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A B S T R A C T

Maximization of wellbeing is the exceedingly targeted objective that conventional economics going forward. Keeping in view its central place, economists developed well-structured models and tools in order to measure and investigate wellbeing. In received literature, on the subject, various factors have been investigated that affecting wellbeing. However, wellbeing which is viewed from different approaches and is of a different form is not shaping equally with different types of factors. In this context, this study is an attempt to investigate how subjective wellbeing is affecting by social capital. The basic hypothesis is that “individual wellbeing moves parallel with its social capital”. The hypothesis is empirically tested using primary data set of 848 individuals collecting form Azad Jammu and Kashmir (Pakistan). The empirical estimates indicate that keeping other factors constant, an individual that embodied more social capital enjoy more wellbeing in their life.

JEL Classification: B24, I30, C43
Keywords: Social Capital, Wellbeing, Trust, Confirmatory Factor Analysis

1. INTRODUCTION

Hanifan (1916) was the first one whose formally define the term Social Capital as “Those tangible assets that count for most in the daily lives of people: namely good will, fellowship, sympathy and social intercourse among the individuals and families who make up a social unit”. Based on Hanifan (1916), recently a number of studies have investigated the response of social capital to the shaping of human behavior both at the
individual and societal level. However, with its dynamic nature generous understanding of the different levels of social capital is required to cope with its dynamic nature.

Considering its nature, in received literature at both levels social capital has been defined and analyzed. For instance, Bourdieu (1986), Burt (1992), and Lin (2001a) stated social capital at the individual level, while Coleman (1988, 1990) and Putnam (1993) describe it at the community and societal levels, respectively. While defining social capital at individual level Bourdieu (1986) defines social capital as “The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of which provides each of its members with the backing of the collectivity-owned capital, a “credential” which entitles them to credit, in the various senses of the word” (Bourdieu, 1986: 51). According to Burt (1992), who has extended the theory of the strength of weak ties (Granovetter, 1973), an entrepreneur with sparse social networks has better opportunities in business. Lin (2001a), as mentioned above, defines social capital as resources for actors. One of his examples makes the implication of his definition clear; in the status attainment process, an actor who has a tie with another actor of high status is more likely to get a higher status than one who does not have such a tie. In this example, a tie with an actor of a high status becomes social capital for a person who pursues a higher status.

Coleman (1988, 1990), in contrast, defines social capital at the mesa level. The social capital that increases the wellbeing of the parents of high school students from the above example exists between the parents. Coleman (1988: S98) emphasizes the mo level of social capital when he says, ‘social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspects of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure.’ The World Bank, a major player in the aid of developing countries through community development, adopts this definition. For example, the Social Capital Initiative, a working group in the World Bank, has reported the effects and causes of social capital at local levels in developing countries (Grootaert and Bastelaer, 2002).

The human wellbeing can be attained through social capital. It has been widely
discussed in the literature. Helliwell (2003 and 2004), along the lines of Aristotle and Durkheim, highlighted the significance of social capital in the wellbeing of human life. Judson (1916) explained the concept of social capital, as social and interpersonal connectedness that appears mutually beneficial in context. Hanifan idea of social capital is further developed by Bourdieu (2003). According to Bourdieu (2003), social capital is an amalgamation of the potential or actual resources that are based on the institutionalized connection between the classes and groups. The work of Bourdieu was extended by Putnam, who explains that the networks, social trusts, and norms as the determinants of the social firm, serves as the influence of collaboration and coordination for the purpose of mutual benefits.

Stutzer and Frey (2012), has explained the factors affecting satisfaction and wellbeing. They include; employment, income, health and social capital. It has been recognized, that the scholarly work related to the association between the subjective wellbeing and social capital, is scarce. However, the substantial literature on wellbeing is available, with respect to the social and societal support matters of wellbeing (Helliwell & Putnam, 2004, Winkelmann, 2009).

