadian culture is also rooted in the Abrahamic tradition (Christianity), and many people endorse theological wisdom.

The following research questions will be used to explore the wisdom of people with AS:

1. How does wisdom differ from culture to culture for people with AS?
2. How do people with AS perceive, remember, and evaluate ideal exemplars in their lives?
3. What are the themes behind naming ideal exemplars for People with AS?
4. What are understood as the wisest approaches to life by people with AS?
5. What understandings of wisdom do people with AS hold?

**Rationale 4: Psychological well-being:**

Studies have found that wisdom is positively correlated with psychological well-being. Nota and colleagues (2003) suggested that there are differences in quality of life predictors across populations. Considering the idiosyncratic culture and identity of people with AS, their quality of life might have distinctive predictors compared to non-autistics. Studies have shown mixed life outcomes for people with Asperger syndrome (e.g., Asperger, 1979; Kanner, 1971, 1972; Tantam, 1991; Saldana et al., 2009, Vuletic, 2010). These studies, however, lack first-person perspectives on autism spectrum disorders, which are essential in understanding participants’ psychological well-being.
The following research questions will be explored to understand psychological well-being of people with AS:

1. How do people with AS evaluate their well-being?
2. What is the relationship between quality of life and levels of wisdom?

1.8. **Significance of the Study:**

This cross-cultural study focuses on the identity and wisdom of people with AS, exploring their traits, values, and narratives. In contrast to the DSM, which considers many symptoms of Asperger syndrome to be culturally universal, this study seeks to understand the identity and wisdom of people with AS cross-culturally. It also seeks to understand how religious, social, and scientific involvement influences an individual’s wise decisions, and the idealized figures they consider to be wise.
2. Design of the study:

This study uses a mixed method design. The data was collected and analyzed through both interviews and quantitative measures. This is an exploratory study and the major purpose of this study was to describe the characteristics of a population of people diagnosed with Asperger syndrome.

2.1. Study Site:

The present study was conducted in the Greater Toronto Area (Canada), and Karachi (Pakistan). I chose these two countries because they have very different cultural traditions. The Islamic Republic of Pakistan is a developing country that was created for people to practice Islam. Most people living in Pakistan think that the country should be a contemporary Islamic state in which Islam and democratic values breathe together. Islamic ideology is reflected in the constitutional laws in Pakistan. On the other hand, Canada is a developed country, where constitutional laws do not strictly reflect any religion. Canada's culture has been greatly influenced by European culture, as the early settlers of Canada came from England and France, whereas, Pakistani culture has been influenced by Middle Eastern culture. Canadian culture is more socially liberal and focused on the rights of the individuals. Pakistani culture is more religiously oriented and focused on common values and obligations. People in Canada have more social freedom and rights, whereas people in Pakistan must adhere to boundaries influenced by religion. Despite these differences, both Canada and Pakistan were originally part of the British Empire, and share a democratic parliamentary democracy, providing a good basis for comparison.
2.2. Recruitment of participants:

To recruit people with Asperger syndrome various organizations serving people with AS were contacted both in Karachi, Pakistan and in the GTA, Canada. These organizations serve those who receive a diagnosis of ASD from a qualified professional. The organizations that were contacted in the GTA, Canada included Kerry’s Place Autism Services, Geneva Centre for Autism, The Redpath Centre for Social and Emotional Development, and Autism Ontario. In addition to these organizations the accessibility department of the University of Toronto was also contacted. These organizations posted my short recruitment advertisement to their websites. A few organizations posted my recruitment advertisement on bulletin boards at some of their service centers and offices. External ethics approval was also needed from some organizations. The processes of external ethics approval took time. However, the applications were successfully approved from some of the organizations. There were refusals from some organizations due to their commitments to other scholars; they could not accommodate my study.

The organizations that were contacted in Karachi, Pakistan included: MaAyesha Memorial Centre; The Education Foundation; Institute of Behavioural Psychology; Department of Professional Psychology, Baheria University; Department of Special Education, University of Karachi; Department of Psychiatry, Aga Khan University Hospital; and Karachi Vocational and Training Centre for Children with Developmental Disabilities. External ethics approvals were also received from those organizations.

Participants who were willing to participate in study either contacted me directly by phone or email, or they contacted a responsible person at one of the organizations mentioned
above and then the organizations contacted me. A few parents of participants from Pakistan and Canada also contacted me to arrange for their son to participate in the study (participants were all male). In Pakistan most interviews were conducted at the office of the Education Foundation (a separate room was given to me to conduct interviews), located at Mahmodabad, Karachi, Pakistan. Some interviews were also conducted in a separate room at the MaAyesha Memorial Centre, located at Shahrah-e-Faisal, Karachi, Pakistan. In Canada interviews were conducted in my office at 252 Bloor Street West, Toronto; at the Kerry’s Place Autism Services, Brampton resource centre; or at the Brampton and Mississauga Public libraries.

Typically developed people (non-autistic people from the general population) were recruited randomly from the public libraries and also from university libraries in Canada and Pakistan. In Pakistan typically developed people were interviewed mostly at the office of The Education Foundation and at the MaAyesha Memorial Centre. In Canada they were interviewed mostly in my office at the University of Toronto and in a separate room (small reading room) at the Mississauga Central Public Library.

2.3. Participants:
Forty-six male participants took part in this study. Twenty-three participants with Asperger syndrome ($M = 24.39, SD = 5.00$) were matched according to their age with typically developed participants ($M = 22.95, SD = 4.26$). Of these 46 participants, 24 were recruited from Karachi, Pakistan. Half of them were diagnosed with Asperger syndrome from a qualified professional and the rest were people from the general population. Twenty-two participants were recruited
from the Greater Toronto Area (GTA). Half of them were diagnosed with Asperger syndrome and the rest were people from the general population.

**Ethnicity:** All 22 Canadian participants in this study were born or raised in Canada (One participant was Pakistani decent, but he still considered himself as a Canadian). All 24 Pakistani participants in this study were also born or raised in Pakistan. However, some participants identified them with their ethnicity. Two participants from the Canadian Asperger group identified them as Scottish-Canadian; one each identified as Jewish-Canadian, Irish-Canadian, German-Canadian, and Indian-Canadian. The remaining 5 participants from the Canadian Asperger group identified themselves as simply Canadian.

Two participants from the Canadian control group identified them as Asian-Canadian; one each identified them as Croatian-Canadian, Pakistani-Canadian, and Indian-Canadian. The remaining 6 participants in this group identified themselves as simply Canadian.

Seven participants from the Pakistani Asperger group identified them as Mohajir; one each identified as Punjabi-Pakistani, Memon-Pakistani, and Bohri-Pakistani. The other 2 participants in this group identified themselves as simply Pakistani.

Three participants from the Pakistani control group identified them as Mohajir. The remaining 9 participants in this group identified themselves as simply Pakistani.

**Age:** This study mainly focuses on young adults from the ages of 18-30 years old diagnosed with Asperger syndrome. However, a few of the participants were slightly outside of the age limit: two participants in the Pakistani Asperger group were 17.7 and 17.8 years old, whereas one participant in the Canadian Asperger group was 17.8 years old; two Participants from the Canadian Asperger group were 31 and 33 years old, whereas, one participant from the
Pakistani Asperger group was 32 years old; two participants from the Canadian control group were 17.7 and 17.8 years old and one participant was 31 years old and; no one from the Pakistani control group exceeded the age limit of 18-30 years. However, an independent-sample t test indicated that the mean age of people with AS (\(M = 24.39, SD = 5.00\)) did not differ, \(t(42.92) = 1.046, p = .30, \) two-tailed, from the mean age of those in control groups (\(M = 22.95, SD = 4.26\)).

**Education:** An independent-sample t test was conducted to determine that the typically developed people and people with AS in this study had a similar number of years of education. The results of an independent-sample t test indicated that years of education did not differ between participants, \(t(38.08) = 1.609, p = .11, \) two-tailed. The results suggested that the mean years of education for people with AS (\(M = 13.69, SD = 2.70\)) were similar to the mean years of education of those in control groups (\(M = 14.78, SD = 1.78\)).

**Marital status:** An independent-sample t test was conducted to determine that the marital status was similar between typically developed participants and participants with AS in this study. The results indicated that marital status did not differ between participants, \(t(36.22) = 1.036, p = .30, \) two-tailed. Descriptive statistics revealed that the majority of the participants were never married: this included 92% of the participants diagnosed with Asperger syndrome in the Pakistani group, 100% of those diagnosed with Asperger syndrome in the Canadian group, 83% of the Pakistani control group, and 91% of the Canadian control group were never married.
2.4. Confidentiality:

Participant’s confidentiality was a high priority in this study. Confidentiality was maintained through various mechanisms: Pseudonyms were given to each participant to complete the demographic questionnaire; all of the Pseudonyms were given numbers. I (the researcher) conducted the interviews. Interviews were kept only temporarily on a voice recorder and then transcribed immediately and then deleted from the voice recorder. The questionnaires were kept in a locked cabinet of the researcher’s office at the OISE, University of Toronto. All the data will be destroyed after the completion and publication of the study (approximately by June, 2013).

2.5. Procedure and Measurement:

Interviews were conducted in the participants’ native language (mostly in Urdu in Pakistan, and in English in Canada). Participants met with the interviewer for one session lasting about 45 minutes to 1 ½ hours and were asked a few questions about their own lives, their best life decisions, their own concepts of wisdom, and ideal exemplars of wisdom. These questions were adapted from a study by Ferrari, Khan, Benayon and Nero (2011). Participants were also asked a few questions about their identity through their life narratives (see Appendix A). Interviews were audio-taped and transcribed verbatim. Interviews of Pakistani participants were transcribed verbatim in Urdu, and then translated into English. Verbal assent was given before the interviews begin. Questionnaires were translated into Urdu and translated back into English. However, Pakistani participants had no difficulty reading and understanding English questionnaires. This is because English is the second official language in Pakistan and most
schools, colleges, and universities have adopted English as their language of instruction. Participants were also asked to complete a demographic questionnaire (see appendix B).

Participants then completed the Aspects of Identity Questionnaire (AIQ-IV; Cheeks, et al., 2002). The various questions of the AIQ identify people’s identity orientations in 4 categories: personal (10 items), social (7 items), collective (8 items), and relational (10 items). The AIQ includes a total of 35 items (e.g., My dreams and imagination). Participants responses were noted on a 5-point Likert-type scale ranging from 1 (Not important to my sense of who I am) to 5 (Extremely important to my sense of who I am).

Participants completed another aspect of identity questionnaire, Personal Integrity\(^6\) (adapted from Paulhus, 1991): This test includes five questions that relate to personal commitment to have a good life within socially approved norms (e.g., It would be hard for me to break any of my bad habits, and I have not always been honest with myself).

Participants were also given the Human Values Scale – PVQ-ESS (Schwartz, 2003). This scale included 23 items all together (e.g., S/he strongly believes that people should care for nature. Looking after the environment is important to her/him). The scale is divided into 10 basic values: (1) self-direction, (2) stimulation, (3) hedonism, (4) achievement, (5), power, (6) security, (7) conformity, (8) tradition, (9) benevolence, and (10) universalism. The participants responses were recorded on a 6-point Likert-type scale ranging from 1 (Very much like me) to 6 (Not like me at all).

\(^6\) The four items of the personal integrity scale were adapted from Paulhus’ (1991) social desirability scale.
To assess wisdom, participants completed Ardelt’s (2003) *Three-Dimensional Wisdom Scale* (3D-WS) and Levenson and colleagues’ (2005) *Adult Self-Transcendence Inventory* (ASTI). The Three-Dimensional Wisdom Scale has 39 items (e.g., I always try to look at all sides of a problem) that included 14 items for cognitive, 12 for reflective, and 13 for affection dimensions of wisdom. The participants’ responses were recorded on a 5-point Likert scale.

Another measure of wisdom is self-transcendence. Participants also completed a self-transcendence questionnaire. The Adult Self-transcendence Inventory (ASTI) has a total of 18 items. ASTI includes two scales, *self-transcendence* (14 items) and *alienation* (4 items) in which alienation will be described with the psychological well-being scales (see below). The Self-transcendence Scale has 14 items (e.g., I feel that my individual life is a part of a greater whole). The participants’ responses were recorded on a 5-point Likert scale.

Participants then completed 4 questionnaires to assess their psychological well-being:

1. *Satisfaction with Life Scale* (Pavot and Deiner, 1993): The various components of the Satisfaction with Life Scale (SWLS) are focused to assess global life satisfaction. The SWLS has 5 questions (e.g., The conditions of my life are excellent). Participants responded on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

2. *Quality of Life Inventory* (Frisch, 1994; Pearson assessment): The QOLI has 16 sub-scales. Each sub-scale is structured with two types of questions: (1) the level of importance of the particular item to the participant, and (2) the level of satisfaction of the particular
item to the participant (e.g. *Money*: (1) how much money is important for your happiness, (2) how satisfied are you with the money you have).

3. **Alienation** (Levenson et al., 2005): The various questions of alienation describe individual’s sociability with others. This scale includes 4 questions (e.g., I feel more isolated and lonely).

4. **Purpose in Life** (Ryff & Keyes 1995): This scale includes 3 questions (e.g., I have discovered satisfying goals and a clear purpose in life).

Table 1

**Internal Reliability**

<table>
<thead>
<tr>
<th>Scales</th>
<th>No. Of items</th>
<th>Overall</th>
<th>AS Pakistan</th>
<th>Control Pakistan</th>
<th>AS Canada</th>
<th>Control Canada</th>
</tr>
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<td>.82</td>
<td>.96</td>
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<td>.87</td>
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<td>.89</td>
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<td>.89</td>
<td>.89</td>
<td>.93</td>
<td>.84</td>
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<td>.65</td>
<td>.72</td>
<td>.79</td>
<td>.78</td>
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<td></td>
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<td>Self-direction</td>
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<td>.78</td>
<td>.52</td>
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<td>.89</td>
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<td>.88</td>
<td>.35</td>
<td>.65</td>
<td>.89</td>
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<tr>
<td>Power</td>
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<td>.79</td>
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<td>.56</td>
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<td>.51</td>
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<td>Three Dimensional Wisdom Scale</td>
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<td>.83</td>
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<td>.93</td>
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<td>.88</td>
<td>.86</td>
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<tr>
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<td>.71</td>
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<td>.88</td>
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<td></td>
</tr>
<tr>
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<td>.69</td>
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<td>.74</td>
<td>.76</td>
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<td>Purpose in life</td>
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<td>.70</td>
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<td>.80</td>
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</tr>
</tbody>
</table>

### 2.6. Internal Reliability:

**THREE DIMENSIONAL WISDOM SCALE:** The 3D-WS has an overall high internal reliability ($\alpha = .89$). Noticeably, the internal reliability for the affective dimension of the 3D-WS for people with Asperger syndrome ($\alpha = .67$ and .66 respectively for Pakistan and Canada) in both countries remained low compared to the typically developed population ($\alpha = .77$ and .82 respectively for Pakistan and Canada). The responses of participants with Asperger syndrome on the affective dimension of the questionnaire are inconsistent resulting in a lower internal reliability. This lower internal reliability may be due to their difficulties in theory of mind abilities (Baron-Cohen, 1995).

**SELF-TRANSCENDENCE SCALE:** Overall internal reliability for the self-transcendence scale was .77.

**PSYCHOLOGICAL WELL-BEING SCALES:** The psychological well-being scales such as satisfaction with life, purpose in life, and alienation have an overall high internal reliability $\alpha = .86$, .85, & .86 respectively. The internal reliability for the Satisfaction with Life Scale (SWLS)
also remains lower for the Pakistani control group compared to the Canadian control group. However, it is consistent with the internal reliability of my 2008 study in Pakistan.

**IDENTITY SCALES:** The internal reliability (α) of the various aspects of identity scale was equal to and greater than .85 including personal identity (α = .85), social (α = .89), collective (α = .87), and relational (α = .94). Personal integrity has an overall good internal reliability, α = .86.

**BASIC HUMAN VALUES SCALE:** The overall internal reliability (α) for the various aspects of the basic human values scale was equal to or greater than .68. However, the sub-scales of the Basic Human Values Scale struggle with internal reliability. Table 1 shows inconsistent (high and low) internal reliability. However, studies that utilized this scale also showed inconsistent internal reliabilities, but predicted human behaviour and attitude (Schwartz, 2005). A re-grouping of the basic human values was also done through the developer of the Basic Human Values Scale (Schwartz, 2005). He combined the conceptually related items into four different sub-groups. The new re-grouping was as follows:

1. Openness to change (α = .76): this value included (1) hedonism, (2) stimulation, and (3) self-direction.
2. Conservation (α = .71): this value included (1) conformity, (2) security, and (3) tradition.
3. Self-transcendence (α = .68): this value included (1) universalism, and (2) benevolence
4. Self-enhancement: this value included (1) achievement (α = .80), and (2) power (α = .76).

In this study the two items of self-enhancement (achievements and power) could not be

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7 The Cronbach’s alpha for the Satisfaction with Life Scale was .81 in my 2008 study of Wisdom and Identity in Pakistan (a thesis submitted in conformity with the requirements for the degree of Master of Arts, in the department of human development and applied psychology at the OISE of the University of Toronto.
8 Schwartz (2005) found from across 20 representative national samples that the average internal reliabilities for the sub-scales of the basic human values remained .56, ranging from .36 (tradition) to .70 (achievement). This inconsistent reliability may be due to the fact that only two items measure each value except for universalism which has three items. Schwartz (2005) claims that despite low reliabilities these values predict behaviour and attitude.
combined together due to an overall low alpha reliability. The internal reliability of these
two items was calculated separately as mentioned above.

I also followed the re-grouping of the basic human values scale in my study to increase
the internal reliability through combining the conceptually related items. However, in this study
the value of tradition was excluded from the new re-grouping of the value of conservation as
this value could not hold the internal reliability with the value of conformity and security in the
new re-grouping of the value of conservation. Moreover, due to very low internal reliability (\( \alpha = .55 \)) the value of tradition could not be included separately in my study. Furthermore, due to
low internal reliability the values of power and achievement could not be combined together as
the value of self-enhancement. However, the values of achievement and power held good
internal reliability and were explored separately. The internal reliability of this new re-grouping
was calculated in three ways, (1) overall, (2) in the Asperger populations, and (3) in the typically
developed populations. Table 2 shows the internal reliability of the re-grouping of the basic
human values.

Table 2

*Internal reliability of the components of basic human values*

<table>
<thead>
<tr>
<th>Scale</th>
<th>No of items</th>
<th>Overall</th>
<th>Asperger population</th>
<th>General population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness to change</td>
<td>6</td>
<td>.76</td>
<td>.69</td>
<td>.66</td>
</tr>
<tr>
<td>Conservation</td>
<td>4</td>
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<td>Self-transcendence</td>
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<td>.68</td>
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<td>Achievement</td>
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<td>.80</td>
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<td>.67</td>
</tr>
<tr>
<td>Power</td>
<td>2</td>
<td>.76</td>
<td>.71</td>
<td>.64</td>
</tr>
</tbody>
</table>
2.7. **Qualitative Interviews:**

Personal identity can be better understood through individuals’ life narratives. Following McAdams & Pals’ (2006) model to understand identity and wisdom of people with Asperger syndrome this study also used an interview method. The participants were asked questions about their life in general, including their life stories and life goals, and about their understanding of self. The participants were also asked a few questions about the wisest person they know, their personal approach to wisdom, and their understanding of wisdom in general. This kind of information related to people’s life stories can be best understood through the method of narrative identity inquiry (e.g., McAdams & Pals, 2006; also see, McAdams, 2003, 2006, & 2011; Ricoeur, 1984).

**CODING SCHEME:** A coding scheme was developed to understand life stories. This qualitative analysis was divided into two sections: (1) understanding people’s narrative identity, and (2) understanding people’s wisdom through their life stories. My coding scheme begins by exploring life narratives followed by understanding wisdom.

2.7.1. **Understanding people’s narrative identity through life stories:**

Participants’ narrative identity was depicted through narratives about various moments in their lives. Following McAdams (1993), these personal narratives were used to understand people’s identity. The data were analyzed through grounded theory (Strauss, 1987 and Strauss & Corbin, 1990 & 1994). Following Strauss & Corbin’s method, each transcript was read several times. This repeated reading allowed themes of people’s life stories to emerge directly from the data. First open coding identified the key points from repeatedly rereading the transcripts. This open
coding was then gathered together into themes (an implicit or recurrent idea of participants’ expressions) and these themes were then organized into a theory of the phenomenon under study. For example, to understand the phenomenon of people’s narrative identity, the open codes of status or desire for a status, money or desire to achieve money or material, and desire to improve general or self-knowledge were identified from the transcripts of this study; these open codes were then combined together into the theme of personal development. Two other themes (achievement/accomplishment and individuality) were also identified through other open codes. All three themes were the further combined together into the major theme of personal agency.

2.7.2. Coding schemes for the various themes of life narratives:

This study adapted the method of narrative identity (McAdams, 1993) to understand people’s life stories. Drawing from Bakan (1966) and McAdams (2001 & 2011) a coding scheme was developed to identify various themes of people’s life stories for this study. Thus, this study found two major themes in people’s life stories: (1) the theme of communion, and (2) the theme of agency. There were some variations in these themes between the groups; however, no group was found to lack these themes.

The theme of communion was understood as people’s view of self that describes themselves with their relations and concerns for others. Bakan (1966) and McAdams (2001) included four aspects in the theme of communion love and friendship, care and help, dialogues,
and unity/togetherness. This study included five aspects for the theme of communion help and care, social being, meaningful relationships, collective being, and contribution to society.

People who hold an agentic view of self describe themselves with their achievements, sense of autonomy, and desire for power and independence. Bakan (1966) and McAdams (2001) included four elements for the theme of agency: self-mastery, status/victory, achievement, and empowerment. Drawing from Bakan (1966) and McAdams (2001) this study included three elements for the theme of personal agency: achievement/accomplishment, personal growth, and individuality.

Two coders were involved in coding the various themes of people’s life stories. The coding for the various themes was as follows:

2.8. The theme of Communion:

This study included five aspects for the theme of communion: help and care, social being, meaningful relationships, collective being, and contribution to society. I begin exploring the coding scheme of help and care followed by the sequence listed above.

2.8.1. Help and care was coded as:

- The participants provided care, help, assistance, and nurturance to someone else, or a group, or on a mass level (e.g., Well, I think a long time ago, perhaps when I was eleven or twelve, my father was sick for a very long time and he couldn’t walk. At that time
the age difference between me and my sister was eight years, so I had to take care of my family at a very young age. Interview 1, Asperger Pakistan).

- The participants provided material, substance, financial, charity, domestic, physical, social, or emotional support or help to someone, or a group, or on a mass level (e.g., Right now, I am making a great difference in my friend’s life by supporting him emotionally and in other areas of his life. Interview 24, control Pakistan).

- The participants provided care and help to family, siblings, parents, and friends on technical, personal, or family matters (e.g., My aunt had a lot of computer problems such as her computer was not working, it was crashing, and messages were not being sent out. I helped her in solving those problems. Interview 9, Asperger Pakistan)

- The participants provided help to train, teach (sports & knowledge), advise, and share skills with someone or with a group (e.g., I like to teach games, sports, art, and drawing to children with special needs. Interview 3, Asperger Pakistan).

2.8.2. Meaningful relationship was coded as:

- The participants reported or expressed desire to be married, or have a girlfriend (e.g., My goal is to get settled in life by getting married and then I’ll have to go live in the US because most of my family is already there. So, if I move there then my family can help me live there, as most of them are settled in the USA. Interview 2, Asperger Pakistan)

- The participants reported or desired family relationships (e.g., I did not give as much time to my family members as they deserved. But, in the future I intend to
live in a joint family and enjoy more time with my family members. Interview 16, control Pakistan).

2.8.3. **Social being was coded as:**

- The participants related themselves socially or desired social intermingling (e.g., I am a very social person, I like going for coffees, going for different outings ... I am proud to be friendly, I believe I am very friendly because I was brought up by a very loving and caring person in my family. This makes me who I am and that comes back to identity. Without my family I wouldn't be the person I am today. Interview 36, control Canada).

2.8.4. **Collective being was coded as:**

- The participants expressed or desired relations with their country, cast, religion, or political party (e.g., I would say I am a kind Canadian. Interview 37, control Canada).

2.8.5. **Contribution to society was coded as:**

- The participants engaged in volunteer or charity work (e.g., I do charity work and I try to give the most to society by doing volunteer work. I work with the Arthritis Society and Humber Region Hospital. Interview 35, Asperger Canada).
• The participants expressed or desired to work for an organization, society, or on a larger scale without pay for the betterment of mankind (e.g., I would like to do volunteer work with special needs children. Interview 3, Asperger Pakistan).

2.9. The theme of personal agency:

This study included three aspects for the theme of personal agency:

(1) achievements/accomplishments, (2) personal development, and (3) individuality.

I begin exploring the coding scheme of the theme achievements/accomplishments.

2.9.1. Achievements and accomplishments was coded as:

• The participants reported successful achievements in sports, school, and jobs (e.g., I like playing baseball and other sports and sometimes I do really well playing these sports. A long time ago I also won a first place trophy. This was in Saudi Arabia. I had good experience playing baseball in my school that is why I got so good at it. Interview 2, Asperger Pakistan).

• The participants reported a desire to achieve their goals (e.g., my goal now is to focus on one goal and achieve as much success, awareness, and power in my life as I can. Thereby, I am able to write books and guide the future generation so that they can also learn and become like I am. Interview 1, Asperger Pakistan).

• The participants reported a success story about which they felt proud, successful, or confident (e.g., I know a lot about different things, I know a lot about the fire
department. You can ask me anything about the fire apartment and I would tell you
the information. I also know all about public buses, like what time they run. Interview
32, Asperger Canada).

- The participants reported meeting challenges, or overcoming the obstacles in life (e.g.,
I went to the hospital and they helped me with my problems. I went to pursue courses
and I did some summer courses and I was able to get my degree. I had some serious
mental health issues. Interview 35, Asperger Canada).

2.9.2. **Personal development was coded as:**

- The participants reported on their status, or desire for a status or a job (e.g., I want to
become a chef. Interview 3, Asperger Pakistan).

- The participants reported a desire to achieve good health, education, or skills (e.g.,
When I entered into a school called Milestones one of the teachers Mr. N was a great
helper in my studies. He helped me to focus on my abilities and because of him I
learned the strategies to overcome the weaknesses of my personality. In that school I
got the chance to become a head boy and a prefect to my class. Hence, I developed a
positive self-worth and I was happy. Interview 7, Asperger Pakistan).

2.9.3. **Individuality was coded as:**

- The participants described themselves through personal attributes (e.g., I don’t
really think about individuality much besides my looks and I have only thought
about my looks. Interview 27, Asperger Canada).
2.10. Interrater reliabilities for the themes of life narratives:

Interrater reliability was calculated on all of these themes using the following method. Two raters were involved in coding the themes of people’s life stories. The grounded theory approach was used. The transcripts were read several times allowing coders to identify themes directly from the transcripts. The two raters read the transcripts separately and coded (highlighted) the presence of a theme. After coding was done the two raters would match their coding. If rater one’s coding matched with the other rater’s for a particular theme then they both coded their theme as 1. When one rater coded a theme but another rater did not code the same theme then this theme was coded as 0. All the ones and zeros were added to make a total (sum of themes). All the 1s were considered reliable. To calculate the percentage of the reliable coding we used the following mathematical formula, \( \text{obtained (the sum of 1s)} \times 100 \div \text{total (sum of 1s + sum of zeros)} \). A percentage of 80 was considered a good interrater reliability of a theme.