Social capital is the connectedness among people, their shared values and understanding to resolve public or personal problems in a network. It is ‘an individual’s personal network and elite institutional affiliations’ (Belliveau et al. 1996, p. 1572). A culture of trust and tolerance, in which extensive networks of voluntary associations emerge’ (Inglehart 1997, p. 188). According to Putnum social capital is ‘features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit’ (Putnam 1995, p. 67). It can be generated through various sources. Some studies found that if an individual performs a voluntary or social work, the outcome, an amount of social capital is generated which usually appears as rewarding (Meier & Stutzer, 2008). There is a long felt need for conducting more studies on the relatively less explored area of the social capital and its relationship with human

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wellbeing. Keeping in view the potential gaps in the received literature on the subject, the study contributes to the literature in two different ways. First, Subjective Wellbeing Index has been constructed in order to capture the response of unobservable factors in the shaping of human wellbeing. Second, empirical estimation has carried out in order to explore how social capital response to human wellbeing. The rest of the paper is organized as follows. The paper is organized as follows. Relevant literature on the subject is presented in section 2. Section 3 shows a methodology that covers analytical framework, definition, and construction of variables, data and data sources. Section 4 presents empirical findings and discussion. The study concludes with section 5 that presents the key findings of the study.

2. LITERATURE REVIEW

There exists abundant literature on the ideas, measuring human capital. The concepts behind the social, religious, cultural and spiritual are all not much discussed in the business of economics. Social capital is one of the most important attributes of communities and human capital has also certain attributes like individual, skills, knowledge, and qualification. Bowling Alone Putnam (20019) states that human capital can be specified to individuals, but for him, social capital can be related to a certain group of connections between individuals that shares the social networks and the norms of the mutuality that comes from them.

The interest of the researchers has now been increased more into the social capital theory, in recent times and this is because of the involvement of many different disciplines that are impacting the social capital through its application so widely. One of the most interesting features that the social capital share, is the fact that it integrates sociology and economics. It actually, combines a lot of ideas like civic tradition, norms, social engagement, trust, formal and informal interpersonal bonds and the cognitive activities done by the researchers in the current period (Claridge, 2004).

Bourdieu (1986) introduced the concept of social capital and further Coleman (1990) and Putnam (1993, 1995, 2000) worked on social capital there exists some disagreements on how social capital can be defined “Social capital can easily be
understood by a combination of norms, social support, trust that actually facilitates the coordination and cooperation among individuals within a community” (Putnam 1995d, Hombres at al (2011), Goryakin et al (2013). Internationally organizations have developed and create their own set of definitions over this terminology.

The idea behind social capitalist considered important in economics because of the inherent nature of connectedness among human beings. Individuals, by desire or by necessity, remain connected for different intended outcomes. Therefore, they align their capitals through social interactions within the communities, individuals, institutions and the organizations and also the state for a social network that generates social capital (Shah and Hamdani, 2006). OECD (2001) tells about the social capital as “Networks that work together to share their norms, understanding, and values that facilitate the cooperation within or outside groups.” The World Bank (1999) describes the social capitals as it’s an institution that builds a relationship through norms that actually shape the quality and quantity of the interactions of the family members, its peers, members within the community and locally confined institutions at the broadest level within the society. “Social Capital is not only the institution that is supposed to support any society but it also acts as a stick or gum that grips the society” (World Bank, 1999).

Harpham et al. (2002), states that social capital can be classified into cognitive and structural mechanisms. The other components that introduce social capital are bonding, linking, and bridging (Sreter and Woolcock (2004). Cognitive is one of the social capital that actually means ethics, value system and the religious belief while the other social capital that is known as structural social capital includes the social structure form primary to the density of the social relationships and the networks. It actually bonds the social capital in a relationship with the members of the network that share the similar demographics and the social characteristics that bridge the social capital referring in a relationship with heterogeneous people and linking social capital means the relationship between groups at different hierarchical levels.

Norman, (2000) discussed the social capital three indicators first one trust second is ease of cooperation and third is the network. The three families have different definitions and measurement methods. He concludes that all definitions and measures are
related and try to catch aspects of the same phenomenon.

Although there are many definitions of social capital, we follow Putnam (1995, 2000) defines the study of social capital in this research. Putman (2000, p. 19) further defines the social capital as the connections among the individuals that share the common social networks under the norms and values of the reciprocity and the trust that they actually give.” Social capital can also be measured at both the community and the individual level. Most researches show that social capital is based on the secondary analysis of the existing data sets.

There are some surveys that have developed their resources to capture social capital indicators. According to existing literature more than 13 government surveys identified in which social capital indicators are also included to capture the shared capital. Many different economists have deeply discussed the importance of social capital in many different ways and traits. The conclusion that Putnam (1995) shared has a very significant role and it leaves valuable effect in many different aspects of human life and improves the physical wellbeing of the human. These are very valuable and quantifiable effects that actually includes, reduction in crime rates (Halpern 1999, Putnam 1995), physical and mental wellbeing of the individual that is actually better health (Wilkinson, 2009; Hendryx et al, 2002), improved endurance (Putnam, 1995), high levels of the educational achievement (Coleman, 1988), higher income equality levels (Wilkinson 1996, Kawachi et al. 1997), improving child welfare (Cote and Healy, 2001; Gordon and Jordan, 1999), reducing corruption with effective and efficient government (Putnam, 1995; Kingston, 2005) and last but not the least improved levels of the economic target and its achievement through increased level of trust and lower level of transaction cost (Fukuyama, 1995).

studies that actually have a positive influence on the social capital of general life satisfaction at the level of the individual and in terms of many other sources and in different forms. For this purpose, Putnam (2000) did this study on US data, Helliwell and Barrington-Leigh, in 2010 for Canada, Leung et al., also in 2010, did this study for Canada.

Helliwell and Andrés Rodríguez-Pose & Viola von Berlepsch Social Capital and Individual Happiness in Europe Putnam, 2004, p. 1437 refer the social capital as one of the “Healthiest questions that associates wellbeing”. Furthermore (Helliwell and Barrington-Leigh, 2010, p. 15) discussed the economic difference as the most important when explaining the differences in life. The scholars pointed this out that the social capital has a very indirect effect on the wellbeing of the individual while focusing primarily on the relationship with wealth, health and economic growth. Like Helliwell and Putnam (2004) gives a very strong concept by identifying the positive effects on the health and wellness of human being that in turn also increases life satisfaction. Helliwell and Putnam (2004) suggest a strong driving force behind it by increasing the economic growth that can absorb external shocks in a much better way. Helliwell and Barrington-Leigh (2010) and Winkelmann (2009) also discussed and explain the predictor for the wellness of human being by using the Canadian and German micro-data.

However, the review of literature tells the cumulative data across the country that is away from consistency. On the other hand, Bjørnskov (2003) puts more emphasizes on a strong and healthy sort of relationship among the happiness and the social capital. He actually figures it out in the northern European countries that higher the levels of social capital more is it leads to economic growth, greater wellbeing and the stability of the individual. Many similar findings are found by Helliwell and Putnam (2004) while evaluating the dataset worldwide and Helliwell et al. (2011) also report that the variables in the social context explain approx. 73.4% of the variation across the country to the subject of wellbeing. On the other side, Ram (2010) finds out a very weak connection between social capital and happiness if it exists.

Helliwell and Putnam analysed that the Social Capital is very strongly linked through many independent channels to the idiosyncratic of the wellbeing of the individual
like in several different forms like Marriage and family, commitment and responsibilities, workplace duties, civic appointments (both one to one and group), trustworthiness and faith that all appear independently and actively relating the happiness and life satisfaction, both in terms of direct and through the overall impact of it on health” (2005, p. 455).

It is believed that the wellbeing of the individual does not depend necessarily on monetary wealth. Governments and societies also seek economic growth but increasingly are more concerned with the natural and social environments (OECD, 2001). Sjoerd and Sjak (2004) develop a model that is designed on the growth of social capital and did testing of it by using the data from the European Value Studies (EVS). Putman creates a distinction that bonds and creates the bridge between the social capitals to the model social capital while participating in the two types of social networks. Firstly, closed networks of the family and friends and secondly, it opens the network bridging it to different communities. Agents do have certain references while socializing that is a trade-off against materialistic wellbeing of the individual. It is very time consuming when you participate in socially and also when it comes to the cost of participation in the formal economic sphere within the working time.