The interrater reliabilities for the various aspects of the theme of communion were as follows: help and care (85%), meaningful relationships (82%), social being (87%), collective being (93%), and contribution to society (89%). The interrater reliabilities for various aspects of the theme of agency were as follows: achievement/accomplishment (89%), personal development (87%) and individuality (93%).
2.11. Understanding people’s wisdom:

To understand wisdom the participants were also asked a few questions about the wisest person they know in their lives, their personal approach to wisdom, and also their own understanding of wisdom in general. Several themes were derived from participants’ narratives. This study analyzes people’s wisdom through various themes identified from the transcripts of their interviews. Drawing from Clayton (1980) and Ardelt (2003) the themes for wisdom were constructed for this study. They understood wisdom as the integration of cognitive, affective, and reflective qualities. In this study, I found the three aspects of wisdom as identified by Clayton (1980) and Ardelt (2003). However, I added two additional aspects of wisdom, self-transcendence (which was also found in the studies of Levenson et al, 2005, and Ahmadi, 1998 & 2000) and teaching and advice.

The data were analyzed through grounded theory (Strauss, 1987 and Strauss & Corbin, 1990 & 1994). Following Strauss and Corbin’s (1990, 1994) method the transcripts were read several times to allow themes of people’s understanding of wisdom to emerge directly from the data. First open coding was done through identifying the key points from reading over and over the transcripts. The open coding was then gathered together into a theme (an implicit or recurrent idea of participants’ expressions). Then the themes were organized in a way that expressed a theory of the phenomenon of the study. For example several open codes such as making a wise decision, ability to understand a phenomenon, and ability to solve problems were identified from the transcripts of this study. These open codes were then gathered together into a theme and this theme was identified as the theme of cognition. Similarly two other
themes affection and reflection were identified through other open codes. Through combining the themes of cognition, reflection, and affection a theory of wisdom (Ardelt, 2003) was identified to understand the phenomenon of study.

Five emerging themes were identified in people’s understanding of wisdom: (1) cognitive, (2) reflective, (3) affective, (4) self-transcendence, and (5) teaching and advice.

Coding Scheme: A coding scheme was developed to identify various themes of people’s understanding of wisdom for this study. Two coders were involved in coding the various themes of people’s understanding of wisdom. The coding for the various themes was as follows:

2.11.1. Cognitive theme of wisdom was coded as:

- *The ability and willingness to understand a phenomenon, events, inner self, and topics thoroughly* (e.g., I think Isaac Newton is the wisest person in history because he came up with three laws that are being used in everyday life. No matter how old those principles are, they still apply to everyday life. Interview 2, Asperger Pakistan).

- *Knowledge of positive and negative aspects of human nature/having religious/general knowledge* (e.g., My brother is wise. Whenever something new comes out in the market he is the first one to know about it. He knows a lot about the things around him and how many things function. Interview 8, Asperger Pakistan).
• The ability to understand and manage life’s unpredictability and uncertainty (e.g., Whenever there is crisis I work well. Interview 6, Asperger Pakistan).

• Ability to make important decisions (e.g., I guess getting into my Ph. D. is a wise decision and it was the time to do something different and that was wise. Interview 25, Asperger Canada)

• Ability to solve problems (e.g., I had a group of two friends in church. Whenever they had a fight I had to fix it and I used to talk to them until they settle their problems. Interview 40, control Canada).

• Abilities of reasoning, execution, farsightedness, and paying attention (e.g., Wisdom applies to all of the things in your life you are doing with passion and devotion; and to use all of your efforts to perform the assigned tasks in the best possible manner. Interview 38, control Canada).

2.11.2. Affective theme of wisdom was coded as:

• Sympathetic, empathetic or compassionate love for others. This includes positive caring and nurturing emotion and behaviour towards others (e.g., My mother is also wise. She helps me and understands me and tries to help me to solve my problems. Whenever I do not understand anything, she helps me to understand. She helps me during those times when I feel anxious and stressed. She helps me to become calm. Interview 10, Asperger Pakistan).
• **Positive emotion and behaviour towards someone or group** (e.g., Wisdom is to do good deeds in life that benefit everybody, and teach others to do the same; in this way, we can make this world a better place to live. Interview 20, control Pakistan).

2.11.3. **Reflective theme of wisdom was coded as:**

• *The ability and willingness to look at the phenomena and event from a different or, multiple perspectives* (e.g., The wisest person in my life is my father. Anytime I am confused or I need a person to go to, I always go to him directly. He gives me a different outlook on almost everything. Interview 36, control Canada).

2.11.4. **The theme of self-transcendence was coded as:**

• *Working to get out of/transcend/go beyond self, or a group, or a large population* (e.g., I think the wisest person is Mother Theresa because of her kind will and her necessity to put others before herself in all of her missions. I think it is good to help other people. Interview 40, control Canada).

• *Bringing a positive change in self, or a group, or a large population* (e.g., Wisdom in my eyes is for example a person who through his words and actions takes another person towards the right path and changes his life to move in a positive direction, then that is his wisdom. Interview 16, control Pakistan).
2.11.5. The theme of teaching and advice was coded as:

- Participants reported teaching someone or a group was a wise act (e.g., My parents are the wisest because they gave me experience and they have guided me and mentored me. I talk to them and they teach me many things and help me through hard situations. Interview 35, Asperger Canada).

- Participants reported giving advice or guidance to someone or a group was a wise act (e.g., If there were any problems between any of my friends or any of my family then I would give them advice on how to make the situation and life better. Interview 11, Asperger Pakistan).

2.12. Interrater reliabilities for the themes of wisdom:

Interrater reliability was calculated on all of the themes of understanding wisdom by using the same method as used for coding people’s life stories (described in the previous interrater reliability section of life narratives). The two raters were also involved in coding the themes of people’s understanding of wisdom. The grounded theory approach was used (as described in the previous section). The transcripts were read several time allowing coders to identify themes to emerge directly from the transcripts of the interviews. The interrater reliabilities for the various aspects of the theme of wisdom were as follows: cognitive (89%), affective (93%), reflective (82%), self-transcendence (87%), and teaching and advice (91%).
3. Results:

The results section addresses the following questions: Do personal and social identity and personal integrity differ between the two groups diagnosed with Asperger syndrome and the control groups; and are there cultural differences in identity, in the control groups that do or do not mirror what is true of people with Asperger syndrome? The same questions were asked about values, wisdom, and quality of life.

This study drew on McAdams & Pals’ (2006) five principles to explore identity and wisdom of people with Asperger syndrome. Given the clinical identity of Asperger syndrome my analysis begins exploring identity traits, followed by exploring human values.

3.1. Identity traits:

My study explores the four aspects of identity (personal, social, collective, and relational) developed by Cheek and colleagues (2002) and the personal integrity scale adapted from Paulhus’ (1991) social desirability scale in people with Asperger syndrome. I begin exploring AIQ followed by personal integrity.

3.1.1. Aspects of Identity Questionnaire (AIQ):

My data explores how important a particular identity is to the participants’ sense of who they are. I use a two-way ANOVA to explore whether or not the sense of identity differs in the two
countries and also in the Asperger and control groups in these two countries (Pakistan & Canada). My analysis of the AIQ begins with personal identity. Table 3 shows the means and standard deviations of the AIQ and the personal integrity scale for the samples of various groups in this study.

Table 3

Means and standard deviations of the aspects of identity questionnaire & the personal integrity

<table>
<thead>
<tr>
<th>Aspects of identity</th>
<th>Pakistan Overall (n = 24)</th>
<th>Canada Overall (n = 22)</th>
<th>Asperger Overall (n = 23)</th>
<th>Control Overall (n = 23)</th>
<th>Asperger Pakistan (n = 12)</th>
<th>Control Pakistan (n = 12)</th>
<th>Asperger Canada (n = 11)</th>
<th>Control Canada (n = 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal identity</td>
<td>3.97 (0.61)</td>
<td>4.03 (0.60)</td>
<td>3.98 (0.57)</td>
<td>4.02 (0.64)</td>
<td>4.20 (0.42)</td>
<td>3.75 (0.70)</td>
<td>3.75 (0.64)</td>
<td>4.31 (0.43)</td>
</tr>
<tr>
<td>Social identity proper</td>
<td>2.64 (1.08)</td>
<td>2.98 (1.03)</td>
<td>2.41 (1.03)</td>
<td>3.19 (0.97)</td>
<td>1.98 (0.69)</td>
<td>3.29 (1.03)</td>
<td>2.88 (1.16)</td>
<td>3.09 (0.93)</td>
</tr>
<tr>
<td>Collective identity</td>
<td>2.88 (0.97)</td>
<td>2.75 (0.86)</td>
<td>2.45 (0.90)</td>
<td>3.17 (0.78)</td>
<td>2.37 (0.92)</td>
<td>3.38 (0.76)</td>
<td>2.54 (0.92)</td>
<td>2.95 (0.78)</td>
</tr>
<tr>
<td>Relational identity</td>
<td>2.99 (1.06)</td>
<td>3.98 (0.77)</td>
<td>2.94 (1.10)</td>
<td>3.99 (0.68)</td>
<td>2.26 (0.81)</td>
<td>3.71 (0.74)</td>
<td>3.68 (0.90)</td>
<td>4.29 (0.49)</td>
</tr>
<tr>
<td>Personal integrity</td>
<td>3.98 (0.68)</td>
<td>3.80 (0.72)</td>
<td>4.01 (0.62)</td>
<td>3.78 (0.77)</td>
<td>4.36 (0.37)</td>
<td>3.60 (0.71)</td>
<td>3.62 (0.61)</td>
<td>3.98 (0.81)</td>
</tr>
</tbody>
</table>

A. Personal identity:

Question: Does personal identity (assessed through the AIQ) differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on personal identity (assessed through AIQ) should also be universal.

The results of a two-way ANOVA showed that the mean scores of personal identity between the two Asperger groups were the same. The results also showed that there were no differences between the Asperger and control groups on their profiles of personal identity.

However, the results showed that there was a significant interaction between the effects of
country and the Asperger and control groups on personal identity, $F(1, 42) = 9.191, p = .004$. People with AS living in Pakistan have a higher profile of personal identity compared to those from the control group in Pakistan; whereas, people with AS living in Canada have a lower profile of personal identity compared to those from the control group living in Canada.

B. Social identity (combined):

Recall that social identity combines three aspects: social identity proper, relational identity and collective identity. I will explore social identity (combined) through a two-way ANOVA.

**Question:** Does social identity (assessed through the AIQ) differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on social identity (assessed through AIQ) should also be universal. Asperger syndrome is characterized by social deficiency, so their profile on social identity should be different from the control group of typically developed participants.

**Social identity (combined):** The results of a two-way ANOVA found that the two Asperger groups differed significantly on social identity (combined) and indicated a significant interaction between country and conditions, $F(1, 42) = 4.368, p = .04$. This interaction suggesting that people with AS in Canada were higher in social identity (combined) compared to people with AS in Pakistan.
The results of a two-way ANOVA showed that the mean scores of social identity (combined) was significantly higher in the control groups compared to those of people with AS, $F (1, 42) = 16.845, p = .001$.

The results revealed country differences on social identity; a higher tendency of social identity (combined) was found for those of Canadian participants (including both Asperger and control groups) compared to those of Pakistani participants, $F (1, 42) = 3.944, p = .054$. Figure 1 shows the estimated marginal means for social identity (combined).

Figures 1

*Estimated marginal means for social identity (combined)*

As discussed above social identity (combined) included three aspects of identity. I will now analyze these three aspects of identity. My analysis begins by exploring social identity proper followed by collective identity, and relational identity.
**Social identity proper:** The results of a two-way ANOVA found a higher tendency of social identity proper for the Canadian group with Asperger syndrome compared to the Pakistani group with Asperger syndrome, $F(1, 42) = 3.78, p = .06$. Results also showed that the mean scores of social identity proper of the control groups (both the control groups combined) were significantly higher compared to the mean scores of those of the Asperger populations (combined), $F(1, 42) = 7.052, p = .01$. The results did not indicate any country differences on social identity proper.

**Collective identity:** Overall results suggested that the mean scores of collective identity between the two Asperger groups did not differ; the mean scores also remained the same between the two countries. The results suggested that collective identity of people with AS was independent of their origin of country, but lower than the control groups, $F(1, 42) = 7.938, p = .007$.

**Relational identity:** The results of a two-way ANOVA indicated that the mean scores of the Pakistani Asperger group ($M = 2.26, SD = 0.81$) on relational identity were significantly lower than the Canadian Asperger group ($M = 3.68, SD = 0.90$). Results also revealed the mean scores of both Asperger groups were significantly lower than the mean scores of those in the control groups, $F(1, 42) = 21.284, p = .001$. The results indicated that country of residence has a significant effect on relational identity, $F(1, 42) = 19.867, p = .001$. This suggests that the mean scores of Pakistani populations on relational identity were significantly lower than those of Canadian populations. Overall results suggested that relational identity of people with AS was dependent on their country of origin.
3.1.2. Personal integrity:

**Question 1:** Does personal integrity differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile of personal integrity should also be universal.

The results of a two-way ANOVA showed that the mean scores of personal integrity did not differ between the two countries. The results also found the mean scores of personal integrity were also similar between the Asperger and control groups. However, the results found one significant interaction, \( F(1, 42) = 8.427, p = .001 \); people with AS living in Pakistan scored higher on personal integrity compared to those in the control group in Pakistan, whereas, people with AS living in Canada scored lower on personal integrity compared to those in the control group living in Canada.

Figure 2

*Estimated marginal means for personal integrity*
**Honesty:** Honesty is one of the items of the scale of personal integrity. Honesty was considered a prominent feature of personal identity for people with AS (McMullan, 2000). I also undertook an independent-sample *t*-test to determine whether honesty is similar between the groups from the two countries, Asperger and control groups, and also between the two Asperger groups.

The results of an independent-sample *t* test indicated that honesty did not differ between the two countries and the results were also similar between the two control groups. However, the results showed that the mean score of honesty was significantly higher in the Asperger groups (combined) compared to the control groups (combined), *t*(29.02) = 2.94 *p* = .006, two-tailed. The results also indicated the mean score of honesty was substantially higher for the Pakistani Asperger group compared to the Canadian Asperger group, *t*(10.00) = 3.130 *p* = .01, two-tailed.

**Summative remarks for identity traits:**

To examine whether identity traits differ between the groups and countries I used a method of two-way ANOVA. To see the effect of age, I put age as a covariate and found no significant differences in my results. The mean scores of *personal* and *collective* identities between the two Asperger groups did not differ substantially. However, the results found a higher tendency of social identity proper in the Canadian Asperger group compared to the Pakistani Asperger group. Moreover, the mean scores of *social identity* (combined) and *relational identity* were significantly higher in the Canadian Asperger group compared to the Pakistani Asperger group.
The results suggested that the social and relational identity of people with AS were dependent on their country of origin. People with AS living in Canada scored higher in relational identity compared to those of people with AS living in Pakistan. However, the results also suggested that people with AS rate themselves significantly lower in their sense of social identity (combine) and social identity proper compared to those of general populations.

The results suggested that the mean score of personal integrity was higher in the Pakistani Asperger group compared to those of the Pakistani control group. Personal integrity was also higher in the Pakistani Asperger group compared to the Canadian Asperger group. Similarly, honesty (one of the personal integrity items) was also higher in the Pakistani Asperger group compared to the Canadian Asperger group. The results also showed the mean scores of honesty were substantially higher in the Asperger populations (combined) compared to the populations in the control groups (combined).

Following McAdams & Pals’ (2006) model we understood that identity traits are very much associated with personal values. In the next section I will explore the portrait value questionnaire (PVQ) developed by Schwartz (1992).

3.2. Basic human values, The Portrait value questionnaire (PVQ)

Recall that Schwartz’s 10 values were grouped into 4 dimensions: conservation, openness to change, self-transcendence, and achievement. I first consider the 4 main dimensions, and then if differences are found I explore the component values of that dimension in more detail.
To test whether or not components (conservation, openness to change, self-transcendence, achievement, and power) of the PVQ are universal in people with Asperger syndrome, I first tested whether or not each component of the PVQ differs in the two countries, then I tested whether or not the components of the PVQ differ in the Asperger and control groups. These tests were conducted through a two-way ANOVA. In this section, my analysis begins by exploring the value of conservation, followed by an exploration of the values of openness to change, self-transcendence, and, achievement. The value of power was not computed through a two-way ANOVA because the scores did not meet the criterion of homogeneity of variance.

Table 4

Means and standard deviations of the values of conservation, openness to change, self-transcendence, and achievement

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pakistan Overall (n = 24)</th>
<th>Canada Overall (n = 22)</th>
<th>Asperger Overall (n = 23)</th>
<th>Control Overall (n = 23)</th>
<th>Asperger Pakistan (n = 12)</th>
<th>Control Pakistan (n = 12)</th>
<th>Asperger Canada (n = 11)</th>
<th>Control Canada (n = 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation</td>
<td>5.07 (0.87)</td>
<td>5.13 (0.60)</td>
<td>5.32 (0.68)</td>
<td>4.88 (0.75)</td>
<td>5.50 (0.67)</td>
<td>4.64 (0.85)</td>
<td>5.13 (0.67)</td>
<td>5.13 (0.56)</td>
</tr>
<tr>
<td>Openness</td>
<td>3.81 (0.77)</td>
<td>4.33 (0.73)</td>
<td>3.56 (0.54)</td>
<td>4.55 (0.69)</td>
<td>3.36 (0.54)</td>
<td>4.26 (0.72)</td>
<td>3.78 (0.47)</td>
<td>4.87 (0.51)</td>
</tr>
<tr>
<td>Transcendence</td>
<td>4.91 (0.57)</td>
<td>5.07 (0.53)</td>
<td>4.98 (0.55)</td>
<td>5.00 (0.56)</td>
<td>4.96 (0.52)</td>
<td>4.86 (0.64)</td>
<td>5.00 (0.60)</td>
<td>5.15 (0.45)</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.89 (1.09)</td>
<td>4.09 (0.97)</td>
<td>3.52 (0.91)</td>
<td>4.45 (0.94)</td>
<td>3.41 (1.12)</td>
<td>4.37 (0.85)</td>
<td>3.63 (0.63)</td>
<td>4.54 (1.05)</td>
</tr>
</tbody>
</table>

A. The value of conservation:

Question: Does the value of conservation (assessed through the PVQ-ESS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on the value of conservation (assessed through PVQ-ESS) should also be universal, but
different from the control groups. The value of conservation entails honesty in action and thoughts; and this is a prominent feature in people with AS (e.g., McMullen, 2000, Baron-Cohen, 1995), so the value of conservation in people with AS should be different from the typically developed control groups.

The results of a two-way ANOVA showed that the mean scores of the value of conservation were similar between the two Asperger groups. The results also revealed that the two countries did not differ on the value of conservation. However, results also revealed that the mean scores of the Asperger groups were significantly higher compared to the control groups on the value of conservation, $F(1, 42) = 4.233, p = .04$.

The results also revealed that there was a significant interaction between the effects of country and the Asperger and control groups on the value of conservation, $F(1, 42) = 4.233, p = .05$. The Pakistani Asperger group held a higher value of conservation compared to the Pakistani control group, whereas the Canadian Asperger group held the same value of conservation as the Canadian control group.

Overall results suggested that regardless of their cultural differences both the Asperger groups did not differ in their value of conservation. However, the value of conservation was significantly higher in the Asperger groups compared to those of the control groups. Figure 3 shows the estimated marginal means for the value of conservation (see below). Table 5 shows the means and standard deviations of the sub-components of the PVQ (see below).
Table 5

Mean and SD of the sub-component of the basic human values (PVQ)

<table>
<thead>
<tr>
<th>Basic Human Values</th>
<th>Asperger Pakistan Means &amp; SD</th>
<th>Asperger Canada Means &amp; SD</th>
<th>Control Pakistan Means &amp; SD</th>
<th>Control Canada Means &amp; SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 12</td>
<td>n = 11</td>
<td>n = 12</td>
<td>n = 11</td>
</tr>
<tr>
<td>Power</td>
<td>3.41 (1.08)</td>
<td>3.90 (0.53)</td>
<td>4.41 (1.14)</td>
<td>5.15 (0.50)</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.41 (1.12)</td>
<td>3.63 (0.63)</td>
<td>4.37 (0.85)</td>
<td>4.54 (1.05)</td>
</tr>
<tr>
<td>Hedonism</td>
<td>2.75 (1.01)</td>
<td>3.36 (0.92)</td>
<td>3.87 (1.06)</td>
<td>4.72 (0.71)</td>
</tr>
<tr>
<td>Stimulation</td>
<td>2.20 (0.45)</td>
<td>3.36 (0.56)</td>
<td>4.00 (0.92)</td>
<td>5.00 (0.63)</td>
</tr>
<tr>
<td>Self-direction</td>
<td>5.12 (0.48)</td>
<td>4.68 (0.60)</td>
<td>4.91 (0.92)</td>
<td>1.15 (0.34)</td>
</tr>
<tr>
<td>Universalism</td>
<td>4.97 (0.55)</td>
<td>5.00 (0.51)</td>
<td>4.69 (0.73)</td>
<td>5.18 (0.40)</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4.95 (0.62)</td>
<td>5.00 (0.80)</td>
<td>5.04 (0.68)</td>
<td>5.13 (0.67)</td>
</tr>
<tr>
<td>Tradition</td>
<td>4.45 (0.54)</td>
<td>4.09 (0.88)</td>
<td>4.50 (0.90)</td>
<td>4.95 (0.52)</td>
</tr>
<tr>
<td>Conformity</td>
<td>5.29 (1.05)</td>
<td>5.36 (0.80)</td>
<td>4.58 (0.92)</td>
<td>4.81 (1.05)</td>
</tr>
<tr>
<td>Security</td>
<td>5.70 (0.54)</td>
<td>4.90 (0.73)</td>
<td>4.70 (0.94)</td>
<td>5.45 (0.41)</td>
</tr>
</tbody>
</table>

IN-DEPTH ANALYSIS: The in-depth analysis (see table above) of the sub-components of the PVQ showed that people with AS gave less importance to the values of power, $t(44) = 4.092, p = .001$; achievement, $t(44) = 3.425, p = .001$; hedonism, $t(44) = 4.208, p = .001$; stimulation, $t(44) = 6.951, p = .001$; and tradition, $t(44) = 1.983, p = .05$, compared to those in
the control groups. The results also indicated that people with AS placed significantly higher emphasis on the value of conformity than those in the control groups, $t(44) = 2.251, p = .02$.

**B. The value of openness to change:**

**Question:** Does the value of openness to change (assessed through the PVQ-ESS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on the value of openness to change (assessed through PVQ-ESS) should also be universal. People with AS are strict in their environmental changes and fixated on sameness (DSM-4), so their value of openness to change should be different from those of the control groups.

The results of a two-way ANOVA showed that the mean score of the value of openness to change did not differ significantly between the two Asperger groups. Results also revealed that the mean scores of the Asperger groups were significantly lower than the mean scores of the control groups, $F (1, 42) = 34.703, p = .001$. The results also showed that the mean scores of the Pakistani populations (including the Asperger and control groups) on the value of openness to change was significantly lower than the mean scores of both of the Canadian groups, $F (1, 42) = 9.474, p = .004$.

Overall results suggested the value of openness to change was significantly lower in people with AS compared to those in the control groups. The results also suggested that the two countries also differed on the value of openness to change; Pakistani people (combined)
valued openness to change significantly less than Canadian people. However, regardless of these country differences, the value of openness to change remained the same for both of the groups with Asperger syndrome.

Figure 4

*Estimated marginal means of the value of openness to change by country and groups*

![Graph showing estimated marginal means of openness to change by country and groups.]

C. The value of self-transcendence:

**Question:** How does the value of self-transcendence (assessed through the PVQ-ESS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on the value of self-transcendence (assessed through PVQ-ESS) should also be universal.

The results of a two-way ANOVA showed that the scores for both of the Asperger groups were similar on the value of self-transcendence. The results also showed that country of
origin did not significantly affect the value of self-transcendence, nor was there a difference between the mean scores of the Asperger and control groups on the value of self-transcendence.

The results suggested that the value of self-transcendence was regarded equally in both countries and in both of the human conditions (Asperger and control groups).

Figure 5

*Estimated marginal means for the value of self-transcendence*

### D. The value of achievement:

**Question:** Does the value of achievement (assessed through the PVQ-ESS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on the value of achievement (assessed through PVQ-ESS) should also be universal. According to Schwartz (2006) the value of achievement is personal success through the
demonstration of competence according to social standards. As People with Asperger syndrome struggle in the maintenance of social standards (DSM-4), so their profile on the value of achievement should be different from those of the control groups.

The results of a two-way ANOVA showed that the mean scores between the Asperger groups did not differ on the value of achievement. The mean scores of the value of achievement were also similar between the two countries. However, results revealed that the mean scores of the Asperger groups were significantly lower compared to the control groups on the value of achievement, $F (1, 42) = 11.282, p = .002$.

Overall the results suggested that regardless of their cultural backgrounds both of the Asperger groups did not differ in their value of achievement. However, the value of achievement received substantially less regard by people with AS compared to the typically developed people in the control groups.

Figure 6

*Estimated marginal means for the value of achievement*
Summative remarks for the basic human values:

To examine whether values differ between the groups and countries I used a method of a two-way ANOVA. To see the effect of age, I put age as a covariate and found no significant differences in my results. The results of the various components of the basic human values suggested that all four basic human values (1) conservation, (2) openness to change, (3) self-transcendence, and (4) achievement did not differ in either of the Asperger groups. However, the results suggested that people with AS placed greater regard on the value of conservation compared to those in the control group. In-depth analyses also suggested that people with AS significantly value conformity (the sub-group of the component of conservation) compared to the control groups. Thus, conformity or conservation can be considered a unique value of people with AS that distinguishes them from the general population.

Personal identity, which includes personal values, requires wisdom to lead to the best possible quality of life, and wisdom is sometimes considered an important aspect of personal and social identity. Wisdom in relation to people with Asperger syndrome is considered in the following section.

3.3. WISDOM:

In this section I will explore wisdom (through the 3D-WS) as instrumental to living a better life, while keeping one’s identity and values intact. I will then explore a different aspect of wisdom called self-transcendence (a component of ASTI). Through exploring the three dimensional wisdom scale (3D-WS), I will be able to articulate if people with Asperger syndrome
living in the two different countries have similar profiles on the attributes of wisdom. In addition, the components of the 3D-WS will also provide me insight into people with AS’ cognitive, reflective, and affective understandings of wisdom. Importantly, given that the cognitive abilities of people with AS are not affected, the cognitive dimensions of wisdom can also be considered as a control in my study between the Asperger and typically developed, control groups.

Table 6

Mean scores and standard deviations for the 3D-WS, components of 3D-WS, and self-transcendence scales by country, conditions, and groups.