Additionally, participating in intercommunity networks reduces the incentives for approaching and they rent dishonestly. Through a proper channel like this, social capital can raise the level and enhancement of economic growth. While testing model researchers find different regional differences in the materialistic behaviour of the attached values like family life that significantly reduces the participation in the open networks that in turn reduces the regional output growth in Europe. The social activities have actually reduced the corruption and crime rates have dropped in the local areas as soon as the level of participation has increased in community-based activities. The reason behind the participation in the local organizations increases the opportunities of the social interaction that in turn enhances the ability of the community to work together providing solutions to the local problems like noticing the common values and also provide the control socially in an informal way so that it helps to reduce the local crimes and increase the community’s ability to achieve the levels of public safety in a more improved way.
Helliwell (2006) shares the summary of its empirical research on certain determinants that relates to the individual’s wellbeing. Results have also been suggested from the national and international samples that actually measure the social capital that measures the specific and general trust having substantial effects on the wellbeing of the ones that moves along with the economic channels. Stutzer and Frey (2012), focus on four factors that have its determinants extracting from the deep literature of happiness and satisfaction in economics like income, social capital, health, and employment. Winkelmann (2006) have also taken the data from the German socio-economic panel from 1994-2004 and it actually analysed that the social capital actually has a very significant and positive effect on the wellbeing of the individual. After doing research more deeply he revealed that it’s good to have more influence on social capital as it is associated with the wellness of human beings.

Takahashi et al. (2011) explained social capital in two types as structural and cognitive. The structural social capital shares tangible network while cognitive social capital is nontangible that is actually measured through the individual’s perceptions and connectedness within their community. They developed a questionnaire to collect data on life satisfaction and social capital. They found in their study structural social capital one component amount within the group that denotes the individual from where it belongs significantly effect on their life satisfaction. Individuals who joined more groups, their life satisfaction are high than others. Furthermore, they found a life satisfying positive effect in social reticulation from their analysis.

Kiani (2012) investigated the factors that are affecting wellbeing or happiness among Iranian family. He collected data through the questionnaire in 2011-2012 and sample size was 350. He analyzed that job nature, age; social capital and income have a significant effect on happiness or self-satisfaction. Rodríguez and Berlepsch (2012) explored that there exists a relationship between the social capital and the self-satisfaction within Europe as a whole and also in four of its main geographical macro-regions that are north, east, west and south. They test the hypothesis before applying that whether the social capital can be defined on the terms of certain characteristics Coleman (1988) that is trust, norms, social interaction and sanctions that influences the individual’s satisfaction
across the European countries and regions.

The concept of social capital is further clarified by incorporating variables defined by Putman (1993) and Olson (1982) on associational activity. The regression analysis is being done on data of 48,583 individuals selected from 25 European countries that actually are able to find some important findings. Firstly, social capital matters a lot for happiness across the three dimensions that have been considered. Secondly, the drivers that effect the social capital on happiness appears to be more in an informal way of social interaction gaining general social and trust of the institutions.

Whether social capital has any influence on social interactions, norms and values, trust, and the sanctions on individual satisfaction is another point of consideration in economic and sociological literature. Rodríguez and Berlepsch (2012) explored the relationship between all these variables in Europe as well as in four of its main geographical macros-regions like north, west, east and south individually. They have tested the hypothesis that whether the threefold definition is applicable to social capital designed by Coleman (1988) that is trusted, norms, social interaction and sanctions influence that satisfies the individual across European countries and regions.

A remarkable work seems to have been done on the concept of social capital by Coleman (1988), Takahashi et al (2011) and Rodríguez and Berlepsch (2012). It has been further enhanced by the incorporation of types of variables Putman (1993) and Olson (1982) on such associational activity. They use the ordinal scale of logistic regression analysis of the data of individuals 48,583 from the 25 different European countries as they have found some important findings. First is the social capital that matters for happiness across the three dimensions that are being considered. Second, are the main drivers that affect the social capital on happiness that appears to be an informal way of socially interacting and also the general social as well as establishing trust of the institution. Helliwell, Huang, and Wang (2014) analysis give some suggestions like social capital has shown some improved subjective of wellbeing as during the period of economic crisis, both through direct and indirect ways of justifying the impact that gives rise to unemployment. Mostly the broader measure of social capital is the most productive way to reduce unemployment.
Matsushima and Matsunaga (2015) empirically examine how social capital effects on wellbeing by using the JGS (Japan General Survey) in 2010. It shows the impactful result of their study supports the significant relationship between social capital indicators and subjective wellbeing. They found that social capital overall positively correlates to subjective wellbeing it further reveals that trust and volunteering have a positive relationship to one’s subjective wellbeing. Jakub and Katarzyna (2010) discussed the distinct dimensions that clearly identify the social capital (that bridges and bonds the social capital) and the performances that the individuals require subjective of the wellbeing and earning. The first step would be to build a theoretical model that describes the dynamics of the formation of social capital. The second stage would be to derive testable steady state that gives predictions from the model and the third would be to test these predictions out with the real data. They have used primary data set form the program i.e “Polish Diagnosis” and suggests that, bridging the social capital have a very positive and significant effect to the earning in Poland and negative effects suggest that bonding social capital effects earning. The bridging of social capital increases the subjective of wellbeing in Poland. Researchers have also found the inverse relation that is U shaped both in case of bridging and bonding social capital.

Helliwell, Huang & Wang 2016 used data of three large international surveys and presented new estimates of the key parameters required to measure the wealth-equivalent value of social trust. The main sources are three large international surveys that have in some or all of their survey rounds asked the social trust question. These include the Gallup World Poll (in which the social trust question was only asked in most countries for only a single year, usually 2009), six waves of the biennial European Social Survey (2002 through 2012), and six waves of the World Values Survey (covering 1981-2014). Their study results suggest a fresh set of links between trust and inequality. Individuals who are subject to discrimination, ill-health or unemployment are typically concentrated towards the lower end of any national distribution of happiness. Thus the resilience-increasing feature of social trust reduces well-being inequality by channeling the largest benefits to those at the low end of the well-being distribution.

Layard and Donnell (2015) suggest that governments should develop new
methods of analysis where happiness is taken as the measure of benefit. Even with existing knowledge, such an approach suggests new policy priorities. It would include much more detailed models of the life-course, such as those being developed by members of the OECD’s Consortium for Modeling Wellbeing over the Life-Course. It will also require many more properly controlled experiments. At the moment much policy is based on little more than a hunch. According to them, the goal of governments should be to increase the happiness of the people and, especially, to reduce misery. Where willingness to pay is not a feasible measure of benefit, governments should develop new methods of policy analysis based on happiness as the measure of benefit.

Frank, Hou, and Schellenberg (2015) study compares life satisfaction among recent immigrants in Canada with life satisfaction in their country of origin and with the Canadian-born population and affords an evaluation of the role that national-level economic and social factors play in immigrants’ life satisfaction. The results of their study indicate that most immigrant groups have higher life satisfaction than their source-country counterparts. The majority of immigrant groups examined also have life satisfaction scores similar to those of the native-born population, a finding that indicates that national-level conditions matter for immigrants’ life satisfaction.

Hamilton, Helliwell, and Woolcock (2016) used social trust data from 132 nations, they present a range of estimates of social trust's wealth-equivalent values. The estimates of the wealth personified in social capital are very large, and with a structure and distribution quite different from those for physical capital. These estimates reflect values above and beyond what social trust contributes to supporting incomes and health. Although social trust is an important component of total wealth in all regions and country groupings, there are nonetheless big variations within and among regions, ranging from as low as 12% of total wealth in Latin America to 28% in the OECD.