<table>
<thead>
<tr>
<th>Scales</th>
<th>OVERALL Pakistan (n = 24)</th>
<th>OVERALL Canada (n = 22)</th>
<th>OVERALL Asperger (n = 23)</th>
<th>OVERALL Control (n = 23)</th>
<th>PAKISTAN Asperger (n = 12)</th>
<th>PAKISTAN Control (n = 12)</th>
<th>CANADA Asperger (n = 11)</th>
<th>CANADA Control (n = 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D-WS</td>
<td>3.01 (0.46)</td>
<td>3.34 (0.56)</td>
<td>2.96 (0.44)</td>
<td>3.38 (0.53)</td>
<td>2.81 (0.40)</td>
<td>3.21 (0.44)</td>
<td>3.12 (0.45)</td>
<td>3.56 (0.59)</td>
</tr>
<tr>
<td>Cognitive</td>
<td>3.14 (0.65)</td>
<td>3.46 (0.70)</td>
<td>3.34 (0.64)</td>
<td>3.25 (0.74)</td>
<td>3.33 (0.64)</td>
<td>2.95 (0.62)</td>
<td>3.35 (0.67)</td>
<td>3.57 (0.74)</td>
</tr>
<tr>
<td>Reflective</td>
<td>3.15 (0.60)</td>
<td>3.50 (0.73)</td>
<td>2.94 (0.52)</td>
<td>3.96 (0.63)</td>
<td>2.81 (0.52)</td>
<td>3.49 (0.49)</td>
<td>3.08 (0.50)</td>
<td>3.91 (0.71)</td>
</tr>
<tr>
<td>Affective</td>
<td>2.75 (0.68)</td>
<td>3.06 (0.57)</td>
<td>2.60 (0.52)</td>
<td>3.20 (0.62)</td>
<td>2.30 (0.35)</td>
<td>3.20 (0.64)</td>
<td>2.93 (0.50)</td>
<td>3.20 (0.62)</td>
</tr>
<tr>
<td>Self-transcendence</td>
<td>3.35 (0.57)</td>
<td>3.74 (0.45)</td>
<td>3.45 (0.48)</td>
<td>3.63 (0.60)</td>
<td>3.27 (0.50)</td>
<td>3.42 (0.66)</td>
<td>3.63 (0.41)</td>
<td>3.85 (0.47)</td>
</tr>
</tbody>
</table>

Three Dimensional Wisdom Scale:

**Question:** Does wisdom (assessed through the 3D-WS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile of wisdom dispositions (assessed through 3D-WS) should also be also universal.
The results of a two-way ANOVA showed that there were no differences between the two Asperger groups on the 3D-WS. However, the results revealed that the mean scores of the Asperger groups were significantly lower than the mean scores of the control groups, $F(1, 42) = 8.906, p = .005$. The results also showed that the mean scores of the Pakistani populations (combined) on wisdom were significantly lower, $F(1, 42) = 5.27, p = .02$, than those of the Canadian populations (combined). There was no interaction between the Asperger and control groups or between the two countries.

These results suggested that regardless of their cultural differences neither of the Asperger groups differed on their profile of wisdom (assessed through the 3D-WS). Although the mean scores of the 3D-WS differed from country to country, these country differences did not apply to people with AS.

Figure 7

*Estimated marginal means for the 3D-WS*
My next analysis will investigate which components (cognitive, reflective, and affective) of the 3D-WS differ between the Asperger and control groups and between the two countries.

A. Cognitive component of the 3D-WS:

Question: Does the cognitive dimension of wisdom (assessed through the 3D-WS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4) and do not affect cognitive ability, so the cognitive dimensions of wisdom (assessed through 3D-WS) should be also universal and no different than those of the control groups (and thus the general population).

The results of a two-way ANOVA showed that neither of the Asperger groups differed on their profile of the cognitive dimension of wisdom. The results also showed that there were no differences between the Asperger and control groups on the cognitive dimension of wisdom. The results also showed that country of origin did not produce different results on the cognitive dimension of wisdom. These results also suggested that there were no differences on the cognitive components of the 3D-WS across all of the groups in this study.

B. Reflective component of the 3D-WS:

Question: Does the reflective dimension of wisdom (assessed through the 3D-WS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so the reflective dimension of wisdom (assessed through 3D-WS) should also be universal. However,
due to limitations in ‘theory of mind’ abilities the profiles of the groups with AS (Ardelt, 2003, defined reflection as ‘theory of mind’) should be different from the control groups.

The results of a two-way ANOVA showed that the mean scores between the Pakistani and Canadian Asperger groups did not differ significantly on the reflective dimension of wisdom. However, the results revealed that the mean scores of the Asperger groups were significantly lower than the mean scores of the control groups (general populations), $F(1, 42) = 20.703, p = .001$. The results also showed that the mean scores of Pakistani populations (combined) on the reflective dimension of wisdom were significantly lower than those of the Canadian populations (combined), $F(1, 42) = 4.357, p = .04$

The overall results suggested that both the Asperger groups scored lower on the reflective dimension of the 3D-WS compared to the control groups in their respective countries. Results also suggested that the mean scores of the reflective dimension differed from country to country. However, these country differences did not apply to people with AS: Their reflective profile of wisdom remained the same regardless of where they were living.

**C. Affective component of the 3D-WS:**

**Question:** How does the affective dimension of wisdom (assessed through the 3D-WS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so the affective dimension of wisdom (assessed through 3D-WS) in people with AS should also be universal. However, due to low affect for others (DSM-4) their affective profile should be different from the control groups.
The results of a two-way ANOVA showed a high tendency of interaction, $F(1, 42) = 3.76$, $p = .059$, suggesting that the Canadian Asperger group had a high tendency of affection compared to the Pakistani Asperger group. However, the results showed that the mean scores of the Asperger groups were significantly lower compared to the mean scores of the control groups, $F(1, 42) = 13.192, p = .001$. The results showed that country of origin did not have an effect on the affective dimension of wisdom.

Overall the results suggested that the mean scores of the affective dimension of wisdom did not differ between the countries. However, the Canadian Asperger group showed a higher tendency of affection compared to the Pakistani Asperger group.

My next analysis will explore a different aspect of wisdom called self-transcendence.

### 3.4. Self-transcendence:

The state of self-transcendence is considered a developmental process that forms a pathway to wisdom (Levenson et al., 2001). I tested whether self-transcendence (ASTI) differs between the Asperger groups living in two different countries. These tests were conducted again through a two way ANOVA.

The results indicated that the mean scores of self-transcendence between the two Asperger groups did not differ significantly. The results also revealed that the mean scores of self-transcendence between the Asperger and control groups were similar. However, the results showed that the two countries differed on self-transcendence, $F(1, 42) = 10.721, p = .01$. The mean score of the combined Pakistani populations ($M = 3.35, SD = 0.57$) on self-
transcendence was significantly lower than the mean score of those of the combined Canadian populations \( (M = 3.74, SD = 0.45) \). The results also revealed that there was no significant interaction between the effects of country of origin and the Asperger and control groups on self-transcendence.

Overall results suggested that regardless of their cultural differences both the Asperger groups did not differ on self-transcendence, additionally the Asperger groups were not different from the control groups.

Figure 8

*Estimated marginal means of self-transcendence*

**Summative remarks on wisdom:**

To examine whether wisdom differs between the groups and countries I used a method of two-way ANOVA. To see the effect of age, I put age as a covariate and found no significant differences in my results. The results of a two-way ANOVA suggested that regardless of their
cultural differences neither of the Asperger groups differed in their perceived self-reported understanding of wisdom (assessed through the 3D-WS). Results also suggested that the mean scores of the 3D-WS differed from country to country. However, this country to country difference did not apply to the Asperger groups’ profiles of wisdom.

Further in-depth analyses of the components of the 3D-WS suggested that there were no differences in the cognitive aspect of the 3D-WS between all four of the groups in this study. However, both the Asperger groups scored lower in the reflective dimension of the 3D-WS compared to the control groups in their countries. In addition, regardless of their cultural differences neither of the Asperger groups differed in their perceived self-reported understanding of the reflective dimension of wisdom. The results suggested that the mean scores of the Asperger groups were significantly lower than the mean scores of the control groups on the affective dimension of wisdom, and a high tendency of affect was also found in the Canadian Asperger group compared to the Pakistani Asperger group.

Another measure of wisdom is self-transcendence. The results suggested that regardless of their cultural differences neither of the Asperger groups’ profiles of self-transcendence differed. The results also found that the Asperger groups were not different from the control groups on self-transcendence.

Now that we know that the overall 3D-WS is not dependent on country of origin for people with AS, but one of its components (affective dimension), it might have a cultural link. However, my data suggests that overall wisdom differs from country to country and between the Asperger to control groups.
Knowing that wisdom is an important component of a good life (e.g., Baltes & Staudinger, 2000), investigations on wisdom have found that wisdom is highly positively correlated with psychological well-being (e.g., Ferrari et al., 2011). The next section will explore psychological well-being.

3.5. Scales of well-being:

My study utilized four scales to explore the well-being of individuals with Asperger syndrome: (1) satisfaction with life scale (SWLS), (2) purpose in life (PIL), (3) alienation, and (4) quality of life inventory (QOLI). At this point my study begins exploring the satisfaction with life scale followed by the sequence listed above. I will again use a two-way ANOVA to see how these scales of well-being differ in between the two countries and also between the groups.

Table 7

*Means and standard deviations of the SWLS, PIL, alienations, the QOLI.*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pakistan Overall (n = 24)</th>
<th>Pakistan Overall (n = 22)</th>
<th>Pakistan Overall (n = 23)</th>
<th>Canada Overall (n = 23)</th>
<th>Canada Overall (n = 22)</th>
<th>Asperger Overall (n = 12)</th>
<th>Control Overall (n = 12)</th>
<th>Asperger Pakistan (n = 11)</th>
<th>Control Pakistan (n = 11)</th>
<th>Asperger Canada (n = 11)</th>
<th>Control Canada (n = 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWLS</td>
<td>5.13 (0.64)</td>
<td>5.40 (1.01)</td>
<td>5.17 (0.66)</td>
<td>5.34 (0.99)</td>
<td>5.05 (0.65)</td>
<td>5.21 (0.64)</td>
<td>5.30 (0.68)</td>
<td>5.49 (1.29)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIL</td>
<td>3.25 (0.91)</td>
<td>3.98 (0.77)</td>
<td>3.43 (0.93)</td>
<td>3.76 (0.88)</td>
<td>2.97 (0.77)</td>
<td>3.52 (0.98)</td>
<td>3.94 (0.86)</td>
<td>4.02 (0.70)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td>2.50 (1.01)</td>
<td>2.43 (0.94)</td>
<td>3.10 (0.75)</td>
<td>1.82 (0.71)</td>
<td>3.31 (0.61)</td>
<td>1.68 (0.58)</td>
<td>2.88 (0.85)</td>
<td>1.97 (0.84)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QOLI</td>
<td>52.45 (7.29)</td>
<td>52.13 (9.15)</td>
<td>47.13 (6.30)</td>
<td>57.47 (6.32)</td>
<td>48.25 (7.35)</td>
<td>56.66 (4.31)</td>
<td>45.90 (4.98)</td>
<td>58.30 (8.11)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results found that both the Asperger groups did not differ in any of the well-being scales. However, separate analyses of the various scales are presented below. I also used age as a covariate and found no differences in my results.

A. The Satisfaction with life scale (SWLS):

Question 1: Does the satisfaction with life (assessed through the SWLS) differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so participants with AS’ profile of satisfaction with life (assessed through SWLS) should also be universal. As wisdom (assessed through the 3D-WS) did not differ between the Asperger and control groups, the profile of satisfaction with life should not be different between the Asperger and control groups (e.g., Ardelt, 2000a, 2000b; Assmann, 1994).

The results showed that there was no difference between the two Asperger groups on the SWLS. The results indicated that country of origin did not effect on the SWLS. Results also revealed that the mean scores of the Asperger and control groups did not differ significantly on the satisfaction with life scale. The results also found that there were no interactions between the two countries or between the Asperger and control groups.
Overall results support the hypothesis and suggested that regardless of their cultural differences neither of the Asperger groups differed in their satisfaction with life. Moreover, their profile on satisfaction with life was similar to those of people in the control groups.

B. Purpose in life:

Question 1: Does the understanding of purpose in life differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profile on purpose in life should also be universal.

The results showed that there were neither differences between the two Asperger groups, nor there were differences between the Asperger and control groups on their profiles of purpose in life. However, results showed that the mean scores of the Pakistani populations
were significantly less than the mean scores of those of the Canadian populations (combined), $F(1, 42) = 8.714, p = .005$. However, this country to country difference did not apply to people with Asperger syndrome.

Figure 10

The estimated marginal means of purpose in life

C. Scale of Alienation:

Question 1: Does the sense of alienation (assessed through the ASTI) differ in individuals with Asperger syndrome living in Pakistan and Canada?

Hypothesis: The diagnostic characteristics of Asperger syndrome are universal (DSM-4), so their profiles of alienation (assessed through ASTI) should also be universal and different from the control groups (due to social disconnectedness as most people with AS remain isolated, DSM-4, 2000).
The results indicated that the mean scores of both of the Asperger groups did not differ significantly on alienation. The results also showed that country of origin did not produce different results related to alienation. However, the results revealed that the mean scores of the Asperger and control groups differed significantly on alienation, $F (1, 42) = 34.771, p = .001$. The mean scores of the Asperger groups were significantly higher than the mean scores of the control groups. The higher scores suggested that people with AS feel more isolated than those in the control groups.

Figure 11

The estimated marginal means of alienation

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**D. The Quality of life inventory (QOLI):**

**Question 1:** Does the quality of life (assessed through the QOLI) differ in individuals with Asperger syndrome living in Pakistan and Canada?
**Hypothesis:** The diagnostic characteristics of Asperger syndrome are universal (DSM-4). So, their profile of quality of life (assessed through QOLI) should also be universal.

The results indicated that there were no differences in the overall mean scores of the QOLI between the two Asperger groups. The results also indicated that the Asperger groups scored significantly less than the control groups on QOLI, $F(1, 42) = 30.767, p = .001$. The results revealed that country or origin did not produce different results on the QOLI.

**Figure 12**

*Estimated marginal means of QOLI*

![Estimated Marginal Means of QOLI T-Score](image)

**QOLI: IN-DEPTH ANALYSIS:** The QOLI has 16 sub-scales. See table 8 below for the means and standard deviations of the sub-components of the QOLI. The detailed results showed that country of origin produced different results in 2 out of 16 components of the QOLI: Pakistani
people (combined) scored higher in *money* and *helping* components of the QOLI (see table below). The detailed results also showed that the two Asperger groups differed in 1 out of 16 components of the QOLI: The Canadian Asperger group scored lower in the *health* component of the QOLI. Overall results suggested that neither of the Asperger groups differed in their self-reported profiles of quality of life. However, the results suggested that the overall mean scores of the QOLI were significantly lower in people with AS compared to those of the control groups.

**Table 8**

*Mean & SD of the sub-components of the QOLI*

<table>
<thead>
<tr>
<th>QOLI</th>
<th>Asperger Pakistan Means &amp; SD N = 12</th>
<th>Asperger Canada Means &amp; SD N = 11</th>
<th>Control Pakistan Means &amp; SD N = 12</th>
<th>Control Canada Means &amp; SD N = 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>4.58 (1.83)</td>
<td>2.81 (1.60)</td>
<td>5.16 (1.33)</td>
<td>4.90 (1.64)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>3.58 (2.15)</td>
<td>2.81 (1.16)</td>
<td>4.33 (1.72)</td>
<td>4.00 (2.00)</td>
</tr>
<tr>
<td>Goals</td>
<td>2.91 (1.83)</td>
<td>2.36 (1.58)</td>
<td>3.83 (1.58)</td>
<td>4.36 (2.15)</td>
</tr>
<tr>
<td>Money</td>
<td>2.08 (1.56)</td>
<td>1.27 (1.10)</td>
<td>3.25 (1.21)</td>
<td>2.18 (1.77)</td>
</tr>
<tr>
<td>Work</td>
<td>3.00 (1.95)</td>
<td>2.45 (1.69)</td>
<td>4.58 (1.37)</td>
<td>3.18 (2.13)</td>
</tr>
<tr>
<td>Play</td>
<td>1.91 (1.44)</td>
<td>1.63 (1.28)</td>
<td>2.58 (1.31)</td>
<td>4.00 (2.14)</td>
</tr>
<tr>
<td>Learning</td>
<td>2.41 (1.56)</td>
<td>3.18 (1.94)</td>
<td>4.00 (1.20)</td>
<td>4.36 (1.96)</td>
</tr>
<tr>
<td>Creativity</td>
<td>3.50 (2.06)</td>
<td>2.09 (1.37)</td>
<td>2.50 (1.44)</td>
<td>4.18 (2.22)</td>
</tr>
<tr>
<td>Helping</td>
<td>3.50 (2.23)</td>
<td>2.36 (1.85)</td>
<td>5.16 (1.33)</td>
<td>3.63 (2.11)</td>
</tr>
<tr>
<td>Love</td>
<td>2.41 (1.92)</td>
<td>1.81 (0.98)</td>
<td>3.16 (1.64)</td>
<td>3.81 (2.27)</td>
</tr>
<tr>
<td>Friend</td>
<td>1.75 (0.62)</td>
<td>1.09 (0.70)</td>
<td>4.58 (1.92)</td>
<td>4.63 (1.68)</td>
</tr>
<tr>
<td>Children</td>
<td>1.25 (1.71)</td>
<td>1.09 (0.70)</td>
<td>2.08 (1.97)</td>
<td>2.18 (2.22)</td>
</tr>
<tr>
<td>Relatives</td>
<td>2.58 (1.78)</td>
<td>1.72 (1.55)</td>
<td>2.33 (1.37)</td>
<td>1.72 (1.61)</td>
</tr>
<tr>
<td>Home</td>
<td>3.66 (2.14)</td>
<td>3.09 (1.70)</td>
<td>4.83 (1.58)</td>
<td>4.72 (1.96)</td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>2.33 (1.77)</td>
<td>1.36 (0.50)</td>
<td>2.00 (1.04)</td>
<td>3.36 (1.80)</td>
</tr>
<tr>
<td>Community</td>
<td>2.33 (1.77)</td>
<td>1.63 (0.50)</td>
<td>2.25 (1.65)</td>
<td>2.72 (2.41)</td>
</tr>
</tbody>
</table>
Summative remarks for the scales of well-being:

This study utilized four well-being scales: (1) satisfaction with life, (2) quality of life, (3) purpose in life, and (4) alienation. The results suggested that both of the Asperger groups did not differ in any of the well-being scales. The results also suggested that country of origin significantly affected the profiles of purpose in life; however, this country to country difference did not apply to people with Asperger syndrome. The results also found that people with AS were significantly isolated compared to those populations in the control groups. The results also indicated that the quality of life of the Asperger groups was substantially lower than that of the control groups.

Now that I have explored various measures of identity and wisdom, my data supports studies that have found that these measures are associated with each other. For example, wisdom is highly correlated with satisfaction with life and negatively correlated with alienation. In the next section I will explore the relationship between various scales I used in this study. The following analysis will help me to determine the relationships of the various variables I used in this study.

3.6. Relationships between the scales:

To explore the relationship between the scales my study will use the Pearson correlation coefficient. My analysis begins by exploring:

A. relationships between the scales of identity traits,

B. relationships between the aspects of identity and basic human values,
C. relationships between the five well-being scales,

D. the relationships between the 3D-WS, self-transcendence, and mastery (i.e., between the two wisdom scales and mastery, the control over life),

E. relationships between the 3D-WS and the well-being scales,

F. the relationships between the 3D-WS, ASTI and the well-being scales, and

G. the relationships between the 3D-WS, ASTI and the sub-scale of the basic human values,

A. **Correlation between the aspects of identity scales:**

Table 9

<table>
<thead>
<tr>
<th></th>
<th>Personal identity</th>
<th>Social identity (combined)</th>
<th>Social identity proper</th>
<th>Collective identity</th>
<th>Relational identity</th>
<th>Personal integrity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal identity</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Social identity (comb)</td>
<td></td>
<td>.842**</td>
<td></td>
<td>.826**</td>
<td>.832**</td>
<td>-.124</td>
</tr>
<tr>
<td>Social identity</td>
<td></td>
<td></td>
<td>.566**</td>
<td></td>
<td>.520**</td>
<td></td>
</tr>
<tr>
<td>Collective identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.544**</td>
</tr>
<tr>
<td>Relational identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.091</td>
</tr>
<tr>
<td>Personal integrity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

C. * . Correlation is significant at the 0.05 level (2-tailed)

Table 9 shows the relationships between the scales of identity traits. The results of Pearson correlation coefficient showed personal identity is significantly correlated with personal integrity, \( r(44) = .313, \ p < .03 \), two-tailed. The results suggested that when people score high in personal identity then they also score high in personal integrity. The results also showed that social identity (combined) was highly positively associated with social identity proper, \( r(44) = \)
.842, p < .001, two-tailed, collective identity, r(44) = .826, p < .001, two-tailed, and relational identity, r(44) = .832, p < .001, two-tailed.

The results suggested that when people score high in social identity then they also score high in social identity proper, collective and relational identity.

D. Relationships between the aspects of identity and the basic human values:

Table 10

Correlations between the identity traits and basic human values

<table>
<thead>
<tr>
<th>Personal identity</th>
<th>Social Identity (comb)</th>
<th>Personal integrity</th>
<th>Conservation</th>
<th>Openness</th>
<th>Self-transcendence</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal identity</td>
<td>1</td>
<td>.268</td>
<td>.313*</td>
<td>.114</td>
<td>.245</td>
<td>.270</td>
</tr>
<tr>
<td>Social identity (comb)</td>
<td>1</td>
<td>-.065</td>
<td>-.222</td>
<td>.435**</td>
<td>.058</td>
<td>.426**</td>
</tr>
<tr>
<td>Personal integrity</td>
<td>1</td>
<td>.331*</td>
<td>.058</td>
<td>.373*</td>
<td>.192</td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>1</td>
<td>-.109</td>
<td>.263</td>
<td>-.171</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>1</td>
<td>.211</td>
<td>.646**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-transcendence</td>
<td>1</td>
<td>.146</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Table 10 shows the Pearson correlation coefficients between the identity traits and the basic human values. The results showed that personal identity was only positively correlated with the value of achievement, r(44) = .406, p < .05.
The results also showed that social identity (combined) was positively correlated with the value of openness to change \( r(44) = .435, p < .05 \), and the value of achievement, \( r(44) = .426, p < .05 \). This suggests that when people score high in social identity (combined) then they score high in their values of openness to change and achievement.

Thus, there is evidence that when people score high in personal identity then they similarly score high in their value of achievement. The results also indicate that personal integrity was also correlated with achievement, \( r(44) = .426, p < .05 \).

E. Relationship between the four well-being scales:

Table 11

Correlations between the well-being scales

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction with life</th>
<th>Quality of life</th>
<th>Purpose in life</th>
<th>Alienation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with life</td>
<td>1</td>
<td>.432(^\ast)</td>
<td>.580(^\ast)</td>
<td>-.452(^\ast)</td>
</tr>
<tr>
<td>Quality of life</td>
<td>1</td>
<td>.270</td>
<td>-.646(^\ast)</td>
<td></td>
</tr>
<tr>
<td>Purpose in life</td>
<td>1</td>
<td></td>
<td>-.402(^\ast)</td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

\(^\ast\). Correlation is significant at the 0.05 level (2-tailed)

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

Table 11 shows the relationships among the five well-being scales. The results of Pearson correlation coefficient showed all 5 out of 6 correlations were statistically significant and were greater or equal to \( r(44) = .402, p < .01 \), two-tailed. The results revealed that purpose in life was highly positively correlated with the satisfaction with life scale, \( r(44) = .580, p < .001 \).
The results also showed that alienation was highly negatively correlated with quality of life \( r(44) = -0.646, p < .001 \), satisfaction with life , \( r(44) = -0.452, p < .01 \), and purpose in life \( r(44) = -0.402, p < .01 \). The results suggested that when people are satisfied in their lives then their quality of life and purpose in life increases, and their isolation decreases.

**F. The relationships between the 3D-WS, self-transcendence:**

Table 12

<table>
<thead>
<tr>
<th></th>
<th>3D-WS</th>
<th>Self-transcendence</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D-WS</td>
<td></td>
<td>.516**</td>
</tr>
<tr>
<td>Self-transcendence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Table 12 shows the relationships between the two wisdom scales. The results revealed that the 3D-WS was highly positively correlated with the scale of self-transcendence, \( r(44) = .516, p < .001 \). The results suggested that when people are high in the three dimensional wisdom (i.e., integration of reflective, affective, and cognitive aspects of wisdom) then they are also high in selfless wisdom (self-transcendence, a wisdom of beyond self).
G. Relationship between the 3D-WS and the well-being scales:

Table 13 shows the relationships between the 3D-WS and the scales of well-being. The results of Pearson correlation coefficient showed that 9 out of 10 correlations were statistically significant and were greater or equal to $r(44) = .402, p < .05$, two-tailed. The results revealed that the 3D-WS was positively highly correlated with the satisfaction with life scale, $r(44) = .716$, $p < .001$, followed by purpose in life $r(44) = .607, p < .001$, and quality of life $r(44) = .607, p < .001$. The results also showed that the 3D-WS was negatively highly correlated with alienation, $r(44) = -.638, p < .001$.

The results suggested that when people achieve high wisdom then they are more satisfied in their lives, their quality of life and purpose in life increases, and their isolation decreases.

Table 13


<table>
<thead>
<tr>
<th></th>
<th>3D-WS</th>
<th>Life Satisfaction</th>
<th>Quality of life</th>
<th>Purpose in life</th>
<th>Alienation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D-WS</td>
<td>1</td>
<td>.716*</td>
<td>.607*</td>
<td>.678*</td>
<td>-.638*</td>
</tr>
<tr>
<td>S. in life</td>
<td></td>
<td></td>
<td>.432*</td>
<td>.580*</td>
<td>-.452*</td>
</tr>
<tr>
<td>Q. of life</td>
<td></td>
<td></td>
<td>1</td>
<td>-.452*</td>
<td></td>
</tr>
<tr>
<td>P. in life</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-.646*</td>
</tr>
<tr>
<td>Alienation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

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

*. Correlation is significant at the 0.05 level (2-tailed)
**H. The relationships between the 3D-WS, ASTI and the well-being scales:**

Table 14

**Correlations between the 3D-WS, ASTI, and well-being scales**

<table>
<thead>
<tr>
<th></th>
<th>cc_3D_WS</th>
<th>Self-transcendence</th>
<th>Life Satisfaction</th>
<th>Quality of life</th>
<th>Purpose in life</th>
<th>Alienation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D-WS</td>
<td>1</td>
<td>.516***</td>
<td>.716***</td>
<td>.607***</td>
<td>.678***</td>
<td>-.638***</td>
</tr>
<tr>
<td>Self-transcendence</td>
<td>1</td>
<td>.511***</td>
<td>.343*</td>
<td>.460***</td>
<td>-.454***</td>
<td></td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td></td>
<td>1</td>
<td>.432***</td>
<td>.580***</td>
<td>-.452***</td>
<td></td>
</tr>
<tr>
<td>Quality of life</td>
<td></td>
<td></td>
<td>1</td>
<td>-.646***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose in life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.402***</td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.05 level (2-tailed)**

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

Table 14 below shows the correlations between the 3D-WS, ASTI and the well-being scales. The results of the correlation coefficients (Pearson) showed that 14 out of 15 correlations were statistically significant and were greater or equal to \( r(44) = .343, p < .05 \), two-tailed. The results revealed that only alienation had a strong negative correlation with the 3D-WS, \( r(44) = -.638, p < .001 \), and self-transcendence, \( r(44) = -.454, p < .001 \), whereas the rest of the correlations were positively correlated with the 3D-WS and self-transcendence. Satisfaction with life was highly correlated with the 3D-WS, \( r(44) = .71, p < .001 \). The quality of life \( r(44) = .60, p < .001 \), self-transcendence \( r(44) = .51, p < .01 \), and purpose in life \( r(44) = .67, p < .01 \), were positively correlated with the 3D-WS.

The results suggested that when people achieve a higher level of wisdom they tend to have satisfaction and purpose in their lives; they achieve a higher quality of life; and their state
of self-transcendence increases. The results also suggested that a higher level of wisdom stops people to from becoming isolated and rather connects them to increase socialization.

H. The relationships between the 3D-WS, ASTI the sub-scale of the basic human values:

Table 15 shows the correlations between the 3D-WS, self-transcendence, and the basic human values. The results of the correlation coefficients (Pearson) showed that 8 out of 21 correlations were statistically significant and were greater or equal to $r(44) = .375, p < .05$, two-tailed. The results revealed that the 3D-WS was positively highly correlated with self-transcendence, $r(44) = -.516, p < .001$, and the values of openness to change, $r(44) = .524, p < .001$, and achievement, $r(44) = .375, p < .05$. The results suggested that when people are high in wisdom they also scored high in their values of openness to change and achievement.

Table 15

<table>
<thead>
<tr>
<th></th>
<th>3D-WS</th>
<th>Self-transcendence</th>
<th>Conservation</th>
<th>Openness</th>
<th>Transcendence</th>
<th>Achievement</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D-WS</td>
<td>1</td>
<td>.516**</td>
<td>-.113</td>
<td>.524**</td>
<td>.145</td>
<td>.375*</td>
<td>.240</td>
</tr>
<tr>
<td>Self-transcendence</td>
<td>1</td>
<td>.197</td>
<td>.440**</td>
<td>.139</td>
<td>.133*</td>
<td>.206</td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>1</td>
<td>-.109</td>
<td>.263</td>
<td>.171</td>
<td>-.278</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>1</td>
<td>.211</td>
<td>.646**</td>
<td>.634**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcendence</td>
<td>1</td>
<td>.146</td>
<td>.226</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>1</td>
<td>.437**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
**Summative Remarks:**

The various relationships between the measures provided us with greater understanding about how and in which directions these measures are associated with each other. The results revealed that personal identity was positively correlated with personal integrity, whereas social identity (combined) was highly positively correlated with social identity proper, collective and relational identities which was reflected in Tajfel and colleagues’ (1971) and Spear’s, (2011) notion of social identity. These correlations also found that wisdom is positively correlated with the satisfaction with life scale, purpose in life, and the quality of life inventory, but, negatively correlated with alienation.

These quantitative analyses have provided us with some descriptive aspects of personal identity. However, personal identity can be better understood through life stories.

Following McAdams & Pals’ (2006) model this study explored the personal traits of people with Asperger syndrome. The study also investigated the personal values of people with AS. Human values can be considered to be motivational forces for individuals’ dispositional traits. Wisdom can also be considered in relation to personal identity. Ardelt (2003) also studied wisdom as a disposition to integrate cognitive, reflective, and affective dimensions of personality. Understanding personal traits through questionnaires are one of the ways to investigate personal identity. However, personal identity can also be better understood through life narratives by asking people to describe various aspects of their lives (McAdams & pals, 2006; also see Bruner, 1986, 1987 & 1990; McAdams, 1993; Ricoeur, 1984 & 1992). In the next section, my analyses will explore life narratives.
3.7. Qualitative Analysis of life narratives and discussion of Wisdom:

Following McAdams & Pals’ (2006) guidelines to understand identity and wisdom of people with Asperger syndrome, this study also used an interview method. The participants were asked questions related to their identity and wisdom. The following qualitative analysis is divided into two sections: (1) understanding people’s identity through their life stories (narrative identity), and (2) understanding people’s wisdom.

Narrative Identity:

This study found eight themes in people’s life narratives. As described earlier, the eight themes identified in this study of people’s life narratives were grouped into two major themes: (A) the theme of Communion, and (B) the theme of personal agency. My analysis begins exploring the theme of communion, which is followed by the theme of personal agency.

A. The Theme of Communion:

Table 16

Frequency of the aspects of the theme of communion by groups

<table>
<thead>
<tr>
<th>Aspects of the Theme of Communion</th>
<th>Asperger Pakistan</th>
<th>Control Pakistan</th>
<th>Asperger Canada</th>
<th>Control Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help and care</td>
<td>29</td>
<td>28</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Meaningful relationship</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Contribution to society</td>
<td>7</td>
<td>13</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Social being</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Collective being</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Communion overall</td>
<td>53</td>
<td>58</td>
<td>28</td>
<td>45</td>
</tr>
</tbody>
</table>
The study found 184 references related to the theme of communion. Table 16 above shows the number of references of the various aspects related to the theme of communion by the four groups.

**COMMUNION GENERAL:** Table 17 shows the means and standard deviations of the theme of communion by the groups. Appendix C shows the examples of the theme of communion in detail. The study found 111 references to the theme of communion for the Pakistani sample (Asperger and control groups), whereas the study found 73 references within the Canadian sample (Asperger and control groups).

An independent-samples $t$ test was conducted to evaluate the hypothesis that the theme of communion was similar in the participants’ life stories. The results indicated a higher tendency between the two Asperger groups, $t(19.41) = 1.909, p = .07$, two-tailed, $d = 0.84$: The Pakistani Asperger group had a higher profile of communion ($M = 0.88, SD = 0.58$) compared to the Canadian Asperger group ($M = 0.49, SD = 0.39$).

The results also showed country differences for the theme of communion: People living in Pakistan (combined group) have higher profiles of communion $t(43.02) = 2.10, p = .04$, two-tailed, $d = 0.61$, compared to those of people living in Canada (combined group).

The results indicated that the theme of communion did not differ between the Asperger and control groups. The results also showed that both of the control groups had similar profiles on the theme of communion.
Overall results suggested that the theme of communion differed between the two countries of origin in people’s life stories. The Canadian participants (combined) valued communion less than the Pakistani participants (combined). However, this low value of communion for the Canadian participants was due to a lower score for the Canadian Asperger group. The mean scores of communion did not differ between the two control groups.

Figure 13

Estimated marginal means for the theme of communion by the group and country

Table 17

Mean scores and standard deviations for the theme of communion and its components.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Asperger Pakistan</th>
<th>Control Pakistan</th>
<th>Asperger Canada</th>
<th>Control Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communion overall</td>
<td>0.88 (0.58)</td>
<td>0.96 (0.38)</td>
<td>0.49 (0.39)</td>
<td>0.81 (0.30)</td>
</tr>
<tr>
<td>Help &amp; care</td>
<td>2.41 (2.42)</td>
<td>2.33 (1.61)</td>
<td>0.72 (0.46)</td>
<td>1.00 (0.63)</td>
</tr>
<tr>
<td>Meaningful Relationship</td>
<td>0.83 (0.71)</td>
<td>0.75 (0.62)</td>
<td>0.72 (1.00)</td>
<td>1.45 (0.52)</td>
</tr>
<tr>
<td>Social being</td>
<td>0.25 (0.45)</td>
<td>0.41 (0.51)</td>
<td>0.18 (0.40)</td>
<td>0.45 (0.52)</td>
</tr>
<tr>
<td>Collective being</td>
<td>0.33 (0.49)</td>
<td>0.25 (0.45)</td>
<td>0.09 (0.30)</td>
<td>0.27 (0.46)</td>
</tr>
<tr>
<td>Contribution to society</td>
<td>0.58 (0.79)</td>
<td>1.08 (0.51)</td>
<td>0.72 (0.64)</td>
<td>0.90 (0.53)</td>
</tr>
</tbody>
</table>
COMMUNION: IN-DEPTH ANALYSIS: Further analysis of the various aspects of the theme of communion showed that only one aspect out of five, the theme of help and care, was significantly lower in the Canadian sample (combined), \( t(26.83) = 3.52, p = .002, \) two-tailed. This low score on the theme of help and care was also impacted significantly in the overall mean scores on the theme of communion between the two countries.

I will now turn to explore the five sub-themes of the theme of communion. My analysis begins with the sub-theme of help and care.

**A.1. Help and care:**

Following kinds of statements were coded as help and care:

- I like to help people, I make arts and crafts, I also make boxes, piñatas, and designs. (Interview 7, Asperger Pakistan)
- I used to help my mom out when she needed it after my dad died. (Interview 26, Asperger Canada)

An independent-samples \( t \) test indicated that the theme of help and care was significantly lower for the Canadian Asperger participants compared to the Pakistani Asperger participants, \( t(11.88) = 2.362, p = .03, \) two-tailed. Results also found that country of origin produced different results for the theme of help and care, \( t(26.83) = 3.52, p = .002, \) two tailed: the Canadian participants (combined) scored less on the theme of help and care as compared to the
Pakistani participants (combined). Results also indicated that there were no differences between the Asperger and control groups on the theme of help and care.

Figure 14

Estimated marginal means for the theme of help and care by the group and country

A few examples of the theme of help and care are as follows:

- Well, I think a long time ago, perhaps when I was eleven or twelve, my father was sick for a very long time and he couldn’t walk. At that time, the age difference between my sister and I was eight years, so I had to take care of my family at a very young age (Interview 1, Asperger Pakistan).

- I am involved in social work activities, such as helping with the flood relief. In 2010 we had flood relief activities. Management activities were in everybody’s hands and everybody was thinking that they were working well even though the relief work was
not going so good. So, I went to my supervisor and requested that he pay attention to that issue (Interview 14, control Pakistan).

- My goals for family and friends are just to get along with them and to look after them, care for them and interact with them (Interview 25, Asperger Canada).
- In our religion we like to give back a lot. It is called Sava. We go to the temple and we help serve food to the public and we are told it cleans our sins away and I will continue to do that (Interview 44, control Canada).

Concluding Remarks:

The study found significant differences between the two countries of origin and between the two Asperger groups in valuing help and care. Both the Pakistani groups showed significantly higher numbers of expressions related to help and care. The Pakistani Asperger groups included both inclination towards and past memories related to the theme of help and care in their life narratives. Whereas, the Canadian Asperger group mostly included their past experiences related to help and care in their narratives.

A.2. Meaningful relationship:

The following kinds of statements were coded as meaningful relationships:

- My family goals are that my daughter gets a good education and grades. My mom and dad live with me and my wife will live with me forever. I hope that
when my daughter grows up she will study abroad. (Interview 4, Asperger Pakistan).

- [My goal is to] Look for a girlfriend and then get married and start a family (Interview 34, Asperger Canada).

An independent-samples t test indicated that the theme of meaningful relationships did not differ significantly between the two Asperger groups. The results also indicated that there were no significant differences between the Asperger and control groups. However, a series of three independent-sample t tests indicated that the Canadian control group was significantly higher in valuing meaningful relationships compared to the Pakistani control group, \( t(20.85) = -2.951, p = .008, \) two-tailed; the Canadian Asperger group, \( t(14.99) = -2.123, p = .05, \) two-tailed; and also the Pakistani Asperger group, \( t(20.02) = -2.387, p = .02, \) two-tailed.

The results suggested that there were neither country differences, nor differences between the Asperger groups related to the theme of meaningful relationships. However, the Canadian control group was substantially higher in valuing meaningful relationships compared to the rest of the groups.

A few examples of the theme of meaningful relationships are as follows:

- I want to get married one day. Obviously everyone has to. It’s not a choice of mine but in this social context you have to understand that society will never accept you working on the greater plan, you see sometimes we have to function well in society and thereby we have to do things that all human beings do. You have to do it; it is a simple mathematical check. So yes I have to, I don’t have an option. Or else people will not take
me as a credible person simply because I am changing the world. (Interview 1, Asperger Pakistan).

- The goal for my family is to fulfill all the basic requirements of life. The goal for my family is to raise my kids in a way that they learn many different languages. Kids are the key elements of one’s life (Interview 13, control Pakistan).

- I do want to start a family but I am trying to find the right person first (Interview 33, Asperger Canada).

Concluding Remarks:

The study found neither country differences, nor differences between the two Asperger groups for valuing meaningful relationships in their lives. However, the Canadian control group differed from all the other groups in this study. The Canadian control group valued meaningful relationships significantly higher than any other group.

The differences in the expressions related to the theme of meaningful relationships were also noted in the various groups. The Pakistani Asperger group equally regarded family and intimate relationships, whereas, the Canadian Asperger group valued intimate relationships more than family relationships. The Pakistani control group did not show any inclination towards intimate relationships; they all expressed their regard for family relationships. In a similar manner to the Pakistani control group, the Canadian group was very much inclined towards family relationships rather than intimate relationships.
A.3. Social being:

An independent-samples t test indicated that the theme of social being did not differ significantly between the two Asperger groups. The results also indicated that the theme of social being did not differ between the Asperger and control groups. The results also showed that the mean scores of social being were similar between the two countries.

A few examples of the theme of social being are as follows:

- I am a social person ... I want to be known for all aspects of myself and my personal self, my work ethic and my work and even my sociability and my professionalism (Interview 5, Asperger Pakistan).
- Among friends my identity is that of an enthusiastic and active person who tries to support other people in their time of need (Interview 15, control Pakistan).
- I can care for family and friends ... and a person that is likeable and lovable (Interview 35, Asperger Canada).
- I am a responsible person who is caring and trustworthy. I believe that I am a stable person whose actions and reactions do not cause many arguments, I would say that is mostly it. I have my social group. (Interview 46, control Canada).

Concluding Remarks:

The number of references related to the theme of social being was higher in both the control groups compared to both of the Asperger groups. However, these higher numbers of expressions were not enough to produce a statistically significant effect in this domain.
There were no substantial group differences in regards to expressions related to the theme of social being. Each group talked about their social characteristics.

**A.4. Collective being:**

An independent-samples $t$ test indicated that the theme collective being did not differ significantly between the two Asperger groups; between the Asperger and general populations; or between the two countries.

Overall results suggested that the value of collective being was regarded equally between all of the groups.

A few examples of the theme of collective being are as follows:

- I am a South Asian, Pakistani man and that is my identity (Interview 2, Asperger Pakistan).
- I am of the Memon caste (Interview 12, Asperger Pakistan).
- My identity is to follow the rules of Islam within the scope possible. Being a Muslim we have to follow Islamic rules and regulations, being a Pakistani we have to live in a certain way (Interview 13, control Pakistan).
- My personal interests are military and politics and education and stuff like that (Interview 32, Asperger Canada).
• I believe my ethnic background and that my people are known to be very proud [are significant aspects of my identity]. I am very proud to be Croatian (Interview 36, control Canada).

Concluding Remarks:

Statistical results could not produce any significant differences between the two countries or between the two groups diagnosed with Asperger syndrome. However, the number of references made related to the theme of collective being was higher in the Pakistani groups (combined) compared to the Canadian groups (combined). The results also found that the mean score of the theme of collective being was higher in the Pakistani Asperger group compared to the Canadian Asperger group. It was also noted that the Pakistani Asperger group included the importance to religion, country, and caste in their life stories, whereas only one Canadian person with AS showed his interest in the military. Both of the control groups were identical on the measure of collective being, their life stories showed the importance of both country and religion in their lives.

A.5. Contribution to society:

An independent-samples t test showed that the theme of contribution to society was similar in all four of the groups. Overall results suggested that the theme of contribution to society was regarded equally between Canadian and Pakistani participants and also between the two Asperger groups.
A few examples chosen within the theme of contribution to society are as follows:

- I want to give my society an understanding of politics and I would also like to motivate them to help each other. I also would like to educate them about how to save our society from corrupted politicians, and to avoid the corruption of society. This is possible through casting a vote for the person who has good plans to run the society, and the person should not be corrupt (Interview 11, Asperger Pakistan).

- I want to change only one thing and that is to introduce a medical insurance system in Pakistan, not like in the US, but like the NHS in the UK. The one thing that irritates me a lot is that when a patient comes to us and needs an MRI examination then we have to think carefully before letting patients know that they need an MRI exam. Because these tests are expensive and patients have to pay, this is very difficult for some of the patients. Similarly, sometimes patients need medicine and if it is expensive then we have to think carefully about whether or not we should ask patients to buy the medicine ... if an insurance system is introduced in Pakistan then we will not worry about whether patients can afford medical examinations or drugs ... so, that is why I would like to introduce this medical insurance system in Pakistan (Interview 22, control Pakistan).

- I do charity work and I try to give the most to society by doing volunteer work. I work with the Arthritis Society and Humber Region Hospital (Interview 35, Asperger Canada).

- I want to help people in society and one of my goals is to go to Africa and build a school. The trip is very expensive, a couple thousand dollars, so maybe when I have my job then I will go and do that (Interview 38, control Canada).
Concluding Remarks:

The numbers of references to contributions to society were higher in both of the control groups in their life stories. However, the higher numbers of expressions were not enough to produce any statistically significant differences between the groups. The study also noted that in all of the groups’ life narratives, participants expressed plans to contribute to society in the future, and did not refer to their past experiences in this domain.

Summative remarks for the overall theme of communion:

Results showed that the Canadian participants (combined group) valued communion less than the Pakistani participants (combined). However, the in-depth analyses found that it was only in the sub-group of the help and care of communion that impacted the overall results of the theme of communion between the two countries. Both the Canadian Asperger and the control groups showed a little inclination towards the theme of help and care. However, there were no significant statistical differences noted in any other sub-themes within the value of communion, neither between the two countries, nor between the two Asperger groups. The number of references showed that the sub-theme of meaningful relationships of communion was higher in the Canadian participants (combined), but this higher mean score did not provide any significant statistical differences. It was also noted that the Canadian groups (both groups) were inclined mostly towards intimate relationships. Whereas, the Pakistani control group was only inclined towards family relationships and the Pakistani Asperger group was equally inclined towards intimate and familial relationships.
There was one difference noted in the life narratives between the Asperger and control groups: the two Asperger groups expressed their desire for togetherness (communion) in the future rather than referring to their past memories in their life stories. Whereas, the two control groups mostly expressed their practical experiences and also recalled their past memories related to togetherness in their life stories.

B. The personal theme of Agency:

This study considers people's life stories that illustrate their personal being within the theme of agency. Appendix D shows detailed examples of the personal theme of agency.

Table 18

*Frequency of the aspects of the personal theme of agency by groups*

<table>
<thead>
<tr>
<th>Aspects of the Theme of agency</th>
<th>Asperger Pakistan</th>
<th>Control Pakistan</th>
<th>Asperger Canada</th>
<th>Control Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement/accomplishment</td>
<td>21</td>
<td>9</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Personal development</td>
<td>25</td>
<td>27</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Individuality</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Agency overall</td>
<td>54</td>
<td>47</td>
<td>42</td>
<td>34</td>
</tr>
</tbody>
</table>

**PERSONAL AGENCY: GENERAL:** An independent-samples *t* test indicated that the theme of personal agency did not differ significantly between the two Asperger groups, or between the two countries. However, the results indicated that the Asperger groups had the tendency to express an agentic theme in their life narratives, \( t(43.18) = 1.678, p = .10 \), two tailed, \( d = .49 \)
compared to the control groups. Overall, the life narratives of people with AS suggested that they were more inclined to individuality rather than to togetherness.

**Figure 15**

*Estimated marginal means for the theme of personal agency by group and country*

![Estimated Marginal Means of Agency](image)

**Table 19**

*Mean scores and standard deviations for the theme of personal agency and its components.*

<table>
<thead>
<tr>
<th>Theme and aspects of agency</th>
<th>Asperger Pakistan</th>
<th>Control Pakistan</th>
<th>Asperger Canada</th>
<th>Control Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency overall</td>
<td>1.50 (0.55)</td>
<td>1.27 (0.69)</td>
<td>1.36 (0.48)</td>
<td>1.03 (1.03)</td>
</tr>
<tr>
<td>Achievement/accomplishment</td>
<td>1.75 (1.05)</td>
<td>0.75 (0.75)</td>
<td>1.36 (1.20)</td>
<td>0.90 (0.70)</td>
</tr>
<tr>
<td>Personal development</td>
<td>2.08 (1.50)</td>
<td>2.25 (1.65)</td>
<td>1.81 (0.75)</td>
<td>1.45 (0.93)</td>
</tr>
<tr>
<td>Individuality</td>
<td>0.66 (0.49)</td>
<td>0.83 (0.57)</td>
<td>0.90 (0.30)</td>
<td>0.72 (0.46)</td>
</tr>
</tbody>
</table>

**PERSONAL AGENCY: IN DEPTH ANALYSIS.** This study did not find any group differences in the themes of personal development and individuality. However, the results indicated that the theme of achievements/accomplishments was significantly higher in people with AS compared...
to the control groups. Detailed analyses of the various aspects of the theme of personal agency will be discussed in the subsequent section

B.1. Achievement/accomplishment:

An independent-samples t test indicated that the aspect of achievement/accomplishment was similar in both of the Asperger groups. The results did not find any country differences on the theme of achievement/accomplishment. However, the results indicated that the aspect of achievement/accomplishment was significantly higher in the Asperger groups compared to the control groups, \( t(37.41) = 2.66, p = .01, \) two-tailed.

Figure 16

*Estimated marginal means for the aspect of achievement/accomplishment by the groups and countries*

Results also showed that the theme of achievements/accomplishments was significantly higher in the Pakistani Asperger group compared to the Pakistani control group, \( t(19.90) = \)
2.671, \( p = .01 \), two-tailed, but the results did not find any significant differences between the Canadian Asperger group and the Canadian control groups. Figure 16 above shows the estimated marginal means for the aspect of achievement / accomplishment by group and country.

A few examples of the theme coded within achievement/accomplishment are as follows:

- I used to drive in places that were empty, with barely any traffic and no signals, just on a smooth road I would go back and forth. That is where I first started driving. Then I started driving on the highway, which is about an hour drive. After that I started driving in the city. After one year of driving I was confident enough that I could drive anywhere at any time (Interview 2, Asperger Pakistan).

- Soon after, I moved to the city of Karachi. At that time I was with the company of students who were not so good and I was not taking any interest in my studies, but I felt guilty so I started taking interest in my studies and after that I developed good study skills (Interview 19, control Pakistan).

- I have accomplished a lot in the last couple of years. The last few years that I have been in college have been especially challenging (Interview 32, Asperger Canada).

- My job was a success and I ended up having my first girlfriend (Interview 45, control Canada).

**Concluding Remarks:**

Both of the countries regarded achievement/accomplishments in similar ways. However, people with AS demonstrated great pride in their achievements/accomplishments compared to
those in the control groups in both counties. The theme of achievements/accomplishments was noted in various aspects of people’s life stories including education, work, family, and sports for all the groups. It was also noted that the Pakistani Asperger group mentioned job and sports related achievements/accomplishment stories more frequently than any other group. Conclusively, the Asperger groups in both countries, but especially those from the Pakistan sample valued the achievements/accomplishments that emerged from their life narratives.

**B.2. Personal development:**

An independent-samples t test showed that the aspect of personal development was similar in both of the Asperger groups. Results also indicated that the theme of personal development was similar between the Asperger and control groups. The study also showed that the mean scores on the theme of personal development did not differ between the two countries. The overall results suggested that all of the groups regarded the theme of personal development similarly.

A few examples of the theme of personal development are as follows:

- I believe what happened is that in the last four years since I found out about Asperger syndrome everything has changed completely, so my current personal growth is related to this condition. My current understanding is that autism and Asperger syndrome are a part of human evolution. A time will come when all of humanity will become as I am. Therefore the people in the next four hundred years, those who will achieve great things, great successes and winners of noble prizes will all have Asperger syndrome.
There is diagnostic, medical, and scientific evidence for this claim. Actual winners have come forward and said ‘yes’ we have Asperger syndrome. Thereby my understanding is that the people who have developed and have the knowledge know that they have Asperger syndrome. We are in a way leaders and pioneers and beacons of life. A time will come when the entire human species will become like us, this is simply an evolutionary process (Interview 1, Asperger Pakistan).

- Negative experiences and memories also help us grow and learn in our lives. This depends on the person, whether he grows in the positive direction or takes a negative route in life. My worst memory occurred on the 13th of January, 2005. My father retired on that day and my results from my first year of medical school came out. So, that was the happiest and the worst day of my life. Whoever I am today I think it is because of that day. From that day I learned that I should be prepared for the worst in life. And that one should be prepared for unexpected situations in life. Meeting with the challenges of life gives you a lot of strength and courage. Actually, my father did not voluntarily retire on that day. He was the victim of some sort of downsizing at the bank. My father was an honest person throughout in his life; he audited bank accounts very nicely and professionally. His professional life was very clean, he never had any corruption issues, but due to downsizing he lost his job. This incident taught me a lot and I learned that if you do well to one person or an organization, never expect that other will do same to you. So, do not expect anything from anybody. This is a trait one should develop in their personality and this is what I learned from that day. I also learned that one should try to be autonomous and an autonomous man can make decisions and is more capable. I
think I am going towards a direction where I will be an autonomous person. I will be a consultant in the future and work on my own. Nobody can hire or fire me (Interview 22, control Pakistan).

- Learning about Asperger syndrome allowed me to change the bad things about me such as not being able to speak to a group of people and learning slower than others about new things. I overcame some of these issues with the help of my mom taking me to places like Kerry's place and taking me to public places to make me more social and introducing me to experiences like fire safety, and how to be on a social network (Interview 28, Asperger Canada).

- High school has been a great learning experience for me, I have become a leader, a role model and a lot of people look up to me and this is my passion (Interview 38, control Canada).

**Concluding remarks:**

Overall the mean scores of the theme of personal development were similar between the groups and also between the two countries. However, the number of references for the theme of personal development was higher in both of the Pakistani groups compared to both of the Canadian groups, but these high means were not enough to produce significant statistical differences. The study did not find any differences in the expressions used by participants either. All the groups discussed their personal development similarly. They all equally included their life experiences and their desires related to their personal development in their life narratives.
B.3. Individuality:

An independent-samples t test indicated that the aspect of individuality did not differ significantly between the two Asperger groups. The results also indicated that the two countries did not differ on the theme of individuality. The results also showed that the mean scores of the Asperger and the control groups were similar on the theme of individuality.

A few examples of the theme of individuality are as follows:

- I am a much focused person. I concentrate when I am doing something I like to do without talking to any other person. Also my identity is to explore different technologies. I love to explore different technologies (Interview 9, Asperger Pakistan).

- I am a good student and I consider myself as someone with a sharp memory. I love to be involved sports and I am a good sportsman (Interview 24, control Pakistan).

- My manners include being loyal and respectful, punctual and empathic—stuff like that makes me the way I am (Interview 28, Asperger Canada).

- I would like to think that my characteristics include being kind, honest, and hardworking (Interview 46, control Canada).

Concluding Remarks:

The study did not find any significant statistical differences between the two countries or between the groups. Their expressions about their individuality were very similar. All of the groups talked about their personal traits such as honesty, kindness and work-ethic in their life narratives.
Summative remarks for overall theme of agency:

The preceding analyses found that the Asperger groups were higher in their agentic expressions compared to the control groups. However, this higher number of expressions from the Asperger groups did not produce a statistically significant effect. Both of the Asperger groups expressed many agentic expressions in the various sub-groups of the theme of personal agency compared to those expressions from the people in the control group. Agentic expressions of both of the Asperger groups were comparatively higher than the both of the control groups in the themes of achievements/accomplishments and personal development.

The value of achievements/accomplishments was expressed in the various fields including education, work, family, and sports in the life narratives of participants from all of the groups. It was also noted that the Pakistani Asperger group mentioned job and sports related expressions in the theme of achievements/accomplishment more frequently than any other group.

The study did not find any differences in the expressions of personal development between the groups. All of the participants included their desires related to their personal development in their life experiences. Their expressions about their individuality were also very similar. All of the groups expressed their individual characteristics.

Personal traits, values, and life narratives define a person as a whole (McAdams & Pals, 2006). However, wisdom is also required to lead to the best possible quality of life. Wisdom can also be considered part of personal identity. In the next section, I will analyze wisdom in people’s life narratives.
3.8. **Analysis of understanding of Wisdom:**

This study identified five themes related to wisdom in participants’ expressions when replying to various queries of wisdom. Chart 1 depicts the themes related to understandings of wisdom expressed by the groups.

*Chart 1*

*Themes of wisdom by groups*

![Themes of wisdom chart](chart.png)
The study found that the mean scores of the cognitive, reflective, affective, and teaching and advice themes of wisdom were similar between the two countries, but the theme of self-transcendence differed significantly. The study also found that the mean scores of all five themes of wisdom were similar between the two Asperger groups. However, the results also found that 2 out of 5 themes differed significantly between the Asperger and control groups; these were the themes of self-transcendence and teaching and advice. Next I will explore the differences between these two themes of wisdom

**SELF-TRANSCENDENCE:** An independent-samples \( t \) test indicated that the theme of self-transcendence did not differ significantly between the two Asperger groups. However, the results also indicated that the two country (combined group) differed, \( t(32.41) = 2.257, p = .03 \), two-tailed. The Pakistani sample (combined) was higher compared to the Canadian sample (combined) in their expressions of self-transcendence when replying to queries related to wisdom.
An independent-samples *t* test also indicated that the profiles of the control groups were higher in their expressions of self-transcendence compared to those of people with AS, \( t(29.39) = 2.849, p = .008 \), two-tailed.