Lucchini, Bella, and Crivelli (2015) explored the causal relationship between social capital indicators to life satisfaction using linear panel data models (fixed-effects, random effects) on data coming from 12 waves (1999-2012) of Swiss Household Panel (SHP). The positive association between indicators of social capital - particularly trust with people, friendships, participation in voluntary associations - and life satisfaction has
been widely proven in the literature although most of these studies adopt standard regression models and cross-sectional data leading to the spurious conclusion. Their study also suggests that informal relationships and trust are the most important social capital indicators in terms of their effects on life satisfaction.

According to OECD (2017) report Trust, co-operative norms and political, institutional and legal arrangements can contribute to the well-being outcomes in several ways. They can; reduce transaction costs and improve economic performance, promote the efficient allocation of resources and influence quality of life and human capital formation. People living in higher-trust and more co-operative communities tend to be happier. “Although there are many factors that influence well-being, one factor emerges again and again like a particularly strong influence. The “secret” to “happiness”—such that there is one may be high quality social relationships. Humans are fundamentally social animals. We live together in romantic relationships, family groups, neighborhoods, and communities. Our relationships can be a source of support, a source of identity, and a source of fun. The research case for the importance of quality relationships is strong. For example, Diener and Seligman (2002) examined the qualities that differentiate the happiest and less happy people. They discovered that it was not gender, or socio-economic status, but close friends that distinguished these two groups. Similarly, in a study of social support in Iran, Jordan, and the United States, Brannan and colleagues (2013) found that social support from friends and family members was linked to satisfaction and positive moods” Global Happiness Policy Report 2018.

3. RESEARCH METHODOLOGY

We approach methodology in four subsections. Section 3.1 presents the analytical framework, section 3.2 illustrates the definition and construction of variables under consideration, whereas section 3.3 shows data and data sources.

3.1. Analytical Framework

In order to analyze the relationship between dependent and independent variables, a conceptual model based on human wellbeing indicators as dependent variables and independent variables adopting the following specifications.
Figure 1: Conceptual Model of Human Wellbeing

Figure 1 presents the conceptual framework model which shows how different variables response to human wellbeing. The four core conventional variables are income, health, education, and household size which have expected positive sign. Social capital which is a variable of interest in this study social capital which is the composite index of five different variables presented in a box (se1 to se5).

3.2. Definition and Construction of Variables

Subjective Wellbeing

We follow contemporary literature (Gundelach and Kreiner 2004; Stanca 2010; Veenhoven and Ehrhardt 1995; Hamdani 2004) in analyzing the four dominant indicators of SWB: life satisfaction from income, health, education, and worship using confirmatory factor analysis.

Social Capital

The explaining variable, on which this paper focuses, is social capital. To quote James Coleman (1988), social capital “is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure” (p. 16). Hence, social capital itself is not directly
observable, but rather a latent concept and summarizing term for various dimensions. Putnam (1995, 2000) mainly identifies trust, networks, and norms within a society as the important features of social capital. The influence of some of these facets on subjective wellbeing was corroborated among others by Helliwell and Putnam (2004), Winkelmann (2009) and Hudson (2006). We construct a social capital index using 5 indicators (trust on others, trust on people in lending and borrowing, trust on the institution, the help of others, and work with the team) through confirmatory factor analysis.

**Additional Determinants of Subjective Wellbeing**

The literature on wellbeing shows that health has a statistically significant impact on subjective wellbeing (Borooah 2006). Hence, a health indicator is included in the following analyses. Again a variable from the Divine economics survey is used within the model, namely the average score for the question “Describe your state of health during past three months” measured on a 1–3 scale (1 Poor, 2 Normal, 3 Good). Moreover, economic indicators are considered in the estimations. Household income monthly in (Rs) is included as an indicator for income to control for the monetary effect on wellbeing in developed states (Bjørnskov 2008; Stevenson and Wolfers 2008). Household income is chosen instead of the conventional indicator GDP p.c. as it is shown to better cover the material living standard of citizens (Stiglitz et al. 2009).

**Education**

Education plays an important role in many aspects of people’s lives. Education affects the human or individuals, social, civic and religious perceptions being (Hayward, Pannozzo and Colman 2005). Clark (1996) indicates that a higher level of education leads to the higher expectation which in turn lead to high level of self-satisfaction or wellbeing and performance. It is likely to affect human wellbeing level. Data on education is used as a number of educational years completed so far. According to previous studies education has been reported a strong determinant of wellbeing.