An independent-samples *t* test also indicated that typically developed people living in Pakistan scored higher in their expressions of self-transcendence when replying to wisdom related queries than typically developed people living in Canada, \( t(15.32) = 2.647, p = .01 \), two-tailed.

Figure 17

*Estimated marginal means for the theme of self-transcendence by group and country*

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**TEACHING AND ADVICE:** The theme of teaching and advice differed between the Asperger and control groups; people with AS scored higher on this value compared to those in the control groups, \( t(32.45) = 1.999, p = .05 \) two-tailed, \( d = .59 \). The results also indicated that
the theme of teaching and advice did not differ between the two countries or between the two Asperger groups.

Previous analyses explored the themes in people’s life narratives related to their understanding of wisdom. The above general analyses will give more meaning when analyzing how people relate these themes conceptually and practically in their lives. This study asked people who they considered to be the wisest person in history and the wisest person among their acquaintances. The study also asked about the wisest actions in people’s practical lives related to their conception of wisdom. The next analyses will explore these questions in relation to the themes explored above. I begin by exploring the wisest exemplars, followed by exploring the wisest acquaintances, wisdom in personal lives, and the concept of wisdom generally.

A. EXEMPLARS: The wisest people in history:

GENERAL FINDINGS: The study found five bases for the nominations of the wisest person in history: (1) religion, (2) science, (3) politics, (4) writing, and (5) human rights. Nineteen nominations of the wisest people in history were reported in this study from the Pakistani populations (people from the Asperger and control groups). Two typically developed participants and one participant with AS from Pakistani group considered no one to be wise.

A total of sixteen out of twenty-four people from Pakistan (including both Asperger and typically developed participants) named religious people as the wisest in history. Among the sample of Pakistani populations 12 people nominated Prophet Muhammad, three nominated
Quaid-e-Azam (the founder of Pakistan), two nominated Hazart Umar (uncle of prophet Muhammad), and Rais Amrohi (a writer), Dr. Abdul Qadeer (a Pakistani nuclear scientist), Newton, Obama, Jesus, Shri Raam (religious figure in Hindu religion), and Prince Amin Aga Khan (religious figure in Aga Khani religion) all received one nomination.

Chart 2

The wisest person in history nominations by participant group

Twenty nominations for the wisest people in history were also reported in this study from the Canadian population (people from the Asperger and control groups). Two participants from the Canadian Asperger group did not consider any one to be wise. Among the Canadian population four people nominated Albert Einstein, three nominated Jesus, two nominated Newton, and one each nominated Steve Jobs, Alexander Graham Bell, Di Vinci, Prophet...
Muhammad, Pope John Paul 2\textsuperscript{nd}, Miyamoto Musashi (writer), Shakespeare, Gandhi, John F Kennedy, Martin Luther King, and Mother Theresa. Bar chart 2 above shows the nominations for the wisest people in history by participant groups.

**EXEMPLARS: DIFFERENCES BETWEEN THE TWO ASPERGER GROUPS:** The study did not find any differences for the nomination of the wisest person in history on the basis of religion, politics, human rights, or literature. However, this study found that the Canadian Asperger group was significantly more likely to nominate a scientist as the wisest person in history compared to the Pakistani Asperger group, $\chi^2 (1, N = 23) = 5.789, p = .01$. The Canadian Asperger group’s nominations for the wisest people were also connected to the traits of the wisest people, and the trait of cognition in wise people was the decisive factor for most of the participants in their choice of nominee.

**EXEMPLARS: DIFFERENCES BETWEEN CANADA AND PAKISTAN:** This study found two major differences for the nomination of the wisest person in history between the two counties. The results of a Pearson Chi square test indicated that the Pakistani participants (including both Asperger and control groups) mainly nominated a religious figure as the wisest in history compared to the Canadian participants, $\chi^2 (1, N = 46) = 8.932, p = .01$. The Pakistani groups’ (combined) nominations were also connected to the attributes of the wisest person and the trait of self-transcendence in wise people was the decisive factor for most of the Pakistani sample in their choice of nominee. The second difference was that the Canadian participants (combined group) prominently nominated a scientist as the wisest in history compared to the Pakistani participants (combined group), $\chi^2 (1, N = 46) = 6.695, p = .01$. Canadians’ nominations
were connected to the attributes of the wisest person and the trait of cognition in wise people was the decisive factor for most of the Canadian sample in their choice of nominee.

**EXEMPLARS: DIFFERENCES BETWEEN THE ASPERGER AND CONTROL GROUPS:** The study did not find any differences between the Asperger and control groups for their nominations of the wisest person in history on the basis of religion, science, politics, literature, and human rights.

**A FEW EXAMPLES OF THE WISEST PERSON IN HISTORY:**

1. **PAKISTANI ASPERGER GROUP VS. CANADIAN ASPERGER GROUP:**
   - Hazrat Umer [Prophet Muhammad’s uncle] was a wise person because of the justice he provided to Muslims and non-Muslims and he spread Islam (Asperger Pakistan, Interview 12).
   - I think Isaac Newton was the wisest person in history because he came up with three laws that are being used in everyday life. No matter how old those principles are, they still apply to everyday life (Asperger Pakistan, Interview 2).
   - If we’re talking about wisdom being wise in terms of knowledge and intelligence, scholars such as Isaac Newton or Einstein are wise (Asperger Canada, Interview 25).
   - Einstein was the wisest because he came up with the theory of relativity (Asperger Canada, Interview 32).
2. EXAMPLES: ASPERGER GROUPS VS. CONTROL GROUPS:

- I think prince Amin Aga Khan [brother of His Highness prince Karim Aga Khan the spiritual leader of Ismaili Muslims] was the wisest because he helped the world. He educated the world. He made a hospital for patients. He made schools and Masjids [Mosques] (Interview 4, Asperger Pakistan).

- Jesus was the wisest, I don't know what he did, people just saw him as a good person because he treated people nicely and he was just himself. He expressed himself to people. He did so many good things for people and he taught people things, he made laws for people. He got messages for people. He went to take bread and he split it in half and shared it with people (Interview 33, Asperger Canada).

- The Holy Prophet’s life was full of wisdom. His strategy to induce positive behaviours to his followers was great. He always wanted others to model his behaviours as his behaviour was directed through God. So instead of giving orders he conveyed that his actions were God’s commands, so people followed his behaviours (Control Pakistan, Interview 15).

- I look up to Albert Einstein for changing modern science way before the technology we have now, he knew everything. He started a pattern and started from scratch. He really contributed a lot of knowledge towards modern science (Control Canada, Interview 41).
B. EXEMPLAR: The wisest acquaintances:

GENERAL FINDINGS: Twenty-four nominations of the wisest people among acquaintances were reported in this study from the Pakistani samples (includes people from the Asperger and control groups). One participant from the Pakistani Asperger group did not nominate any wise person from among his acquaintances. One participant from the Pakistani control group nominated two wise people from among his acquaintances. Among the Pakistani groups (combined) 11 people nominated family members (this includes father, mother, brother, and sister), five nominated extended family members (this includes grandfather, grandmother, and uncle), four nominated friends, and four nominated non-family members (this includes teachers and social workers).

The Pakistani Asperger group nominated five family members, four friends, and two extended family members as the wisest among their acquaintances. One participant did not nominate any wise person from among his acquaintances.

Twenty nominations of the wisest people among acquaintances were also reported in this study from the Canadian samples (people from Asperger and control group). Two participants from the Canadian Asperger group did not nominate any wise people from their acquaintances. Among the Canadian samples (combined) 14 people nominated family members, three nominated friends, two nominated non-family members, and one nominated an extended family member (grandfather).

The Canadian Asperger group nominated five family members, two friends, one extended family member, and one non-family member as the wisest among their
acquaintances. One participant did not nominate any wise person from among his acquaintances. Chart 4 shows the wisest acquaintance by categories and groups.

Chart 3

*The wisest acquaintance by categories and by groups*

**The wisest acquaintance**

<table>
<thead>
<tr>
<th></th>
<th>Control Pakistan</th>
<th>Control Canada</th>
<th>Asperger Pakistan</th>
<th>Asperger Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Extended family</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Friend</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Non-family</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**THE WISEST ACQUAINTANCES: BETWEEN THE ASPERGER GROUPS:** This study did not find any differences in nominating the wisest acquaintances between the two Asperger groups in four identified categories, (1) family, (2) extended family, (3) friends, and (4) non-family members.

**THE WISEST ACQUAINTANCES: BETWEEN THE ASPERGER AND CONTROL GROUPS:** The results of a Pearson Chi square test indicated that the Asperger groups substantially nominated friends as the wisest among their acquaintances compared to those people in the control groups, $\chi^2(1, N = 46) = 4.212, p = .04$. The results also showed a higher tendency for the
control groups to nominate a non-family member as the wisest acquaintance compared to the Asperger groups, $\chi^2(1, N = 46) = 3.067, p = .08$. The results did not show any differences between the Asperger and control groups for nominating family members and extended family members as their wisest acquaintance.

THE WISEST ACQUAINTANCES: BETWEEN THE TWO COUNTRIES: The results did not find any differences between the two countries for nominating a family member, friend, and non-family member as their wisest acquaintance. However, the results found that the Pakistani participants (combined group) had a higher tendency to nominate extended family members as their wisest acquaintance, $\chi^2(1, N = 46) = 2.685, p = .10$.

The results above showed that there were no statistical differences between the two Asperger groups in nominating their wisest acquaintance. However, their expressions vary as the Canadian Asperger group was more expressive than the Pakistani Asperger group, see following examples:

- The wisest people in my life are my parents because I always look up to them ... They brought us up well and they guided me on every step in my life, because of them, I Insha Allah [if Allah wishes] will be one very successful man in our generation because of my parents. I owe it all to them (Interview 5, Asperger Pakistan).

- My brother is wise whenever something new comes out in the market he is the first one to know about it. He knows a lot about the things around him and how many things function (Asperger Pakistan, Interview 8).
• My grandfather is the wisest ... well one he has lived over a century, two he has been married for 89 years, three he has had great experiences at all time. His wife is 110 and he is 114. The man was a soldier for a living and at all points in his life when he had an experience he would share it with family so that they could all grow and gain wisdom from his experiences, so that when he passes his wisdom and it is not lost. He has invested in what he has known, learned, and shared it with the next generation bit by bit rather than trying to pour it in at the last moment. I think this is wisdom because it's like investing 50 cents every week and so the investment grows gradually (Asperger Canada, Interview 29).

NOTE: As stated earlier, there were no apparent differences between the two Asperger groups on the basis of their nomination in the five identified categories for their wisest acquaintance. However, below is an atypical statement from a Canadian participant with AS. It is also important to understand that the example below does not represent the Asperger population in Canada. This is just the statement of one participant.

• My girlfriend is wise ... I think because when she was 16 she was thinking not straight and she did a lot of that bad stuff like lying, robbing, bringing weapons to school and stuff like that. She has been in prison a few times with a bad record and now she is trying to re think the stuff she has done and she wants to go on the right path. So, I see this is what she did in her past and now she is trying to re live it and she wants to leave the past behind her and live on and move on and do good things (Asperger Canada, interview 33).
EXAMPLES: WISEST ACQUAINTANCES: ASPERGER VS. GENERAL PEOPLE:

The following examples show the various statements of people with AS and people from the control groups.

• The wisest person is my friend X. If you tell him to do something he will do it right away ... He knows how to do almost everything you ask ... if he comes across a difficult situation he deals with it by himself (Asperger Pakistan, Interview 4).

• The wisest person in my life would be my own mother ... The reason why I choose her is because she has taught me a lot of things with her own experiences. Some of the things that she told me helped me to get through a lot of problems. For example, she was one of the people that I could come to in a tough situation when my friend died she has shown her care she has helped many others ... when my friend died whenever I needed to talk to her about my friend's passing away she would sit down listen to what I had to say and she would comfort me with her words (Asperger Canada, Interview 34).

• A wise person for me is my elder brother ... he is a source of inspiration for me, and I admire him for his management of uncertain and difficult situations in a very calm way (Control Pakistan, Interview 22).

• My sister is wise because she is three years older than me and she is in university, she studies very diligently, and never gets distracted ... When I was about six or seven it was one of my relationships with my friends which had gone bad and my sister came up to me and advised me and she told me to tell the teacher, I did and the teacher talked to him and he apologized and it was better because if I didn't do it he would have kept on
insulting me until I was very mentally hurt ... a wise person often gives advice and that's what she did, it doesn't have to be very smart like a mathematical equation but something that helps me in a difficult situation (Interview 40, control Canada).

**Summative Remarks:**

Three distinctions were identified among the four groups for nominating the wisest acquaintance. These were: (1) The Asperger groups significantly nominated a friend as the wisest acquaintance compared to the control groups, (2) the control groups had a higher tendency to nominate non-family members compared to the Asperger groups, and (3) the Pakistani samples (combined) had a higher tendency to nominate extended family members as the wisest compared to the Canadian samples (combined).

The Pakistani Asperger group gave high consideration to the cognitive characteristics to nominate the wisest acquaintance compared to the Canadian Asperger group. The other characteristics of the wisest acquaintance such as affect, reflect, and teaching and advice were equally considered by both of the Asperger groups. The characteristic of self-transcendence was only considered by the Pakistani control group to nominate the wisest acquaintance.

**C. Wisest actions:**

**GENERAL FINDINGS:** The study found three themes for the wisest personal action: (1) cognitive, (2) affective, and (3) teaching and advice.
I will analyze the wisest action or approach of participants’ lives with reference to these themes. Chart 4 below shows the frequency of participants’ expressions of the wisest actions by groups.

Chart 4

*The wisest actions by categories and by groups*

![Bar chart showing the frequency of participants' expressions of the wisest actions by categories and by groups.]

<table>
<thead>
<tr>
<th>Category</th>
<th>Control Pakistan</th>
<th>Control Canada</th>
<th>Asperger Pakistan</th>
<th>Asperger Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Affective</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Teaching and advice</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

1. **Group differences in wisest actions on cognitive ground:**

There were no significant statistical differences between the two countries, between the Asperger and control groups, or between the two Asperger groups for their wisest actions on cognitive grounds. However, the study found that the wisest action for the most of the Pakistani Asperger group was related to dealing with their personal and household situations, whereas, for most of the Canadian Asperger group making wise decisions for their studies was the wisest action in their lives. For both of the control groups their wisest approaches were related to their personal, financial, work, and educational matters.
EXAMPLES OF THE WISEST ACTION ON COGNITIVE GROUND:

Seven references from seven participants were found from the Asperger Pakistan group for their wisest approach/act on their cognitive account. A few examples of their wisest approaches are as below:

- I make decisions wisely and spend money wisely (Interview 5).
- The wisest approach was to share my ideas while shopping and selecting things and to help and share my knowledge related to computers with others (Interview 9).
- My approach was wise many times in my life. Many times I was involved with my elder brother in brainstorming and making some life decisions (Interview 11).

Five references from five participants were found from the Asperger Canada group for their wisest approach/act on their cognitive account. A few examples of their wisest approaches are as below:

- I guess getting into my PHD is a wise decision and it was time to do something different and that was wise (Interview 25).
- I was wise because I chose to go to college (Interview 27).
- Another time when I was wise when I wanted to go to college, I took the program CIC it’s a program for people who have a mental problem so I learned how to write a cheque, how to get a job and I learned social skills and in a social environment. To go to college was my most wise decision (Interview 28).
Seven references from six participants were found for the Pakistani control group for their wisest approach/act on their cognitive account. A few examples of their wisest approaches are as below:

- A wise decision in my life was when I started leaving behind my fun activities and started to concentrate on my studies ... I studied science and science is the study of nature so that study helped me get to know about myself if we see historical and religious perspective in solving the problems of our life we can succeed more. Then I started attending lectures through which my knowledge increased and I understood the social aspect of the human mind, and the importance of religion in our day to day lives (Interview 13).

- Financial management exams are difficult for many students and they are unable to pass it. I realized that when the exams were on Eid and Muharram [both are religious months], the exams were light and one could easily get through it. So, I decided to attempt the exams during those months and I easily passed, so that was the time in my life when I acted wisely (Interview 15).

- Making my own decisions in life made me wise. My father wanted me to do my house job in Hyderabad city, but I chose Karachi to do my house job as Karachi is a big city and my learning and exposure would be more in Karachi. So that was my wise approach in life. Choosing the field of medicine was also a wise decision as I feel that it relates to my aptitude and personality (Interview 16).
Six references from six participants were found from the control Canada group for their wisest approach/act on their cognitive account. A few examples of their wisest approaches are as below:

- I would say making the decision of what I wanted to do with my life in high school was a wise choice. I felt I was headed towards a decision which I didn’t know I wanted to do. At the end of high school I still didn't know what I wanted to do, and the wisest thing I did was to go back to school (Interview 37).

- Another wise thing would be to choose my studies in business it is one thing I am passionate about and it wouldn't make any sense or be wise to go into anything else it was something my parents and relatives were also interested in. My cousins said it was a good idea and it was fun because of all the opportunities they speak highly of it and it is my best shot and I am going into that field (38).

- I had a group of two friends in church when they had a fight I had to fix it and I talked to them and they settled their problems (Interview 40).

**Concluding Remarks:**

There were no significant statistical differences between the two countries, between the Asperger and control groups, and also between the two Asperger groups for their wisest approach on cognitive ground. However, through participants’ expressions the study found that the wisest approach for most of the Pakistani Asperger group was related to dealing with their personal and household situations, whereas, for most of the Canadian Asperger group making
wise decisions for their studies were prominent choices for their wisest approach. For both of the control groups their wisest approaches were related to their personal, financial, work, and educational matters.

2. Group differences of wisest actions on affective ground:

The results of Pearson Chi square found that the Canadian Asperger group had a higher tendency of showing affection on their wisest action compared to the Pakistani Asperger group, \( \chi^2 (1, N = 23) = 2.650, p = .10 \). For the rest of the groups there were no statistical differences on their wisest action on affective ground.

EXAMPLES OF THE WISEST ACTION ON THE AFFECTIVE GROUND:

Only one participant from the Pakistan Asperger group considered his approach was wise on his affective account. He expressed that “I became a sports coach and I helped people learn from my experiences. So, working as a coach is my wisest approach as this helps people” (Interview 4).

Four references from four participants in the Canadian Asperger group were found for their wisest approach/act on their affective account. A few examples of their wisest approaches are as below:

- I was back in church someone was playing the piano and she asked me for help and while she was having trouble trying to play some chords on the piano, I had to show her the right notes for the right chords on the piano (Interview 26).
• One time one of my friends was having a difficult time in his life he approached me to talk to me about what was happening in his life. We got together sat down we started talking about what was happening with him. Most of the things we talked about I think I was able to help him out from the past experiences in my life which helped me to be wise in some aspects and he listened to me. For example, one time he came to me I was able to help because he was talking about the crush that he had and I was able to help him out from guiding him through my own personal experiences with people that I had met in the past it has helped both me and him (Interview 34).

Four references were found from the Pakistani control group on their wisest approach on affective account. A few examples of their wisest approach are as follows:

• My approach towards life is that I try to help other people as much as possible (Interview 19).

• I think that I helped other people and supported them in their time of need [this was my wisest action]. In the past I also shared many things which were beneficial for others (Interview 21).

Five references from five participants were found from the Canadian control group for their wisest approach/act on their affective account. A few examples of their wisest approaches are as below:

• It is the death of my friend’s mom which was recent and this was a very close friend of mine, and I was also close to his mom, and so, I tried to not get emotionally sad, and
tried to calm him instead. I did this because I felt it was important for someone to support him and make him happy (Interview 36).

- I guess the main time when I was wise was when I had a little sister and she's 11 years old. I was wise as she always needed help and to be picked up from school and I did that. I told her how to do her homework, how to make plans how to not make the teacher mad in class. I guess that is a wise thing to do because at this age children require direction and my parents were busy at work (Interview 38).

Concluding Remarks:

There was only one person from the Pakistani Asperger group who considered his act was wise on the affective ground compared to four participants from the Canadian Asperger group. However, there were no statistical differences between the groups for their wisest approach on the affective ground. Their expressions also showed that they all considered that helping others were their wisest approaches in life.

3. Wisest actions on teaching and advice ground:

The study did not find any group or country difference (statistical) on the wisest action on teaching and advice ground.

EXAMPLES OF WISEST ACTION ON TEACHING AND ADVICE GROUND:

The study found four references for the personal wisest approach on teaching and advice from the Pakistani Asperger group. A few expressions are as follows:
Once my father asked me why I was not adjusting with my stepmother, and if he should leave her. So I advised him and tried to make him understand that his image among the people and in the society would be ruined and people will start thinking about him as a man who just marries and divorces and that is he is maladjusted with others, and the effect of his action would be very negative for his younger brothers and sisters. I told him that he should reconsider his thoughts and take a more positive action rather than just an impulsive action as this will affect the family. So I conveyed my thinking to my father (Interview 7).

If there were any problems between any of my friends, any of my family, then I would give them advice on how to make the situation and life better (Interview 11).

The study found two references for the personal wisest approach on teaching and advice account from the Canadian Asperger group. Their expressions are as follows:

When my friend was being bullied he came to me for advice because he knew I had been bullied before, I told him how to cope with it, I told him how to avoid bullies and how not to let the bullies use action. That's a one of the times when I was wise (Interview 28).

Well, when I was in hospital my cousin was going to high school I gave him some advice and some help (Interview 35).

The study found two references for the personal wisest approach on teaching and advice account from the Pakistani control group. Their expressions are as follows:
• Education changes us a lot. When I was studying well in Madrasah [school for religious education] I conveyed teachings to other people. This conveying of messages to other people is a wise thing to do (Interview 21).

• I have done something socially like giving people advice. A friend had a family that was going to break up, so I gave him advice. If I didn’t give him the right advice at that time his family would be broken. Whenever my brother and sister ask me something I always guide them (Interview 23).

Similar to the Pakistani control group the study found two references for the personal wisest approach on teaching and advice account from the Canadian control group. Their expressions are as follows:

• Giving advice to people who were doing the wrong thing and some people were following the wrong crowd, I gave them a third person view about their actions (Interview 37).

• A couple of weeks ago a girl on my council in grade 9 came to me. She was asking me about courses to take because I go to a very smart school, because I am in a specialized program almost everyone that I know took calculus, physics and chemistry and whatever. But, I personally didn't take calculus or chemistry I took physics. I felt it was kind of stupid for not taking calculus, I thought those guys are very smart for taking those courses, but now I know if I don't need it then why would I kill myself over it. So I told the girl if you don't need it then don't take the course. Don't take a subject just because your friends are taking it. If a bunch of your friends are taking a stupid course
then you shouldn't take it. You have to find the courses that are right for you. You have to find your own path and no one is going to help you with that except for you. So, she said that was very good advice and I really helped her (Interview 39).

Concluding Remarks:

The results did not show any differences in number of expressions for the wisest approach on teaching and advice grounds between the two countries; between the two Asperger groups; and also between the Asperger and control groups. There was no difference in both the Asperger groups for providing advice to others. Both the Asperger groups expressed that they provided their advice to their friends and family members. The wisest approach on the teaching and advice ground for both of the control groups were very similar to people with AS, and often included giving advice to friends.

D. The concept of wisdom:

GROUP DIFFERENCES IN CONCEPT OF WISDOM: The study did not find any statistical differences on the various themes (cognitive, reflective, affective, teaching and advice, and self-transcendence) related to the concept of wisdom between the two countries; between the Asperger and control groups; and also between the two Asperger groups. All the groups substantially valued the theme of cognition to express their concepts of wisdom. It can be understood that both the Asperger groups’ concepts of wisdom circled around cognition, and this is also true for both of the control groups.
Chart 5 shows the frequency of participants’ expressions related to their concepts of wisdom.

I will further analyze the concept of wisdom according to the themes of wisdom (cognitive, reflective, affective, self-transcendence, and teaching and advice) between the groups.

**D1. Concept of wisdom on cognitive account:**

Eight references from eight participants were found from the Pakistani Asperger group for their concept of wisdom on their cognitive account. A few examples of their concept of wisdom are as below:

- What wisdom means to me is basically personal comprehension and knowledge about a certain topic or a group of topics or generally about the environment. Making a decision
of your past set of knowledge is wisdom. Specific factors or a combination of factors make a person wise. Wisdom is a set of correct knowledge that you attain or learn from your own self and the environment and then you apply that knowledge in different settings throughout your life and also try to influence and make other people’s lives better. To be wise is to learn from your mistakes (Interview 5).

- Wisdom is to learn and have knowledge and learn from interaction with others and from your own experiences (Interview 10).

- A person’s ability to differentiate between good and bad and if one can eliminate the evil and negative attitude and be positive and try to focus and take positive actions in life then one can make his/her life good and can contribute a lot towards society and I think this is wisdom (Interview 11).

Ten references from ten participants were found from the Canadian Asperger group for their concept of wisdom on their cognitive account. A few examples of their concept of wisdom are as below:

- I think wisdom is about knowledge and making the right decisions, for example how Einstein moved from Germany to America that was when he saved his life (Interview 27).

- Wisdom from my perspective is simply not just to have knowledge, but to also make the right decisions. (Interview 31).
• Wisdom to me is the ability to take messages from your life experiences and move forward with your life with the knowledge that you have gained and everything that has happened in your life as well as the experiences learned from others (Interview 34).

Eight references from eight participants were found from the Pakistani control group for their concept of wisdom on their cognitive account. A few examples of their concept of wisdom are as below:

• Wisdom is interacting with others in a way that they can come close to you, if people will socialize with you your pleasure in life can be found and this will increase your knowledge about world. Gaining more knowledge about the world and learning is all what wisdom is (Interview 14).

• Wisdom is making the right decisions at the right time as this will make our life easy (Interview 15).

• Wisdom is the ability to generalize your knowledge. For example, if you have studied perception then in your real life you should utilize the study in order to perceive and analyze people, events, and things, and on the basis of your analysis you should try to make good choices in life (Interview 24.)

Seven references from seven participants of the Canadian control group were found for their concept of wisdom on their cognitive account. A few examples of their concept of wisdom are as below:

• Wisdom is being able to make the right choices about something based on your own personal experiences and based on your own interactions (Interview 36).
• I think wisdom is something one has to have inside them, or one comes to realize certain things just like in the Buddhist religion they believe he pondered under a tree for years until he came to realize inner wisdom or inner wushu. I don't know the exact term but it tells you that wisdom is something that comes from within, it cannot be taught to you (Interview 37).

• Wisdom in my opinion is something like learning experiences that you have experienced and it is your ability to make decisions in different situations by learning from your past experiences (Interview 39).

**D2. Concept of wisdom on affective account:**

Two references from two participants of the Pakistani Asperger group were found for their own concept of wisdom on their affective account. These concepts of wisdom are as below:

• Wisdom means thoughts can be used in helpful ways in life (Interview 2).

• Wisdom is to know everything and to use it for the betterment of everyone around you in a positive way (Interview 3).

Only one reference from one participant was found from the Canadian Asperger group for their own concept of wisdom on their affective account. His concept of wisdom is as below:

• Wisdom is something you do for other people like help others and work as a team (Interview 33).
Only one participant from the Pakistani control group expressed his concept of wisdom on affective account. He expressed that “Wisdom is to do good deeds in life which are for the benefit of everybody and teaches others to do the same; in this way we can make this world a better place to live” (Interview 20).

Two references from two participants were also found from the Canadian control group for their own concept of wisdom on their affective account. These concepts of wisdom are as below:

- Wisdom to me is being able to change not so much the views, but to affect the life of a single person as long as you are there. No matter who is being wise, wisdom is not so much knowing facts, but being able to know people and how to help them on a small scale as well as on a large scale if they need help (Interview 41).

- Wisdom to me means helping someone and shaping them from wise words from your life (Interview 44).

**D3. Concept of wisdom on reflective account:**

The study did not find any definition of wisdom on reflective ground from the both Asperger groups and the Pakistani control group. However, two references were found from the Canadian control group on the reflective aspect of wisdom (e.g., I think wisdom is being able to live a life and be able to reflect on it and be able to fix your mistakes and teach other people from your experiences (Interview 38).
**D4. Concept of wisdom on self-transcendence account:**

The study did not find any references for the concept of wisdom on the theme of self-transcendence from either of the Asperger groups or the Canadian control group. However, the study found three references from the Pakistani control group. A few examples are as follows:

- Wisdom in my eyes is, for example, a person who through his words and actions takes other people towards the right path and changes his life to move towards a positive direction, then that is his wisdom (Interview 16).

- Wisdom is forgiveness and sacrifice not only living for yourself, but also for others so you can understand them and live in a better way with others (Interview 17).

**D5. Concept of wisdom on teaching and advice account:**

The study did not find any references for the concept of wisdom on teaching and advice account from either of the control groups or the Canadian Asperger group. However, the study found two references for the concept of wisdom on teaching and advice account from the Pakistani Asperger group. Their expressions are as follows:

- Wisdom is one who gathers the required experiences then becomes old and thereby starts teaching (Interview 1).

- Wisdom is to make people learn and teach (Interview 4).
**Summative Remarks:**

The study did not find any statistical differences on various themes related to the concept of wisdom between the two countries; between the Asperger and control groups; and also between the two Asperger groups. However, all of the groups substantially valued the theme of cognition to express their concepts of wisdom. It can be understood that both of the Asperger groups’ concepts of wisdom circled around cognition, and this is also true for both of the control groups.
Discussion:

This dissertation adapted McAdams and Pals’ (2006) model of personal identity to investigate the identity and wisdom of people with Asperger syndrome (AS) living in Canada and Pakistan. McAdams and Pals’ (2006) model recognizes a biological link to the clinical identity of people with Asperger syndrome. According to their model, acknowledging human nature is essential because it produces dispositional traits that are connected to values. However, life narratives create a clearer picture of individual traits and values. Some behaviour may be culturally specific, so accounting for an individual’s culture provides a richer picture of his or her identity. Culture also applies to all levels of personal identity (McAdams & Pals, 2006).

Phenotype universality was found in people with AS in at least three domains of life (DSM-IV, TR, 2000), yet, existing studies have not explored the wisdom and identity of people with Asperger syndrome cross-culturally. Drawing on the existing literature (e.g., Takahashi & Bordia, 2000; Bruner, 1990; Markus & Kitayama, 1991; Baumeister, 1987; Gergen, 1991) this dissertation speculated that understandings of wisdom and identity would differ from culture to culture for non-autistic populations, but it is not clear if the same hypothesis can be applied to populations of people diagnosed with Asperger syndrome. The main objective of this study was to examine the identity and wisdom of people with AS and to determine whether wisdom and identity in people with AS is universal.

The following discussion grapples with these elements of personal identity. Given that people with Asperger syndrome develop a personal clinical identity; my discussion begins by focusing on the central traits of Asperger syndrome.
Identity Traits:

Finding identity orientations through identity questionnaires is one approach to understanding humankind (e.g., Kashima & Hardie, 2000; Cheek, 1989). People have various personal attributes that figure into how they construct their definitions of self and identity. Cheek and colleagues (2002) explored identity using their Aspect of Identity Questionnaire (AIQ), which included four elements of identity: (1) personal, (2) social proper, (3) collective, and (4) relational. In addition, the personal integrity scale, adapted from Paulhus’ (1991) social desirability scale, captures some of the important attributes of people with AS. My discussion of identity traits begins by exploring how these traits differ between countries, followed by a comparison of the two Asperger groups, and between the control groups of typically developed and the Asperger groups. I will first discuss the AIQ scale and will then turn to the Personal Integrity scale.

This doctoral study explored the four aspects of identity constructed by Cheek & colleagues (2002) and found differences between countries. The Canadian combined sample (including both the Asperger and control groups) scored higher in relational identity compared to the Pakistani combined sample. This showed that there were cultural differences in at least one of the four aspects of identity. Further analysis exploring these differences found that they also held true for the non-combined samples (excluding Asperger populations) from both countries, and the findings were of national differences in relational identity were replicated. The fact that the Pakistani respondents generally scored lower in relational identity might be due to their inhibitions regarding the expression of intimate relations. Due to the prevailing religious atmosphere, these expressions are considered taboo in Pakistani culture (Jafar, 2005).
Generally, people in Pakistan do not discuss their intimate relationships, and non-marital relationships are considered very sinful (Al-Quran, 17-32; also see Baldauf, 2004). The majority of the participants in this study have never married. In Canada, people are more liberal and discussions about intimate relations are not considered taboo. This may explain the differences between the countries on relational identity. Having explored the cultural effects of relational identity for the general population in Pakistan and Canada, my discussion now turns to an exploration of how culture affects the two Asperger groups.

Culture impacted both Asperger groups. The results of this study found that the two Asperger groups are not alike in their social and relational identities. Below, I discuss cultural effects on relational identity between the two Asperger groups and then address social identity.

Canadians with AS scored higher in relational identity compared to Pakistanis. People with AS in both countries adopted the same cultural pattern as non-autistics. Canadian people with AS disclosed their relational identity. It can therefore be concluded that the liberal culture in Canada influences this aspect of identity for both typically developed (non-autistics) and AS populations in Canada. Pakistani people with Asperger syndrome did not disclose their relational identity, which was consistent with the typically developed people in Pakistan (see Baldauf, 2004). It can be concluded that Pakistani culture, where relational identity is taboo, influences both people with AS and the general population in Pakistan. Conceptually, relational identity is part of social identity (e.g., Tajfel et al., 1971; Turner, 1996; Spear, 2011). In the subsequent section I will discuss how social identity differed between the two Asperger groups.

Similar to relational identity, this study found that social identity differed between the two Asperger groups. Canadians with AS demonstrated more prominent social identities than
Pakistanis with AS. This might be due to the Canadian Asperger group’s intensive training in social skills (e.g., Webb, 2003; also see Feng et al., 2008). Most of the participants in the Canadian Asperger group underwent social group therapy (mostly based on the theory of mind abilities) from the organizations that supported individuals diagnosed with AS such as Kerry’s Place Autism Services and the Geneva Centre for Autism. In social group therapy, people with AS learn how to interact and socialize with others (Feng et al., 2008), despite limitations in social skills (e.g., Gillberg, 1998; DSM-IV, TR, 2000).

On the other hand, the Pakistani Asperger group did not have access to this kind of facility due to lack of funding and expertise. Due to the fact that the Canadian Asperger group was involved in social group therapy, I speculate that this social training might be the reason that the Canadian Asperger group associated themselves with social identity and the Pakistani Asperger group did not make similar associations. However, this study found that social identity differed significantly between the Asperger groups and the non-autistic groups. Results showed that their combined mean score on social identity was significantly lower (of the both Asperger groups combined), than non-autistics (combined). Next my discussion turns to the social identity of the Asperger and control groups.

Through a self-reported questionnaire, people with AS identified themselves as less social than non-autistics. These results are also consistent with the clinical diagnosis of Asperger syndrome (e.g., DSM-4 TR, 2000; also see Gillberg, 1998), which suggests a deficit in social domains. The findings of this study are also consistent with some theories of autism spectrum disorders.
From 1943 to the present, there have been many theories describing the characteristics of people with autism spectrum conditions. These theories seek to understand what lies behind the observable features of autism spectrum conditions. Both Hans Asperger (1944) and Leo Kanner (1943) have pointed out that social disconnectedness is the defining trait of autistic populations. Since then, many theorists have attempted to explain social disconnectedness and elucidate other secondary characteristics of autism spectrum populations. For example, Mahler (1952, 1958; Mahler & Furer, 1972) considered autism spectrum as a basic defect of the ego. This theory considers Freud’s (1938, 1966) point of view that infants do not perceive anything beyond their own body, and some get fixated at this early stage of being-self (early stage of being), resulting in the social disability that occurs in autism. Bettelheim (1967) speculated that a heartless upbringing (the refrigerator mother) resulted in social disability in autistic people, while Baron-Cohen (1995) posited that it was an absence of theory of mind abilities that caused social disabilities in people with autism spectrum disorders. Finally the empathizing-systemizing (E-S) theory of Baron-Cohen (2003) pointed out that due to an inability to empathize; people with AS tend to have difficulty in social domains.

Exploring the aspects of identity cross-culturally using questionnaires, I have discussed how culture affected relational identity between the participants from the two countries in this study. I have also discussed how relational and social identities differed cross-culturally between the two Asperger groups. Now, I turn to a discussion of another measurable personal trait: personal integrity.
PERSONAL INTEGRITY: The various components of personal integrity include a self-commitment to maintaining social norms. Personal integrity among participants did not differ between the two countries. However, the results suggested that the Pakistani Asperger group had a higher level of personal integrity compared to non-autistics in Pakistan. This suggested that people with AS have a commitment to maintaining social norms, even though they lack social abilities (DSM-IV, TR, 2000). This study did not find substantial differences in personal integrity between the Asperger and control groups, but the descriptive statistics indicated higher mean scores for people with AS, suggesting that they have an inclination to abide by social norms.

The scale of personal integrity was substantially higher in the Pakistani Asperger group compared to the Canadian Asperger group. The scale includes an important dispositional trait: ‘honesty’. This item on the personal integrity scale produced a substantial difference between the two Asperger groups, as this study found that Pakistanis with AS scored significantly higher on the trait of honesty compared to Canadians with AS. Moreover, people with AS (combined group) scored substantially higher in terms of honesty compared to the typically developed control groups. This is consistent with other studies on people with AS (e.g., McMullan, 2000).

The theory of mind (Baron-Cohen, 1995) provides an explanation of why people with AS are particularly honest. Honesty, including not telling a lie, is a socially valued trait. Lying is a high functioning mental skill that is also related to theory of mind abilities. Numerous studies (e.g., Baron-Cohen, 1995; Baron-Cohen & Howlin, 1993) have speculated that due to a deficiency in the theory of mind, people with AS do not understand other people’s positions, and project their own ideas onto others. Therefore, it is not easy for people with AS to be
deceptive or lie. Thus, being honest is part of being autistic (e.g., William, 1992, 1994; Sinclair, 1992). However, sometimes society demands that we appear in ways that are not honest with our true feelings, forcing us to pretend we are what society wants us to be. For instance, we may hide our feelings through staying positive and calm to others when experiencing anxiety due to a noisy or unpleasant environment. Studies have found that theory of mind-based social-cognitive training improves theory of mind abilities in individuals with AS (e.g., Gevers et al., 2006; also see Baron-Cohen & Wheelwright, 2006). At the same time, improvement in theory of mind abilities may diminish honesty. As mentioned earlier, the Pakistani Asperger group did not have the privilege of receiving theory of mind-based social group therapy, resulting in diminished social identity compared to the Canadian Asperger group.

Moreover, Pakistani people with Asperger syndrome may not feel that they need theory of mind training. Living in a collectivist society, people with AS in Pakistan can benefit from the theory of mind of other people around them. But in Canada, people with AS mostly live independently and exercise their theory of mind abilities. I speculate that, due to the unavailability of social group therapy, the Pakistani Asperger group scored higher in the measure of personal integrity and also in honesty compared to the Canadian AS group. Some autobiographies (e.g., William, 1992, 1994) have highlighted that many people with AS acquire the ability to live in their ‘appear-state’. Few, however, are uncomfortable in their appear-state and tend to revert to their ‘being state’.

The above discussions explore how people can be identified by their traits. When considering clinical populations such as people with AS, personal integrity, including honesty,
can be considered important, and diminished social identity can be understood as a trait that distinguishes those with Asperger syndrome from typically developed populations.

McAdams & Pals’ (2006) model of personal identity illustrates that traits have links to people’s values. The next section will discuss how human values link to personality traits.

Values:

Previous studies have indicated that it is crucial to ascertain people’s values in order to understand their identity (e.g., Hitlin, 2003, 2011; McAdams & Pals, 2006; Schwartz, 2005) and their conceptions of wisdom (e.g., Pushkar and colleagues, 2010; Le, 2008). Jason and colleagues (2001) developed the Foundational Values Scale (FVS) that identified five factors attributed to the wise: (1) harmony, (2) warmth, (3) intelligence, (4) spirituality, and (5) reverence for the environment. In 2009, Khan and Ferrari found that people attributed higher scores to the individuals they nominated as wise on the foundational values scale than they did to themselves. The study also found that a higher level of wisdom is positively correlated with psychological well-being.

Schwartz (1992) understood values as the principles guiding an individual’s life towards achieving a desirable goal. Using Schwartz’s (1992) basic human values scale, this study found that Canadians (including people with AS and non-autistics) scored substantially higher in the value of openness to change compared to Pakistanis (including people with AS and non-autistics). The value of openness to change included three sub-categories: self-direction, stimulation, and hedonism. These sub-values describe the tendency of taking independent action, the value of excitement and challenges, and the value of pleasure time. Openness to
change and these three sub-values fall under the broader category of personal values (Schwartz, 1992). Pakistan is a collectivist society, and in a later section I contend that the life stories of Pakistanis exhibited the theme of communion far more than Canadians (including both the Asperger and control groups). The value of openness to change endorses individuality and results showed that Pakistani people valued togetherness. This might be the crucial reason why Pakistanis (included both the Asperger and non-autistics groups) scored lower on the value of openness to change compared to Canadians.

The study found that the Asperger-only groups from Canada and Pakistan had similar profiles for the values of conservation, openness to change, self-transcendence, and achievement. This showed that their basic human values are independent of culture and demonstrates universality in human values, which is consistent with diagnostic characteristics for AS (DSM-IV, TR, 2000).

The study found that people with Asperger syndrome placed a significantly higher emphasis on the value of conservation compared to the control Canadian and Pakistani populations. Recall that the value of conservation included two sub-categories: security and conformity. Security entails stability in society and conformity involves respect of social norms (Schwartz, 1992). It is very important for people with Asperger syndrome that everyone follows rules at all times, even when no-one is watching. Investigations into the values of people with AS are very recent, although conformity was found to be significantly higher in people with AS in other studies using Schwartz’s (1992) value scale to make comparisons with the general population (e.g., Jaari, 2004; Helkama et al., 2006; Myyry et al., 2010a; Hirvela & Helkama, 2011). The values of security and conformity also relate to social values (Schwartz, 1992) and
people with AS lack social abilities (DSM-IV, TR, 2000), but score high in personal integrity. For instance, they score high in the attribute of honesty.

Dispositional traits provide the outline of personal identity, given the clinical identity of people with AS in this study supported findings that personal integrity and, more precisely, honesty, was a meaningful trait for people with AS. However, following McAdams’ and Pals’ (2006) model, it is also imperative to explore people’s life stories to understand their personal identity.

In the following section, I explain how life narratives provide a rich picture of the individuality of people with AS. I also suggest that their stories are embedded in culture.

**Narrative Identity:**

Hammack (2008, also see 2011) proposed a tripartite model to understand people’s identity that included the cognitive, social, and cultural aspects of an individual. Thus, individual identity is linked to the socio-cultural context of the individual. Many studies (e.g., Bakan, 1966; McAdams, 1980; Woike, 1995; Mansfield & McAdams, 1996; Ackerman et al., 2000; McAdams & Pals, 2006; Abele and Wojciszke, 2007; Kogler, 2012; Adler et al., 2012) have underlined themes of agency and communion in the life stories of non-autistics and their approaches to interactions with others; these themes are consistent with this study. Narrative analysis revealed themes of communion or togetherness and agency or autonomy in both people with autism spectrum and non-autistics.

The results of this study also found a higher tendency towards the theme of communion in Pakistanis with Asperger syndrome compared to Canadians with AS, suggesting the cultural
milieu was an influencing factor, even for those with a social disability. The study found that out of seven themes (help and care, relationship, social being, collective being, contribution to society, achievements, personal development, and individuality) only one differed between people with AS living in the two countries: help and care. This theme was significantly higher in the Pakistani Asperger group, which created a difference in the overall theme of communion. A similar result was found in my previous study (Khan, 2008), which found that typically developed people in Pakistan were more likely to help others in various ways.

I speculate that people with AS might have adapted the characteristic of helping from the general population in Pakistan. In addition, the Muslim religion that is so prevalent in Pakistan (Jafar, 2005; also see the constitutional laws of Pakistan, 1973) endorses help because helping others is one of the main pillars of Islam (Schumm & Kohler, 2006), called Zakat (helping needy people with money, or in physical and emotional ways). Seeing people helping others might also influence the Pakistani Asperger group to help others. In addition, most people in Pakistan live with extended family (Muhammad, 1992; also see Avan & Akhund, 2006) and this living situation often requires helping others. This study also found that many Pakistani Asperger participants were also living with extended family; therefore their living situation may require that they help others more frequently. On the other hand, Canadian Asperger participants mostly live independently, which may promote individuality and autonomy.

My results highlighted a higher tendency for people with AS to engage in agentic expression compared to non-autistics who display more communion in their expressions. This might be due to people with Asperger syndrome’s low profile in empathy and theory of mind abilities (Baron-Cohen, 2010). Empathy and theory of mind promote social understanding and
may lead to communion. Inabilities in the domain of empathy and theory of mind may result in focusing on one’s self. I speculate that due to social disability (DSM-4, TR, 2000) people with AS are less interested in social activities, specifically this study found that people with AS showed less interest in their contributions to society. The results found that people with AS had a lower profile related to their contribution to society compared to the non-autistics in this study. The study also found another major distinction in the Asperger group narratives: they tended to disclose their achievements/accomplishments (a sub-category of the theme of personal agency) more often than non-autistics.

Personal traits, values, and stories are developed from cultural memories (e.g., McAdams & Pals, 2006; Hammack, 2008, 2011; also see Bruner, 1986). Thus, themes of agency and communion are also linked to culture in people’s life stories. These links were also explored in the present study. Following McAdams & Pals’ (2006) model, I now turn to the cultural context of personal identity.

**Cultural context:**

The current study did not find any differences between Canada and Pakistan in the theme of agency or autonomy. Participants (both the Asperger and the non-autistic control groups) from both countries expressed the same levels of autonomy in their life stories. However, the study found substantial differences in the theme of communion or togetherness between Canada and Pakistan when combining the Asperger and control groups. People in Pakistan (including both Asperger and control groups) expressed the theme of togetherness significantly more in their life stories than people in Canada (including both the Asperger and the control groups).
However, an in-depth analysis found that non-autistics from both countries did not differ in their expressions on the theme of communion. It was the Canadian Asperger group’s lower score in communion that resulted in country differences for the overall theme of communion.

This study showed that the non-autistic participants (typically developed) from both countries share the themes of communion and personal agency in their life stories. The non-autistic participants from Pakistan and Canada valued both personal agency and communion equally. This balanced trait was considered part of an ideal life (Bakan, 1966). However, in-depth analysis found two major differences between the non-autistic participants from Pakistan and Canada. Non-autistic Pakistanis expressed the theme of help and care (a sub-category of the theme of communion) more than Canadian non-autistics, whereas Canadians placed greater emphasis on their meaningful relationships (a sub-category of the theme of communion) than the Pakistani general population. Again, these differences might have close ties with individual dispositional traits (e.g., McAdams & Pals, 2006). Recall that the dispositional traits of the Canadian control group led them to identify themselves with relational identity compared to the Pakistani control group. Canadian life stories stressed the theme of meaningful relations that corresponded to their dispositional trait of relational identity. However, Hammack (2008, 2011; also see Bruner, 1986) argued that life stories have close ties to culture. Below, I discuss how culture impacted these themes.

**CULTURAL EFFECTS ON NARRATIVE THEMES:** Help and care and meaningful relationships are the sub-categories of the theme of communion. The theme of communion might have religious roots in Pakistan, where Islamic ideology is reflected in constitutional laws
(English, 1968; also see the Constitution of Pakistan 1973). Once per year in the month of Ramadan, Zakat money (2.5%) is automatically deducted from one’s salary or bank account (unless one declares oneself either Shia or non-Muslim). The money is then distributed to needy people through government agencies. Living in a society with Islamic institutional values has an impact on people’s lives and encourages individuals to promote togetherness and communion.

On the other hand, Canada is not a highly religious country, although Christian and other churches are very active and have freedom of religious activity (Elsgruber and Zeisberg, 2006). Most Christian religious places of worship in Canada have high attendance, especially on Sundays. People from other religions are allowed to have their own places of worship such as Mosques (for Muslims), Mandirs (for Hindus), Gurdawaras (for Sikhs), and Synagogues (for Jews). However, Canada cannot be considered a religious country. The constitutional laws in Canada were not strictly made in accordance with religious principles as they are in Pakistan. There is no Government enforcement to follow any religion and no programs based upon religion such as deducting money from people’s bank account to give to the poor and needy. However, many people in Canada are generous and do contribute to charities independently (Edwards, 2010). Since 1971, when multiculturalism became an official policy of the Canadian Government (Berry, 1991) Toronto has opened its arms to embrace newcomers and established various programs including multicultural neighborhood centers, newcomer centers, and many other programs that promoted the culture of various ethnicities. These strategies made Toronto a multicultural city where people from different countries retain their cultural heritage.

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9 [http://www.pakistanconstitution-law.com/]
(Wood & Gilbert, 2005). It might be hypothesized that multiculturalism in Canada produces an atmosphere of togetherness. The results of this study did not find any differences in the theme of communion between the control groups from these two countries. This contradicts some previous studies (e.g., Markus & Kitayama, 1991) that associated an agentic view with Western countries. Perhaps Canada’s multicultural policy differentiates it from other Western countries and promotes communion.

To understand identity it is very important to keep culture in mind (Hammack, 2008, 2011). Some of the participants in this study had roots from Eastern Europe and they embraced the culture of their ancestors and Canadian culture. However, all of the participants in this study were either born or lived most of their lives in Canada.

In comparison to the non-autistic participants, people with AS held honesty as their most prominent dispositional trait, which is tied to their value of conservation and more directly to their value of conformity. The life narratives of the participants with Asperger syndrome expressed that they have tendency to be autonomous. However, people with Asperger syndrome are not all alike; culture molds their personal identity. The Canadian Asperger group scored higher on social and relational identity, while the Pakistani Asperger group was higher on personal integrity. The life narratives also showed that the Pakistani Asperger group had a tendency to value communion.

Dispositional traits, characteristic adaptations such as values, and life narratives provide a clear picture of one’s personal identity, which requires wisdom to lead to the best possible quality of life. My discussion now moves to wisdom-identity. This dissertation adapted Ferrari and colleagues’ (2011) model of wisdom and interview questions. In the following discussion, I
use their model to discuss wisdom. As wisdom involves many aspects of life, I employ Ferrari and colleagues’ model of wisdom and discuss: (1) how people remember the wisest historical exemplars in their lives, (2) how people remember the wisest acquaintances in their lives, (3) wisdom in people’s personal lives, and (4) people’s conception of wisdom.

**Wisdom:**

Studies of Eastern and Western wisdom in the USA, Japan, and Taiwan have revealed that people from different cultural backgrounds have different implicit theories of wisdom (Takahashi, 2000; Takahashi & Bordia, 2000; Takahashi & Ide, 2003). Some Middle Eastern countries embrace *hikma* (a theological and divine wisdom), which emphasizes learning through religious revelations and putting these revelations into practice (Thomas, 2006; also see Gutas, 1981). Some Western countries have adopted a more experience-based understanding of wisdom (based on rationality) that underscores science, logic, and discovery (e.g. Assmann, 1994; Clayton & Birren, 1980; Holiday & Chandler, 1986).

The implicit understandings of wisdom differ in various parts of the world. In general, North Americans consider wisdom to be a sort of knowledge or expertise, which echoes the theories of Baltes (Baltes & Staudinger, 1993, 2000), and Sternberg (1985, 1990, 1998, 2005). Asians (Japan & Taiwan) tend to integrate cognitive, reflective, and affective dimensions of wisdom (Takahashi, 2000; Takahashi & Bordia, 2000) which are also reflected in the North American conception (Ardelt, 2003, 2005). This study was oriented towards the cognitive, reflective, and affective elements of wisdom in people’s life stories. In addition to these three
elements, the study also found the elements of self-transcendence (thinking beyond self), and teaching and advice in people’s life stories related to their understandings of wisdom.

This study found that the two Asperger groups did not differ in overall wisdom scores (assessed through the 3D-WS). However, they differed in the affective dimension of wisdom; the Pakistani Asperger group was substantially lower in the affective dimension of wisdom compared to the Canadian Asperger group. As was discussed earlier, structured social group training helps Canadians with AS in understanding the affective elements of life. This is a resource that benefited Canadian people with AS, whereas, the Pakistani Asperger group relied more on unstructured social help from their collectivist society. This unstructured help, however, did not produce an increase in their affective dimension of wisdom.

The next topic I will discuss is the wisest people in history and the reasons the various groups in this study selected particular nominees.

*The Wisest Person in History:*

Jason (2001) asked graduate students in psychology of mixed ethnicities in the USA to name the wisest person in history. Five participants named political leaders, five named religious figures, three named spiritual figures, two named business leaders, and one named a scientist. Exploring who and why particular people selected as wise can contribute to understanding conceptions of wisdom because wise exemplars often reflect how people remember and evaluate wisdom in their own lives. Takahashi (2003) also asked a mixed group of college students in the USA to name their wisest person. The names mentioned included acquaintances and famous people from history, such as Socrates, Nelson Mandela, Gandhi, and many more.
Social scientists have been trying for decades to find out what shapes conceptions of wisdom, and the rationales behind how people choose who they consider to be the wisest people in history as well as the wisest people among their acquaintances. Thinking of and naming ideal exemplars is one way to remember the attributes of the wise, and also a way to emulate their characteristics. As discussed in the intro section of this study, there are two main sources of wisdom: ‘wisdom of authority’ and ‘wisdom of experience’. In wisdom of authority, practical actions are taken in accordance with an authoritative person’s point of view. In most cases this authoritative person is a Prophet who follows a Holy book that has been revealed to him. In Arabic, this kind of wisdom of authority is called *hikma*. The second source of wisdom can be understood as *experience-based wisdom* or logical/practical wisdom. Aristotle coined the word “phronesis” to describe practical wisdom (Aristotle, 1934).

In the current study, we found differences in participant choices about the wisest person in history between Pakistani and Canadian participants. A substantial country difference was found in naming the wisest person. When asked to name the wisest person in history, most participants named religious figures and scientists. Pakistanis (including both the Asperger and control groups) frequently named a religious figure. On the other hand, Canadians (again, including Asperger and control groups) frequently named a scientist as the wisest person in history, reflecting the findings of previous Westerns studies (e.g. Holiday & Chandler, 1986; Assmann, 1994). These differences may have historical and cultural roots.

Twelve Pakistani participants identified Muhammad as the wisest person in history. The rest of the Pakistani participants named other religious dignitaries. This suggests theology wisdom holds a dominant place in Pakistan. This finding is consistent with my previous study
(Khan, 2008) in which Pakistani participants consistently named Muhammad as the wisest person in history, while only a few people from Canada named religious figures in this study. In contrast, a total of nine out of twenty-two people from Canada (including both the Asperger and control groups) named a scientist as the wisest person in history. This finding is also consistent with our previous cross-cultural study (Ferrari et al., 2011) in which we found similar kinds of nominations from people living in Pakistan and Canada. Muslims living in Pakistan predominantly nominated historical religious leaders, while Jewish Canadians nominated activists or scientists more often as the wisest in history.