**Household**

This variable represents basically the characteristics of the household. Change in these variables likely to affect the wellbeing of the individuals. On the prior, we expect that household size may affect the wellbeing of the individual. In the present study, we
capture household size in the continuous form. The earlier studies indicate that large household size negatively affects the individual wellbeing. Having more children seems to have an adverse or specifically negative impact on the level of wellbeing (Clark and Oswald, 1994). Following table 1 presents an explanation of variables under consideration.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Variable Explanations</th>
<th>Values of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Income</td>
<td>Satisfaction from Income</td>
<td>1=Totally Unsatisfied, 2=Unsatisfied, 3=Mixed, 4=Satisfied, 5=Totally Satisfied</td>
</tr>
<tr>
<td>S. Health</td>
<td>Satisfaction from Health</td>
<td>1=Totally unsatisfied, 2=Unsatisfied, 3=Mixed, 4=Satisfied, 5=Totally Satisfied</td>
</tr>
<tr>
<td>S. Education</td>
<td>Satisfaction from Education</td>
<td>1=Totally unsatisfied, 2=Unsatisfied, 3=Mixed, 4=Satisfied, 5=Totally Satisfied</td>
</tr>
<tr>
<td>S. Worship</td>
<td>Satisfaction from Worship</td>
<td>1=Totally unsatisfied, 2=Unsatisfied, 3=Mixed, 4=Satisfied, 5=Totally Satisfied</td>
</tr>
<tr>
<td>H. Hsize</td>
<td>Household Size</td>
<td>In numbers</td>
</tr>
<tr>
<td>Health</td>
<td>Health of Respondent</td>
<td>1=Very poor, 2=Poor, 3=Mixed, 4=Good, 5=Very good</td>
</tr>
<tr>
<td>LB income</td>
<td>Basic Income (In month)</td>
<td>In rupees</td>
</tr>
<tr>
<td>Gen Edu</td>
<td>General Education</td>
<td>1=Illiterate, 2=Below primary, 3=Primary, 4=Middle, 5=Matric, 5.1=Matric_PTC, 6=Intermediate, 6.1=Intermediate CT, 7=Bachelor, 7.1=Bachelor_B.Ed, 8=Masters/Professional, 8.1=Masters_M.Ed, 9=M.Phil, 10=PhD, 11=Others</td>
</tr>
<tr>
<td>SC1</td>
<td>Respondent considers that people can be trusted</td>
<td>1=No 2=very little 3=to some extent 4=Too much extent 5=Completely</td>
</tr>
<tr>
<td>SC2</td>
<td>Respondent considers that people trust each other for lending and borrowing loans</td>
<td>1=No 2=very little 3=to some extent 4=Too much extent 5=Completely</td>
</tr>
<tr>
<td>SC3</td>
<td>Respondent trust on institutions (Judiciary/police/administration)</td>
<td>1=No 2=very little 3=to some extent 4=Too much extent 5=Completely</td>
</tr>
<tr>
<td>SC4</td>
<td>Respondent performs his colleague tasks voluntarily when needed</td>
<td>1=Never, 2=Rare, 3=Sometimes, 4=Often, 5=Always</td>
</tr>
<tr>
<td>SC5</td>
<td>Respondent prefer to work in a team</td>
<td>1=Never, 2=Rare, 3=Sometimes, 4=Often, 5=Always</td>
</tr>
</tbody>
</table>

3.3. Data and Data Sources

The present study demands a multidimensional data about social capital and
wellbeing of people. Unfortunately, the available datasets on conventional economics provide data on economic, demographic and other aspects of material life. There exist some data sets which include religious or spiritual data, but that provides only limited information which is related only partly to the present study. Moreover, none of such data sets provide about the area of the present study i.e. Azad Jammu & Kashmir. Therefore, the resort was to collect primary data for the purpose. Collecting primary data was a big challenge for the study. A huge financial and human resource was required. Moreover, conceiving and developing the survey questionnaire for unique research, training the enumerators, conducting the fieldwork and processing the data was a time demanding task that was beyond the scope of an individual researcher. Therefore, the University created a special module relating to the special aspects of this study into its one of the surveys, Divine Economics Survey – 2013 [DES-2013 for short]. The author, being part of the DES-2013, conducted the field survey of households in Azad Jammu & Kashmir.