It was evident that the element of self-transcendence influenced who the Pakistani participants nominated as the wisest person in history compared to the Canadian participants. However, it was not a considerable factor for people with AS in Pakistan. Further in-depth analysis found that this country-to-country difference was mainly due to very high mean scores in self-transcendence for non-autistic Pakistanis. Religion endorses self-transcendence that produces an atmosphere of communion. Khan (2008) found that most people in Pakistan practice Islam in most parts of their lives. This was also studied by Ahmadi (1998, 2000), who studied self-transcendence through life narratives of Sufis (practicing Muslim) living in Sweden. His study indicated that quiet contemplation of God improved their quality of life. This study also indicated that practicing Muslims not only incorporate the trait of self-transcendence in their lives, but they also seek this attribute in the wise people they idealize.

Wisdom in Pakistan is mostly revealed via Prophets. Most people in Pakistan practice a theological wisdom (Khan, 2009). On the other side, the sources of wisdom in Canada are mostly experience-based. Ferrari and his colleagues (2011) found that most Canadians are high
in phronesis (a practical wisdom). Followers of experience-based wisdom traditions are more inclined to understand phenomena logically.

The rationale behind naming religious people, especially Muhammad, as one of the wisest people in history for Pakistani participants reflects the wisdom tradition of hikma. Hikma is the Prophetic practice (Sunna) which means that whatever the Prophet did, believers should follow as closely as they can (Gutas, 1981). The life of Muhammad is an example for human beings, and especially for Muslims. It is an honour for Muslim/Pakistani people to live a life that is as close to Muhammad’s life as possible. People call Muhammad “Al-Ameen”, which means one you can trust (Numani, 1983). He established the very first Islamic Government at Mukkah (Saudi Arabia) where everyone had equal rights, including men and women. The poor received help, and all were provided with justice (Ishaq & Guillaume, 2002).

Hence, when people say that Muhammad is the wisest person this implies that they would like to follow his life, which exemplifies theological wisdom. The majority of the participants from Pakistan in this study suggested that a religious figure was the wisest person in history. This reveals that most people in Pakistan may try to emulate the lives of religious figures. It can also be stated that people’s implicit theory of wisdom in Pakistan may be theological rather than logical. The study also found that a few people from Canada named religious people as the wisest in history such as Jesus, Prophet Muhammad, and Pope John Paul 2\textsuperscript{nd}. This suggests the presence of theological wisdom in Canada, to some extent. Choquette (2004) also found that many Canadians have a religious affiliation of some kind. However, Canadian participants in this study predominantly named a scientist as the wisest in history.
The rationale behind naming a scientist, mainly Einstein, reflects experienced-based or logical wisdom traditions. Contrary to hikma, in which one has to follow the commands of the Prophet, the experience-based wisdom tradition is practical and logical in nature. This includes hypothetical testing and logical applications in most parts of people’s lives. Scientists provide logic in our lives. Most of the groundwork of present science is based on the principles that Einstein and Newton provided, for example, Newton laid the foundation of classical mechanics and Einstein’s theory was crucial in establishing quantum physics (e.g., Baierlein, 2001). Canada is a developed country and much of what Canadians know and understand is based on scientific innovations. Most people in Canada apply science and logic in their lives. The strength of developed countries, including Canada, is that they make science their philosophy. This may be the reason most Canadian participants of this study chose a scientist as the wisest person in history.

This study found that the members of the Canadian Asperger group frequently named a scientist as the wisest in history compared to the Pakistani Asperger group. This suggests that culture impacts how people with AS in Canada name and emulate the lives of the wise.

Wise historical figures are influential in people’s lives. However, people also seek wisdom from their acquaintances. Acquiring wisdom through acquaintances is easy because they are accessible. Following Ferrari and colleague’s (2011) study, I now address how wise acquaintances figure in people’s lives.
The Wisest Acquaintances:

Jason (2001) asked participants of mixed ethnic backgrounds in the US, 81% female, and 19% male, to name the wisest person among their acquaintances. Five participants nominated someone from their immediate family (father, mother, sister), one named a person from their extended family (uncle), four named a teacher or a work associate, and three participants named friends.

In the present study the participants were also asked to name the wisest person among their acquaintances. A few participants from both countries named friends and non-family members, but the majority of both Pakistani and Canadian participants (including the Asperger and control groups) nominated a family member as the wisest among their acquaintances. Pakistani participants were slightly more likely to nominate extended family members. This suggested that both Canadians and Pakistanis valued family and gained a great deal of wisdom from their immediate and extended family.

The life narratives of people with AS documented in this study also showed that the majority of respondents believed that parents were their wisest acquaintance. Most people with AS in both countries nominated a mother or father on the basis of their affective traits. People with AS lack the trait of affection (DSM-4) and feeling parents’ affection towards them gives meaning to their lives because they feel that someone cares for them. This is imperative because it illustrates that parents are instrumental in spreading wisdom. Although autism spectrum is no longer understood as a ‘disorder of love’ as in Bettelheim’s (1967) theory,\(^\text{10}\),

\(^{10}\) In the nineteen sixties, the theory of ‘refrigerator mother’, developed by Bettelheim (1967) took hold as a way to explain autism spectrum traits. Refrigerator mother denotes those who have a heartless style of raising their child with little emotional attachment.
Silverman (2012) highlighted the importance of maternal affection for people with autism. He argued that people with AS have feelings of love, but most often they express their need for affection in ways that are difficult for others to understand.

In terms of wisdom as a form of knowledge (Baltes & Staudinger, 1993, 2000; also see Sternberg, 1985, 1990, 1998, 2005) parents are the first people to provide knowledge of the realities of life to their children. People with AS are usually uncomfortable with people other than family members, especially parents and co-workers. A functional MRI study also showed that people with autism spectrum disorders exhibited reduced activation in response to stranger’s faces compared to their mothers and co-workers (Pierce et al., 2004). Parents are those they feel comfortable seeking knowledge from. This might be another decisive factor explaining why people with AS in this study often chose family members as their wisest acquaintance.

The study also found that, after immediate family members, the Asperger groups in both countries predominantly nominated a friend as their wisest acquaintance. In contrast, not a single friend was nominated by participants in the control groups. It seems that non-autistics consider their friends equally wise and may take them for granted. In contrast, members of the Asperger group in both countries considered their friends wise and treasured making and maintaining friendships. Sometimes people value those things which are hard to achieve (Tversky & Griffin, 1991; Hsee, 1999; Dixon, 1998). From the autobiographies of people with AS, we understand that making a friend is the hardest job for them. Wendy Lawson (author of two books who has a diagnosis of Asperger syndrome) once said “Even when I tried to talk to my peers, somehow my words only compounded the issue. My father once said to me ‘make
friends, Wendy’. I knew how to make rice pudding, I even knew how to make my dog sit, but I had no idea how to make friends” (Lawson, 2000). Generally, people value the items they lack and take for granted those that they have (Tversky & Griffin, 1991; also see Hsee, 1999).

People acquire wisdom through historical exemplars and acquaintances, but also in their day-to-day lives. My next section will discuss wisdom in terms of lived experience.

**Personal Wisdom (the wisest action/approach):**

This study found four themes that circle around personal wisdom: (1) cognitive, which involves people’s actions, life decisions and problem solving; (2) affective, which involves the solving of other’s problems through help and affection; (3) reflective, which involves thinking in different directions to better oneself or solving personal problem, and (4) teaching and advice, which involves interaction with others to transfer personal experiences and knowledge. In my previous study (Khan, 2008), 50 participants from Pakistan (from the general population) highlighted life accomplishments and problem solving skills as attributes that demonstrated their views of wise actions.

The Asperger groups from Pakistan and Canada were similar in how they estimated wise approaches to life. Both Asperger groups considered making important decisions in their lives and solving their own problems (cognitive theme) their wisest actions. The study also found that the Canadian Asperger group rated high in showing affection (theme of affection) and helping others, whereas the Pakistani Asperger group scored high in their tendency to teach others (theme of teaching and advice).
This study found that the Canadian Asperger group was much more likely to describe their wisest approach as showing affection to others than the Pakistani Asperger group. Again, I see the positive aspect of theory of mind-based social skill training as the potential reason behind the wisest approach to show their affection to others within the Canadian Asperger group. In social group therapy people with AS learn how to show their affection through interacting and helping others (Webb, 2003; also see Feng et al., 2008). The Pakistani Asperger group lacks this kind of structural program due to inadequate funding or resources. I speculate that this social training might be the reason that the Canadian Asperger group assessed their wisest approach using the lens of affection.

The Pakistani Asperger group expressed their wisest approach to life through teaching and providing advice to others. However, it can be speculated that the Pakistani Asperger group was adapting their approach of teaching and providing advice through religion that emphasized teaching others for their benefit.

People in Pakistan seem to pay high regard to teachers (Khan, 2008). Many believe that whatever knowledge they possess is a tribute to their teachers. Islamic preachers can also be considered teachers, because they teach how to live a prosperous, ideal, and sin-free life. We have already discussed that Muhammad was seen by a majority of Pakistani participants as the wisest person in history. Muhammad can also be considered a teacher, as he taught his believers a philosophy to live sin-free in this worldly life, and he also successfully put his philosophy into practice. As mentioned earlier, religion is so prevalent in Pakistan (e.g., Khan, 2008) that I speculate that people with AS adapted their approach to teaching and giving advice to others through religion and also by emulating Muhammad’s life.
One common discovery among the studies of implicit theories of wisdom is that wisdom is often understood differently in different populations (e.g., Takahashi & Ide 2003; Valdez 1994; Levitt 1999). The next section focuses on these different conceptions of wisdom.

**The Concepts and Definitions of Wisdom:**

Clayton and Birren (1980), and Ardelt (2003) understand wisdom as the disposition of cognitive, reflective, and affection dimensions of human life. In the present study, the participants were asked to describe their own conceptions of wisdom. Consistent with Ardelt (2003), I found cognitive, reflective, and affective dimensions of wisdom in people’s conceptions of wisdom. However, I noticed two additional themes: (1) self-transcendence, and (2) teaching and advice. In the present study, the results found that people’s understandings of wisdom (including both the Asperger and control groups) dominantly circled around the element of cognition.

The majority of people with AS in Canada and Pakistan expressed their understanding of wisdom through the theme of cognition. The findings of this study are consistent with the findings of my previous study (Khan, 2008) in which I found that people in Pakistan (50 people from the general population) defined wisdom in relation to the attributes of problem solving and knowledge, and these attributes were included in the theme of cognition. However, the finding of my current study does not correlate with Valdez’s (1994) work, in which she interviewed 15 Hispanic-Americans to investigate their interpretations of wisdom. She found that their concept of wisdom highlighted spiritual and interpersonal dimensions, while de-emphasizing cognitive aspects.
Given the clinical nature of Asperger syndrome, we understand why interpersonal and spiritual aspects were not highlighted in their conception of wisdom, this is because: (1) people with AS lack social skills that are needed for interpersonal interactions and, (2) they understand concrete themes and spiritual aspects abstractly (Goodson & Edwin, 2012). This also connects back to their nominations for the wisest person; most named scientists. Recall the coding scheme of cognitive elements of wisdom that included problem solving as one of its items.

Wisdom is required in most parts of life. Studies found that psychological well-being is positively correlated with wisdom (e.g., Ardelt, 2003; Khan, 2008; Ferrari et al., 2011). Below, I discuss psychological well-being in detail.

**Psychological well-being:**

Quality of life (QoL) has been studied largely by developing conceptual models (Cummins, 2005). There are numerous indicators that represent QoL. For instance, interpersonal relationship, social inclusion, personal development, psychological well-being, rights, environment, family, recreation and leisure, and safety are common indicators of adult QoL (Verdugo et al., 2005). Whereas, physical, emotional, social, and school functioning are vital measures for children (Bastiaansen et al., 2004).

Considering the characteristics of people with Asperger syndrome, I explored four distinct scales to understand their psychological well-being: (1) satisfaction with life, (2) quality of life, (3) purpose in life, and (4) alienation. The study found that the two Asperger groups did not differ in any of the well-being scales. This provides evidence of universality in the aspects of well-being in those diagnosed with Asperger syndrome and confirms that culture does not
affect them. However, this study found that people with AS scored substantially lower on the quality of life inventory (QOLI) compared to the non-autistic control group.

Nota and colleagues (2003) suggested that there are differences in quality of life predictors across populations. This study found that people with AS were satisfied with their lives. There was no difference between Asperger and general populations on the satisfaction with life scale. It seems that people with Asperger syndrome who have accepted their conditions achieve an inner satisfaction. They have much joy in their lives and live with pleasure every day.

This study found that people with AS were alienated (less social) compared to non-autistics. However, a strong psychological well-being of people with AS also surfaced in their life narratives. They understood themselves well and considered themselves high achievers. One Pakistani individual with Asperger syndrome’s remark was noted that he thought that Asperger syndrome is part of human evolution and a time will come when the entire human species will become like people with AS. According to his point of view, non-autistic people have not yet reached the peak of human evolution. People with AS feel strongly that they are alienated and a low score on the scale of alienation does not impact their psychological well-being. This is very similar to the statement of Sinclair (1993)\textsuperscript{11}, who maintained that “we [non-autistics and people with AS] are both are alien to each other”. Temple Grandin once said “Much of the time I feel like an anthropologist on Mars” (Sacks, 1995: p. 295). It seems that we underestimate the abilities of people with AS because of their social disabilities. In fact, people with AS have many extraordinary qualities that need to be investigated more extensively.

Beyond the study: Policy matters and recommendations:

The current study found similarities and differences between people with AS living in two different countries. It was evident that culture matters for people with AS. For instance, Pakistanis with Asperger syndrome had the advantage of living with extended families which might have promoted a feeling of togetherness. The Canadian Asperger group benefited from the privilege of social group therapy based on the theory of mind (Baron-Cohen & Wheelwright, 2006) that may have enhanced their ability to socialize compared to the Pakistani Asperger group. It was also evident in some studies that social group therapy produced positive results in developing social skills in people with AS (e.g., Webb, 2003; Feng, et al., 2008). The Ontario provincial Government’s policy to help people with AS seems to be moving in a positive direction and it appears that it is worth the cost of implementing social group therapies.

This study found that people with AS scored lower on wisdom (assessed through the 3D-WS) and quality of life (assessed through the QOLI). Wisdom matters because it is often associated with quality of life (Ardelt, 1997, 1998). However, like theory of mind, wisdom can also be taught (Sternberg et al., 2009). Sternberg and colleagues’ (2009) model of teaching for wisdom is one of the best examples, in that it deals with life matters in a socially sensitive way. I believe teaching wisdom to people with Asperger syndrome will not only enhance their ability to deal with day-to-day matters, but it will also increase their quality of life. There is no government policy either in Pakistan or Canada to fund the instruction of wisdom; however, teaching theory of mind does enhance two aspects of wisdom (the reflective and affective dimensions of the 3D-WS).
The study also found that people with AS were as satisfied as non-autistics (assessed through the SWLS) with their lives. This is because they accept their condition, which is evident in this study. This acceptance allows them to lead satisfied lives, but the constrained nature of this acceptance becomes magnified when they go into the external world where demands are much higher. Teaching for wisdom may overcome this limitation, as wisdom promotes socialization, diminishes alienation, and increases well-being. However, a comprehensive program needs to be designed with this goal in mind. Indeed, the program could be developed using the 3D-WS to identify keystone abilities needed in teaching wisdom to people with Asperger syndrome. This study found that people with AS scored significantly lower on the affective and reflective dimension of wisdom. Teaching for wisdom could promote these two dimensions during group therapy to enhance these abilities. In addition, items from the quality of life inventory (QOLI) such as money management, community orientation, dealing with neighbours, and helping others might be included in teaching for wisdom group-therapy to provide the best strategies to live a better life within the resources one has in a community.

**Limitations of the study:**

This study was limited to male participants and excluded female participants for various reasons. For example, existing studies (e.g., Constantino & Charman, 2012; Fombonne, 2003) found autism is four times higher in male than female populations, largely because girls are less likely to be diagnosed unless they have prominent cognitive or behavioural issues. Within the given time limit for the doctoral study it was difficult to recruit female individuals with AS. Even if I could in Canada, it would not be easy to recruit female individuals with AS in Pakistan. Due
to social stigma in Pakistan, females are less likely to be diagnosed. This is because most marriages are arranged in Pakistan and it would be difficult for parents to find a groom if their daughter had a clinical diagnosis. People with AS, especially women, often live a normal life; their behaviours such as social withdrawal can be ignored in Pakistan as people label them innocent or shy. These labels are acceptable for parents as opposed to a clinical diagnosis.

In addition, the school system varies between Pakistan and Canada. In Canada, teachers sometimes identify problems in students and make arrangements to get a diagnosis, whereas Pakistani schools do not have this kind of system. These are the reasons it is extremely difficult to recruit females with AS. Thus, I excluded females with AS from my study.

This study recruited a small number of people with AS by posting an advertisement on the websites of various organizations. The recruitment advertisement was also posted at some of these organizations’ offices. But, due to social problems associated with AS, those diagnosed with the syndrome do not usually volunteer to participate in studies or to meet other people. This produced a small sample size. The study could only recruit 23 people with AS.

This small sample size prevented the computation of some inferential statistics between the groups. The small sample size in four groups included a maximum of 12 and a minimum of 11 participants in each group, lowering my analytic and methodological options.

The diagnosis of Asperger syndrome is universal, so, this study was designed to investigate whether their wisdom and identity are also universal. However, the study was limited to investigating people with AS in Canada and Pakistan. Within these two countries, the sampling was also limited to recruiting people with AS living in urban cosmopolitan cities: the
GTA in Canada and Karachi in Pakistan. I restricted my study to cities in two countries due to time and funding constraints.

There is a dearth of prior studies on the present topic. However, the wisdom of people with Asperger syndrome has never been investigated empirically. As a result, there was no direct study to follow or model. Instead, I used McAdams and Pals (2006) framework of personal identity and Ferrari and colleagues’ (2011) study to explore the wisdom and identity of people with Asperger syndrome.

The study used quantitative, self-reported information. The participants met with the interviewer only once and there was no test-retest method used. The reliability of the data was only determined through SPSS using the method of Chronbach’s alpha coefficient reliability. The qualitative data were gathered through interviews that challenged participant’s memory abilities on their past experiences of a particular question.

The Asperger group was matched with the general group only by age, but they may differ on other parameters such as IQ, adaptive behaviour skills, mental health, emotional intelligence, and family circumstances.

Wisdom is highly dependent on experience. The study cannot match the exact living experiences between the groups. Furthermore, within the Canadian Asperger group the experience of living independently enhances confidence, whereas the Pakistani Asperger group was living with immediate and extended family which could lead to dependency.
**Future Directions:**

This investigation employed a unique group of late adolescent and young adult participants, half of them were diagnosed with Asperger syndrome. My previous studies investigated wisdom and identity in Pakistan (2009) and Muslim and Jewish wisdom (2011) only in general populations. This is the first ever study that has been completed on wisdom and identity with populations diagnosed with Asperger syndrome with age-matched people form general populations. It is important to study this particular group in more detail. In addition, further research using matched samples of individuals with some other disabilities, including learning disabilities or Fragile X syndrome, for example, will assist in determining a profile specific to individuals with Asperger syndrome.

This research investigated only male participants and future research should include female participants. This will assist in seeing whether the profiles of male and female people with Asperger syndrome are the same when it comes to wisdom and identity.

This study compared participants from the two different countries. It is important for future studies to compare participants diagnosed with Asperger syndrome from many countries to have a broader understanding of their condition. It is also important for future studies to recruit a large sample that will assist in predicting many variables and may provide further generalization of findings across populations.

This study opens the ways for future researchers and professionals to consider people with Asperger syndrome’s needs differently and to help them work in ways that validate their identity and wisdom and allow them to lead successful lives.
Conclusion:
The study of identity and wisdom of people with AS may raise new questions, challenge assumptions, and develop new theoretical and empirical models which will open up debates within and across disciplines. This study will lead the way for future research investigating the concepts of identity and wisdom in more in-depth ways specifically attuned to culture and religion.

The diagnostic statistical manual of mental health creates a clinical identity for people with Asperger syndrome. Their clinical identity is considered universal. Through this study the researcher wanted to determine whether or not personal identity and wisdom remain the same between people with AS living in two countries. This study found that the two Asperger groups were not alike: culture affected their identity and their wisdom. The Canadian Asperger group scored significantly higher in their relational and social identities with a higher tendency of valuing the change, while the Pakistani Asperger group was higher in personal integrity. It was speculated that culture played a role in their identity differences. Their life narratives were also embedded within culture. An emphasis on the theme of communion was also found in the Pakistani Asperger group’s life narratives, again suggesting a cultural role in this aspect. This study also found that the overall wisdom-identity score (assessed though the 3D-WS) did not differ between the two Asperger groups, but the affective dimension might have a cultural link. This study indicated that people with AS differ in their personal identity and practical wisdom, for example, The Canadian AS group had a higher tendency of showing affection on the wisest action found in their narrative compared to the Pakistani AS group; and the Pakistani AS group
considered religious figures as the wisest in history, where as the Canadian AS group considered scientists.

Culture matters for the identity of people with Asperger syndrome. The culture in which they live is important in shaping their identity. Adapting to their cultural environment helps them to become accepted by the mainstream within their respective countries. This study found that people with AS gave a high priority to the value of conservation especially the aspect of conformity of the value of conservation. Their mean scores of conformity exceed those of non-autistics. The value of conformity is instrumental in the work place. This might be the reason Kanner (1971) found that, at work, people with autism were associated with positive job related attributes. This study also found that people with AS had a low profile on wisdom-identity (assessed through the 3D-WS), resulting in low scores on the quality of life inventory compared to non-autistics. However, their concept of wisdom revolved around the theme of cognition that was also typical for the non-autistic populations. Teaching for wisdom will help those with Asperger syndrome to progress towards the ideal of wisdom and by so doing, improve their quality of life.
References:


Appendix A

Interview Questions
(Wisdom & Identity)

Thank you very much for agreeing to do this interview for us. As you know we are going to be talking about wisdom & identity and what it means in people’s lives.

1. Please take a moment to check off attributes that you think describe you (Give list).
   a. The attributes that you think are central/unique to you (Circle)
   b. The attributes that you think are unique to you, and you feel pride while having this trait in your personality (Put P)
   c. Of all the attributes you have mentioned please name the most important attribute that you think without that trait it will be difficult for you to function in a normal way as you do (Put C)
   d. The attributes that others think are unique/innermost to you (Same list, put O)

2. Please take a moment to think of the major goals of your life. I also would like you to think that how would you achieve these goals?
   a. The goals of your personal growth
   b. The goals of your relationship including your family and friends
   c. The goals of your contribution to society

3. Now, I would like to ask you about yourself. Tell me a bit about yourself and your life story.
   a. What are some of the things you remember most about your childhood and your life?
   b. Of all the things you have mentioned (or perhaps something else comes to mind now), please pick three memories that you think were most important in helping make you the person you are today.
   c. Now, think of a difficult situation you have encountered in your life: How did you cope? Anything else you might have done?

4. Now that we have had a chance to talk about your personal life, I would like to ask you:
   d. “What is identity? What does identity mean to you?
   e. What is your identity?

5. Please take a moment to think of the wisest person you know in your own life.
   a. Who is this person?
   b. What makes [this person] so wise? (Why did you choose them?)
   c. What is one story you know about [this person], or one thing [this person] said or did that shows [this person] is wise?
   d. Can you think of a difficult situation they were in: How did they cope?
   e. What was wise about that?
      i. How could [this person] have been less wise?
      ii. What might some other person have said or done?
f. How did [this person] get to be so wise?
   i. How has [this person] affected your own life?
   ii. Is it possible for you to become more like [this person]?
      a) What would you need to do, or what would have to happen?
      b) What influences or circumstances would you need (perhaps beyond your control)?
      c) What about their teachers? Do you think their teachers helped them to become wise?

6. Now how about yourself. Please think of some times in your life when you were wise or approached being wise.
   a. What were those times?
   b. You have listed [these times]: Please tell me which of these times in your life you were the most wise?
   c. How were you wise? How would it have been unwise if you had been different?

7. Finally, please take a moment to think of the wisest person you can think of from history [someone who you have heard about, but never met].
   a. Who is this person?
   b. What makes [this person] so wise? (Why did you choose them?)
   c. What is one story you know about [this person], or one thing [this person] said or did that shows [this person] is wise?
   d. Can you think of a difficult situation they were in: How did they cope?
   e. What was wise about that?
      i. How could [this person] have been less wise?
      ii. What might some other person have said or done?
   f. How did [this person] get to be so wise?
      i. How has [this person] affected your own life?
      ii. Is it possible for you to become more like [this person]?
         a) What would you need to do, or what would have to happen?
         b) What influences or circumstances would you need (perhaps beyond your control)?

8. For my final question in this part of the interview, I would like to ask you again, now that we have had a chance to talk about it:
   a. “What is wisdom? What does wisdom mean to you?
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Appendix B
Demographic Characteristics

[Interviewer please insert country code and ID number.]

Country:
CITY:

Own name or pick a desired pseudonym of respondent:
NAME______________________

Date: __________/________/________ SURVEY DATE
MONTH     DAY       YEAR

Interviewer: ___________________________ INTVIEWER [Last name only]

Total duration of qualitative interview:
Start time     ____ hrs. ____ min.
Finish time    ____ hrs. ____ min.
TOTAL time     ____ hrs. ____ min.

Survey Questionnaire

This is the second part of our study. I am going to read a number of statements to you together with the potential answers. There are no “right” or “wrong” answers. Simply indicate the answer that describes YOU best. Although some of the statements and questions will appear similar, we would like to ask you to answer all of the questions. Again, remember that all your answers will remain confidential.

Demographic Characteristics

First, we would like to ask some questions about you as a person.

1. Gender:
   [Interviewer, please mark the right box.]
   GENDER
   1 [ ] Female
   2 [ ] Male

2. Are you a member of any ethnic group or people that you identify with?
   [Interviewer, if the answer is “no,” ask:]
   Would you consider yourself [name of majority group that is coded as “1”]
   [Interviewer, please mark the right box.]
   ETHNIC
   1 [ ]
   2 [ ]
   3 [ ]
   4 [ ] Other: __________________________

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12 Variable names are in capital letters, bold, and italics. Instructions for the interviewer are in brackets.
1. What is your highest level of education?

   **EDUCDEG**
   - 0 [] No high school
   - 2 [] High school degree or equivalent
   - 3 [] Some college
   - 4 [] Bachelor’s Degree or equivalent
   - 5 [] Masters Degree or equivalent
   - 6 [] Doctoral Degree or equivalent

2. How many years of schooling (including university education) do you have?

   **EDUCYEAR**
   - __________ years of schooling

3. What kind of work have you done most of your life? Please be specific: **OCCUPATION**

4. What kind of hobbies or skills (such as cooking, writing, sports) do you have that you are proud of? **HOBBY**

5. What is your current marital status?

   **MSTATUS**
   - 1 [] Never married
   - 2 [] Married
   - 3 [] Widowed
   - 4 [] Divorced
   - 5 [] Separated

6. Do you have children?:

   **CHILD**
   - yes 1 [] How many?: ______ **NCHILD**
   - no 0 []

7. What is your religious affiliation:

   **RELIGAFF**
   - ____________________________

8. On a scale from 0 to 10, how religious would you say you are?

   **RELIGDEG**
   - 0 1 2 3 4 5 6 7 8 9 10
   - ____________
   - Not at all    Very
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<td><strong>11. Where were you born?</strong></td>
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<td>Place of birth</td>
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<td><strong>12. Where did you live most of your life?</strong></td>
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<td><strong>LIVEPLCE</strong></td>
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<td><strong>13. May I ask what is your age:</strong></td>
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<td><strong>AGE</strong></td>
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Appendix C
Detailed examples of the theme of communion

Examples of theme of communion of Asperger people living in Pakistan:

1. Interview 1 (meaningful relationship): “I want to get married one day. Obviously everyone has to. It’s not a choice of mine but in this social context you have to understand that society will never accept you working on the greater plan, you see sometimes we have to function well in society and thereby we have to do things that all human beings do. You have to do it; it is a simple mathematical check. So yes I have to, I don’t have an option. Or else people will not take me as a credible person simply because I am changing the world”. (Pakistan Asperger)

Interview 1 (help and care): “Well, I think a long time ago, perhaps when I was eleven or twelve, my father was sick for a very long time and he couldn’t walk. At that time the age difference between me and my sister was eight years, so I had to take care of my family at a very young age”.

Interview 2 (meaningful relationship): “My goal is to get settled in life by getting married and then I’ll have to go live in the US because most of my family is already there. So, if I move there then my family can help me live there, as most of them are settled in the USA”.

Interview 2 (collective being): “I am a South Asian origin Pakistani man and that is my identity”.

Interview 3 (help and care): “I like to teach games, sports, art, and drawing to children with special needs”.

Interview 3 (meaningful relationship): “I want to get married when I am 30 years old. I want to get married with a girl studies in my class”.

Interview 4 (help and care): “I want to be a supporting figure for my family”.
Interview 4 (meaningful relationship): “My family goals are that my daughter gets a good education and grades. My mom and dad live with me and my wife will live with me forever. I hope that when my daughter grows up she will study abroad.”

Interview 5 (meaningful relationship): “The goals for my friends and my family are to keep on interacting socially and professionally with them and also to increase communication with them”.

Interview 5 (social being): “I am a social person ... I want to be known for all aspects of myself and my personal self, my work ethics and my work and even my sociability and my professionalism.”.

Interview 6 (help and care): “I would help people learn swimming, so that they can get medals”.

Interview 6 (collective being): “My identity is that I am a Muslim. I fast for the whole month of Ramadan. I help other people. I respect my elders”.

Interview 7 (meaningful relationship): “My goal for my family is to be friendly with them”.

Interview 7 (contribution to society): “As far as society is concerned, I will focus on the everyday needs of general populations”.

Interview 9 (help and care): “My aunt had a lot of computer problems such as her computer was not working, it was crashing, and messages were not being sent out. I helped her in solving those problems”.

Interview 9 (help and care): “One time I helped (my aunt) in photo editing. At that time I did not know about the Photoshop software, but I learnt it and helped her out”.

Interview 10 (help and care): “I also remember that I helped one child at school, he asked me to buy stuff for him and I bought for him”.

Interview 10 (help and care): “I will help them (friends) to work on their weaknesses and create a loving caring relationship with them”. 
**Interview 11 (help and care):** “I want to support my family financially and to help them in community”.

**Interview 11 (contribution to society):** “I want to give my society an understanding of politics and I would also like to motivate them to help each other. I also would like to educate them about how to save our society from corrupted politicians, and to avoid the corruption of society. This is possible through casting a vote for the person who has good plans to run the society, and the person should not be corrupt”.

**Examples of the theme of communion of Asperger people living in Canada**

**Interview 25 (help and care):** “My goals for family and friends are just to get along with them and to look after them, care for them and interact with them”.

**Interview 25 (contribution to society):** “Get good quality research in the topic I’m working on. I guess in general get better statistics from the courses I am taking”.

**Interview 26 (contribution to society):** “The only goal is that I want to work even more extra days and earn a few more hours”.

**Interview 28 (help and care):** “I used to help my mom when she needed it after my dad died”.

**Interview 28 (contribution to society):** “[I would like to] Give more money to charity to whom who work for animal’s welfare”.

**Interview 29 (help and care):** “There is a girl sitting behind in church starving and freezing, I gave her a coat from my back because I didn't need it. That girl now has become a passer herself and helps other in the same way. I practice not by words. She is now; because someone gave her help she is now helping others”.

**Interview 29 (contribution to society):** “To become a conservationist I hope to conserve the world for the next generation”.
Interview 31 (help and care): “When I was wise it is when I helped a person with Down syndrome”.

Interview 32 (meaningful relationship): “I would like to get a girlfriend eventually that’s a big goal.”

Interview 32 (collective being): “My personal interests are military and politics and education and stuff like that”.

Interview 33 (help and care): “I helped my friends sometimes”.

Interview 33 (meaningful relationship): “I want to go back to New York and see my girlfriend”.

Interview 34 (meaningful relationship): “[My goal is to] Look for a girlfriend and then get married and start a family”.

Interview 34 (contribution to society): “If I start a family I would probably try and get back to the community a little more, may be try to work with schools if I have children. I would try and help out schools”.

Interview 35 (help and care): “A lot of times when my parents were working and my brothers were sick I helped them get through it and get better”.

Interview 35 (contribution to society): “I do charity work and I try to give the most to society by doing volunteer work. I work with the Arthritis Society and Humber Region Hospital”.

Examples of the theme of communion for general people of Pakistan:

Interview 13 (collective being): “My identity is to follow the rules of Islam within the scope possible. Being a Muslim we have to follow Islamic rules and regulations, being a Pakistani we have to live in a certain way”.
Interview 13 (meaningful relationship): “The goal for my family is to fulfill all the basic requirements of life. The goal for my family is to raise my kids in a way that they learn many different languages. Kids are the key elements of one’s life”.

Interview 14 (help and care): “I am involved in social work activities, such as helping with the flood relief. In 2010 we had flood relief activities. Management activities were in everybody’s hands and everybody was thinking that they were working well even though the relief work was not going so good. So, I went to my supervisor and requested that he pay attention to that issue”.

Interview 14 (contribution to society): “I am a good citizen and live like a person who proves good for the society”.

Interview 15 (contribution to society): “The goal for my city and for the colony in which I live is to put a stop on racial ethnicity. As racial ethnicity divides people and this gives rise to clashes and violence among each other. If racial ethnicity will end then people will live more happily”.

Interview 15 (social being): “Among friends my identity is that of an enthusiastic and active person who tries to support other people in their time of need”.

Interview 16 (meaningful relationships): “I did not give as much time to my family members as they deserved. But, in the future I intend to live in a joint family and enjoy more time with my family members”.

Interview 16 (help and care): “Being a doctor my chief aim is to serve the humanity”.

Interview 17 (help and care): “I belong to Azad Kashmir our lands and properties were destroyed during the earthquake. So, my goal is to redevelop my family lands. As soon as I finish my studies I want to go back to my family and help my family”.

Interview 17 (collective being): “I am a teacher I got many chances to go abroad, but did not go as I feel I should serve my country”.
Interview 18 (help and care): “The goals for my family and friends are to be helpful and supportive to them and to be there in time of their needs and if I get power then I can facilitate them”.

Interview 18 (contribution to society): “My goal is to develop the civic sense among people. I want people to be united instead of dividing among small groups. I want people to disintegrate the differences. We should start thinking on the collective level, so that we can understand the purpose of our lives. If we will focus on God’s command instead of ourselves then His fear will prevent us from dishonesty and we will lead our lives according to His commandments and principles. We can create positivity among people by giving them knowledge and by collecting them on the same ground”.

Interview 19 (help and care): “I try to help other people as much as possible. My cousin was worried and depressed at one time, though I was working at that time, but supported him morally [over the phone]. I often use to visit and call him for moral support”.

Interview 19 (help and care): “My blind grandfather was having difficulty in his daily life activities; I used to sleep with him, so he could wake me up whenever he needed any help”.

Interview 20 (help and care): “I want to cooperate with my parents and give them happiness that they deserve and to be a helpful person for them”.

Interview 20 (meaningful relationship): “My goal for the family and friends is to keep them happy and take such steps that are in beneficial for the whole family”.

Interview 21 (help and care): “Helping my family in time of need is a very essential element of my life”.

Interview 21 (contribution to society): “We [Pakistani people] are behind the world because of our educational system. In our country [Pakistan] the educational system is divided into elite class, middle class, and poor social class. I want to change that and bring a system that is not based on these values and we should try to change the image of Pakistani people in the world”.
Interview 22 (help and care): “We were in a hostel there were gun firing and bullet shooting. Our senior political leaders asked us to stay in the hostel. But, staying in the hostel means putting our lives in risk. We broke a door on the back side of the hostel. We took a secret passage and went to a safe place. I tried and succeeded to save my life and helped three other people to escape from the hostel”.

Interview 22 (contribution to society):” I want to change only one thing and that is to introduce a medical insurance system in Pakistan, not like in the US, but like the NHS in the UK. The one thing that irritates me a lot is that when a patient comes to us and needs an MRI examination then we have to think carefully before letting patients know that they need an MRI exam. Because these tests are expensive and patients have to pay, this is very difficult for some of the patients. Similarly, sometimes patients need medicine and if it is expensive then we have to think carefully about whether or not we should ask patients to buy the medicine ... if an insurance system is introduced in Pakistan then we will not worry about whether patients can afford medical examinations or drugs ... so, that is why I would like to introduce this medical insurance system in Pakistan”.

Interview 23 (contribution to society): “The contribution that I would like to give to society is that I would like to go to the place where I was brought up like Karachi and make a state of the art institution in my field [physiotherapy] and the objective of that institution will be to provide a good service not to make profit”.

Interview 23 (help and care): “I am already helping my brother morally and financially”.

Interview 24 (help and care): “Right now, I am making a great difference in my friend’s life by supporting him emotionally and in other areas of his life.”.

Interview 24 (social being): “I am caring person and care other people’s needs. I understand and support them in their time of needs ... I love to socialize and like to interact with people. Family means a lot to me and I respect elders of my family”.
Examples of the theme of communion for general people of Canada:

**Interview 36 (collective being):** “I believe my ethnic background and that my people are known to be very proud [are significant aspects of my identity]. I am very proud to be Croatian”.

**Interview 36 (social being):** “I am a very social person, I like going for coffees, going for different outings ... I am proud to be friendly, I believe I am very friendly because I was brought up by a very loving and caring person in my family. This makes me who I am and that comes back to identity. Without my family I wouldn't be the person I am today”.

**Interview 37 (meaningful relationship):** “I would want to keep in touch with my family because as you get older you get away, but I would want to stay close to them, stay as one not split up”.

**Interview 37 (contribution to society):** “I would want to give back to society maybe designing buildings or build anything maybe big projects in the future and projects that would revolutionize and big buildings or offices”.

**Interview 38 (contribution to society):** “I want to help people in society and one of my goals is to go to Africa and build a school. The trip is very expensive, a couple thousand dollars, so maybe when I have my job then I will go and do that”.

**Interview 38 (social being):** “I help my friends. And that's my identity to make sure I'm there for my friends and I make sure I can support them ... Identity is something people know you for and I want to make sure people remember my identity as someone who is good and loving”.

**Interview 39 (help and care):** “I am an executive of my student’s council. We raise money for charity and help built wells in Africa and India. Our goal for this year is to raise 75000 dollars to charity. Last year we donated money for cancer and 100 percent of the money went to support people who have cancer”.

**Interview 39 (meaningful relationship):** “I haven’t been in touch with my father for seven or eight months. By the time I graduate I would like to be in touch with my family especially my father. He is not a very nice guy he has not done very nice things for my family for the last 17 years. I have to let him know which courses I am taking, he may choose to support me or not
that is his choice. I am living with my mother and my sister and hopefully I want to stay in touch with them because they have supported me for my whole life. I am deciding to move to waterloo it will be difficult, but I will manage. I will stay in touch with them they mean so much to me”.

**Interview 40 (meaningful relationship):** “My relationship with my family is okay and we have a bit distant right now. When I grow older and have a bit more money I would like to bond with them a bit more like my siblings. My siblings are very close to me and I would like to build my relationship with my father to whom I am having trouble communicating with”.

**Interview 40 (contribution to society):** “I would want to contribute to society it would be on a bigger scale like for a medical or political issue. I would like to help them on a grander scale”.

**Interview 41 (contribution to society):** “I think everyone has their own personal goals towards society. I want to be the best person I can and help society the best I can on a small scale for the people who I know and help the world on a smaller scale”.

**Interview 41 (social being):** “I think everyone has their own personal identity. Everyone is unique in a sense. My identity is I am respectful and loyal to my family and friends. That is what I think is my identity which is my family and that is my priority”.

**Interview 42 (help and care):** “Also my religion teaches me a lot about how to put faith in heart and how to treat people equally. And before I didn't care about anyone and now I am considering helping people because everyone is equal and we should help out each other we are like the neighbour”.

**Interview 42 (contribution to society):** “I would like to be an inventor and I would like to solve the global warming problem or global problems or computer problems. And I would make a new type of software that will be a good contribution to society and eventually that would help the entire world”.

**Interview 43 (help and care):** “A lot of times when people are drunk and a lot of times when girls have problems I try to help them”.
Interview 43 *(meaningful relationship)*: “I have a family of five and my goal is to provide my parents with a way for them to retire and I can make money for them”.

Interview 44 *(help and care)*: “In our religion we like to give back a lot. It is called Sava. We go to the temple and we help serve food to the public and we are told it cleans our sins away and I will continue to do that”.

Interview 44 *(meaningful relationship)*: “Family means everything, so I try to keep my family bonded”.

Interview 45 *(meaningful relationship)*: “Well, I have some problems with my girlfriend and I cannot take her medical issues and she has to get hospitalized. She went to hospital yesterday. It is an ongoing issue she gets sick every few months. I want her healthy”.

Interview 45 *(contribution to society)*: “I contributed to society when I was younger, but not now. I was involved in elections that sort of thing”.

Interview 46 *(contributing to society)*: “In terms of society, I would like to do things for habitat for society and I would like to get into the big brothers or big sisters program”.

Interview 46 *(social being)*: “I am a responsible person who is caring and trustworthy. I believe that I am a stable person whose actions and reactions do not cause many arguments, I would say that is mostly it. I have my social group”.
Appendix D

Detailed examples of the theme of agency

*Examples of the theme of agency for Asperger people of Pakistan:*

**Interview 1 (achievement/accomplishment):** “my goal now is to focus on one goal and achieve as much success, awareness, and power in my life as I can. Thereby, I am able to write books and guide the future generation so that they can also learn and become like I am.”.

**Interview 1 (personal development):** “I believe what happened is that in the last four years since I found out about Asperger Syndrome everything has changed completely, so my current personal growth is related to this condition. My current understanding is that autism and Asperger syndrome are a part of human evolution. A time will come when all of humanity will become as I am. Therefore the people in the next four hundred years, those who will achieve great things, great successes and winners of noble prizes will all have Asperger syndrome. There is diagnostic, medical, and scientific evidence for this claim. Actual winners have come forward and said ‘yes’ we have Asperger Syndrome. Thereby my understanding is that the people who have developed and have the knowledge know that they have Asperger Syndrome. We are in a way leaders and pioneers and beacons of life. A time will come when the entire human species will become like us, this is simply an evolutionary process”.

**Interview 2 (achievement/accomplishment):** “I used to drive in places that were empty, with barely any traffic and no signals, just on a smooth road I would go back and forth. That is where I first started driving. Then I started driving on the highway, which is about an hour drive. After that I started driving in the city. After one year of driving I was confident enough that I could drive anywhere at any time”.

**Interview 2 (achievement/accomplishment):** “I like playing baseball and other sports and sometimes I do really well playing these sports. A long time ago I also won a first place trophy. This was in Saudi Arabia. I had good experience playing baseball in my school that is why I got so good at it.”.
Interview 3 (achievement/accomplishment): “After I acquired some skills in swimming, I went to the Special Olympics games for Swimming and Relay competitions. I secured two gold medals for diving and Relay and one silver medal for back strokes”.

Interview 4 (achievement/accomplishment): “I was selected for the national team of the Special Olympics. I was very delighted to hear this news. So, then in 1995 I went to America and won two gold medals”.

Interview 5 (personal development): “The goals of my personal growth are to do hard work in whichever field I go into, specifically I want to become a medical doctor and increasing my hard work ethics. So, I have to work hard and achieve my goals”.

Interview 5 (achievement/accomplishment): “Yes, I had great experiences in my childhood. I went to private school and then when I finished middle school and high school I went to college”.

Interview 6 (achievement/accomplishment): “I am a sportsman and I won many medals in swimming and I also won a gold medal in swimming”.

Interview 6 (personal development): “I also remember that I went to swimming competitions and won medals at the Sindh Open Games. These medals were big things for me. They changed my life and since then I thought that I can do something impressive. Then I went to the office of Special Olympics of Pakistan, they offered me training classes. I learnt many sports over there including athletics, soccer, bocce ball, and swimming”.

Interview 7 (personal development): “I was an angry boy. So, in school my teacher helped me release my negative emotions. At that time, I used to become so angry that I felt like hitting people. I controlled my anger by hitting pillows instead of people. This is the skill that I learned to calm down in a cool and positive manner”.

Interview 7 (personal development): “When I entered into a school called Milestones one of the teachers Mr. X was a great helper in my studies. He helped me to focus on my abilities and because of him I learned the strategies to overcome the weaknesses of my personality. In that
school I got the chance to become a head boy and a prefect to my class. Hence, I developed a positive self-worth and I was happy.

**Interview 8 (achievement/accomplishment):** “[My personal achievements are] I have gained my diploma in electronics and I have also earned B. Tech degree”.

**Interview 8 (Individuality):** “Well, when I am doing an important job in life I do not quit until I get it done”.

**Interview 9 (personal development):** “My personal goals are mostly related to computers. I actually like to become a computer engineer, I like making computers. This is my main goal. For my health I want to be fit and I enjoy going to gym. I want to learn more about computers such as how computer works. And I will get training in the field of computers such as learning its functioning and management skills”.

**Interview 9 (Individuality):** “I am a much focused person. I concentrate when I am doing something I like to do without talking to any other person. Also my identity is to explore different technologies. I love to explore different technologies”.

**Interview 10 (personal development):** “Sometimes I had fights with other fellows. I started to solve this problem by staying calm and trying to make friends”.

**Interview 11 (achievement/accomplishment):** “As I have completed my masters in both Political Science and International Relations, so I have very good political thoughts”.

**Interview 11 (personal development):** “I learned from my brother that if you make a good and thoughtful decision then stay with it. I also learned from him that I should think many times before taking any action”.

**Interview 12 (achievement/accomplishment):** “I remember my school days when I was in DHA School, till grade 4 my grades were high and marks were good”.
**Interview 12 (personal development):** “I remember what my mother told me long time ago that to study and do homework properly and to complete your work on time and to tell the truth and not to tell a lie. So, I never tell a lie”.

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*Examples of the theme of agency for general people of Pakistan:*

**Interview 13 (personal development):** “When I started leaving behind my fun activities and started to concentrate on my studies. I was having difficulty managing both the fun and studies at the same time. I got good marks and went to engineering through my concentration and focus. I achieved my target that improved my personality.”

**Interview 13 (personal development):** “I started attending lectures through which my knowledge increased and I understood the social aspect of human mind and the importance of religion in our day to day lives”.

**Interview 14 (achievement/accomplishment):** “My mother had expectation that I will not get involved in wrong activities. So, I did fulfill her expectation and paid all my attention towards my studies”.

**Interview 15 (personal development):** “As far as practical life is concerned, my ultimate destination would be a chief financial officer within 5-10 years. My temporary goal is to get a position of assistant accountant”.

**Interview 16 (personal development):** “He [my father] taught me honesty mercifulness and he always advised me to be honest and spend money wisely, enjoy what I have, be contented with what God has given me, so in my heart a feeling of gratitude was developed”.

**Interview 16 (Individuality):** “I am a down to earth person. I do have traits such as honesty, simplicity and sincerity”.

**Interview 17 (personal development):** “I want to do a Ph. D. I am a self made man I have resources to do that”.
**Interview 18 (personal development):** “As far as short term goals are concerned my goal is to maintain the standards of quality of life”.

**Interview 19 (achievement/accomplishment):** “Soon after, I moved to the city of Karachi. At that time I was with the company of students who were not so good and I was not taking any interest in my studies, but I felt guilty so I started taking interest in my studies and after that I developed good study skills”.

**Interview 19 (personal development):** “My father bought me a car. He was financially not very sound, but I was insisting him to buy a car for me, he bought one for me. After 15 days it [car] was snatched. I felt resentful that I have not given my family anything and because of me they had such a big loss. My father did not say much to me. For me it was a turning point in my life. I started thinking positively and wanted to do something that my family would feel pride. Soon after, I moved to the city of Karachi. At that time I was with the company of not so good students and I was not taking any interest in my studies, but as I felt guilty, so I started taking interest in my studies and after that I developed good study skills”.

**Interview 20 (personal development):** “I want to do BBA”.

**Interview 21 (personal development):** “The goals of my personal growth is being a good human being and helping each other”.

**Interview 22 (personal development):** “Negative experiences and memories also help us grow and learn in our lives. This depends on the person, whether he grows in the positive direction or takes a negative route in life. My worst memory occurred on the 13th of January, 2005. My father retired on that day and my results from my first year of medical school came out. So, that was the happiest and the worst day of my life. Whoever I am today I think it is because of that day. From that day I learned that I should be prepared for the worst in life. And that one should be prepared for unexpected situations in life. Meeting with the challenges of life gives you a lot of strength and courage. Actually, my father did not voluntarily retire on that day. He was the victim of some sort of downsizing at the bank. My father was an honest person throughout in his life; he audited bank accounts very nicely and professionally. His professional
life was very clean, he never had any corruption issues, but due to downsizing he lost his job. This incident taught me a lot and I learned that if you do well to one person or an organization, never expect that other will do same to you. So, do not expect anything from anybody. This is a trait one should develop in one’s personality and this is what I learned from that day. I also learned that one should try to be autonomous and an autonomous man can make decisions and is more capable. I think I am going towards a direction where I will be an autonomous person. I will be a consultant in the future and work on my own. Nobody can hire or fire me”.

**Interview 23 (personal development):** “The goals that I have for my personal growth are in two directions and ultimately they both go the same way. And they overlap each other. The first goal is achieving more in physiotherapy. I am hoping that in my field [physiotherapy] I go on as a neuro-rehabilitation specialist. If somebody asks me what is my dream then I want to mention that I want to achieve a great name in neuro-rehab”.

**Interview 24 (individuality):** “I am a good student and I consider myself as someone with a sharp memory. I love to be involved sports and I am a good sportsman”.

**Examples of the theme of agency for Asperger people of Canada:**

**Interview 25 (personal development):** “I have one goal is to get the darn thing [Ph. D] finished”.

**Interview 25 (Individuality):** “I have one identity as a student, one as a teaching assistant, one identity as a person in my grocery store”.

**Interview 26 (achievement/accomplishment):** “A couple of weeks ago I had an interview at dairy queen and it was successful”.

**Interview 26 (personal development):** “I have one goal for my personal growth which is to continue to eat healthy and exercise”.

**Interview 27 (achievement/accomplishment):** “When I went to high school my marks were much higher”.

Interview 27 (Individuality): “I don’t really think about individuality much besides my looks and I have only thought about my looks”.

Interview 28 (personal development): “Learning about Asperger syndrome allowed me to change the bad things about me such as not being able to speak to a group of people and learning slower than others about new things. I overcame some of these issues with the help of my mom taking me to places like Kerry’s place and taking me to public places to make me more social and introducing me to experiences like fire safety, and how to be on a social network”.

Interview 28 (individuality): “My manners include being loyal and respectful, punctual and empathic—stuff like that makes me the way I am

Interview 29 (personal development): “I have learned to take joy in the simple pleasures rather than hope for what might be tomorrow; live each day like you’re living your last because we have no guarantee of tomorrow. For me, I think the greatest lesson I have learned is to remember the great joys that are there always appreciate each day to have a little joy so each day does not become miserable. Try and find a little joy each day so that you appreciate each day that you are on this earth not less”.

Interview 29 (personal development): “I learned to cope sometimes you have to bite your tongue rather than mouth off”.

Interview 30 (personal development): “I want to become successful and get a career in the field of robotics”.

Interview 30 (Individuality): “Everything in my life that I’ve gone through that I have motivation such as I have interest in science that is a part of my identity”.

Interview 31 (personal development): “My mom has never loved me so far as I can remember. She and my dad never gave anything or cared what I was thinking and that goes into my life and I carry it with me and then after a while I lost my spirituality and I ended up separating from church and then I came back and I went to a different kind of church. I connected with that church for 12 years and I became a very peaceful person”.
Interview 31 (personal development): “In high school I had about 400 suspensions in a year and that is more than anyone in the whole school. I got all these by punching and kicking. If someone just touched me lightly I would beat them up at that moment. And further down the road I went to Kerry’s place and the support workers helped me change around and it was good. I was not going to be rude anymore and I would be nice and go to the church. When I put all of this together I am a different person now”.

Interview 32 (achievement/accomplishment): “I know a lot about different things, I know a lot about the fire department. You can ask me anything about the fire apartment and I would tell you the information. I also know all about public buses, like what time they run.”

Interview 32 (personal development): “I learned how to do the laundry, how to mop the floor, how to do the dishes and how to do all these kind of things”.

Interview 33 (personal development): “What I learned from my girlfriend is if you want to say something then think before you say something and don’t use weapons”.

Interview 33 (achievement/accomplishment): “[My great achievements are] I took weight lifting classes. I was also on a floor hockey team, basketball team, a wrestling team, and indoor soccer”.

Interview 34 (achievement/accomplishment): “I would say my friend that I grew up with and his family have great impact on my life and made me who I am today. One of the things his sister had done with me was giving guitar lessons. Although I did not fully follow it, but, I am proud that I did take it”.

Interview 35 (achievement/accomplishment): “I used to go to science fairs when I was young and we used to do trivia and I was very much into those kinds of things. Then after that going to college and university and stuff like that would be positive achievements in my life”.

Interview 35 (achievement/accomplishment): “I went to the hospital and they helped me with my problems. I went to pursue courses and I did some summer courses and I was able to get my degree. I had some serious mental health issues.”
Examples of the theme of agency for general people of Canada:

Interview 36 (personal development): “The major goal of my life is to finish my university and then get my degree and diploma in Urban Planning and that is what I am currently doing I am enrolled within York University”.

Interview 37 (personal development): In terms of personal growth I would want to finish my studies in architecture and ideally I would want to become a successful architecture.

Interview 38 (personal development): “High school has been a great learning experience for me, I have become a leader, a role model and a lot of people look up to me and this is my passion”.

Interview 39 (personal development): “I've learned how to interact with people differently, also to decide and analyze between situations about what is right and what is wrong. Also to sacrifice stuff and there are luxuries in life that you don't need and he [my father] has taught me to how to treat people properly”.

Interview 40 (personal development): “My ultimate goal is to get into university then I can look for a job later”.

Interview 41 (achievement/accomplishment): “I remember when I got my first job it was an exciting job and it made me feel like an individual and it made me branch off from my parents giving me money. Now, I am earning my own money and spending it”.

Interview 42 (achievement/accomplishment): “I came back to Canada and it was very easy and I felt very powerful. After 6 years studying in Hong Kong my maths skill is much better than others in Canada. I am doing much better here in university and work very hard for a well paid job”.

Interview 43 (achievement/accomplishment): “For my physical sense when we lived in an apartment building I started lifting weights in the gym because there was nothing else to do. However, it wasn't organized. But, as I got older it defined me as who I am and people think of me as big. So, I want to keep working out”.
Interview 44 (personal development): “I've been charged for drinking and driving and I've learned from my mistakes and I've decided to never be in that kind of situation again. This event taught me that it is dangerous and I could put other’s life in danger including mine”.

Interview 45 (personal development): “Employment and money would be the goal. I want to finish a book in poetry. I have a whole stack of poetry”.

Interview 46 (achievement/accomplishment): “My job was a success and I ended up having my first girlfriend”.

Interview 46 (individuality): “I would like to think that my characteristics include being kind, honest, and hardworking”.