We used stratified purposive sampling technique for collecting data on different aspects of the study, including religiosity, a spirituality which is traditionally considered as non-economic variables while are essential parts of Divine Economics. Data was collected from five districts of Azad Jammu and Kashmir including Bagh, Muzaffarabad, Hattian, Sudhnoti, and Poonch. Total of 851 respondents was interviewed during the field survey in winter 2013.

4. RESULTS AND DISCUSSION

4.1. Confirmatory Factor Analysis

We conducted the confirmatory factor analysis (CFA) using Structural equation modeling. The reason for using CFA instead of exploratory factor analysis (EFA) is that all the measures used in this study are well-established instruments for measuring the constructs conceptualized in this study. All these measures have shown good reliability and discriminant validity in previous studies. CFA is used for analyzing the fit of proposed measurement models. Prior to this, the data cleaning process was carried.

Confirmatory factor analysis is mostly used in social research to measure the understanding of the researcher’s hypothesis and the items of his survey questionnaire to
support its variables used in the hypothesis. The main objective of confirmatory factor analysis is to test the data fitness and validity with other psychometric characteristics in accordance with the hypothesis of the variable model. A Confirmatory Factor Analysis (CFA) is conducted to examine the goodness-fit of the measurement model for belief factors. All Figures show the factor loading of each item used in the scale. Statistical software Smart PLS is used for the structural modeling analysis. The items loading for the items of the factors, every item loading is >0.50, minimum criteria about the loading is >0.40. It is done to know the convergent validity of the scale items.

![Confirmatory Factor Analysis for Wellbeing and Social Capital](image)

**Figure 2. Confirmatory Factor Analysis for Wellbeing and Social Capital (N=847)**

| Table 2. Factor Loading of Wellbeing and Social Capital (N=847) |
|-----------------|-----------------|-----------------|-----------------|
| Items           | Wellbeing       | Social Capital  | Decision        |
| S.Worship.1     | 0.58            |                 |                 |
| S.Income.2      | 0.77            |                 |                 |
| S.Health.3      | 0.44            |                 |                 |
| S.Edu.4         | 0.68            |                 |                 |
| S.Worship       |                 |                 |                 |
| S.Income.2      | 0.59            | 0.48            | Included        |
| S.Health.3      | 0.48            | 0.48            |                 |
| S.Edu.4         | 0.48            | 0.57            |                 |
| SC.5            | 0.64            |                 |                 |
The above table 2 depicts the standardized estimates and including or excluding of items in its CFA. According to (Cua et al., 2001) a construct having the factor loadings above 0.4 are considered as a practically significant construct. For items of WB and SC haves factor loadings above 0.4, so that all these items were included in the questionnaire for the final survey and are practically significant.

4.2. Structural Model Assessment

The structural model assesses the relationship between exogenous and endogenous latent variables through evaluating R² value, i.e. the coefficient of determination (Hair et al., 2012) and also β value, i.e. path coefficients of the model (Chin, 1998). R² corresponds to the degree of explained variance of endogenous latent variables (Akter, Ambra, & Ray, 2011) while β indicates the strength of an effect of variables to endogenous latent variables (Lleras, 2005). According to Cohen (1992) r² square value .12 or below indicate low, between .13 to .25 values indicate medium, .26 or above and above values indicate high effect size.

![Figure 3. Structural Regression Model Results](image)

The above figure 3 shows the R² of each variable. Since R² value for each variable is >0.20 which is greater than the suggested value, the model is considered to have a substantial degree of explained variance of wellbeing by inhibiting factors.
According to the above analysis the R2 value of wellbeing is $R^2 = 0.248$, $\text{Adj R2} = 0.244$.

**Path Analysis**

The next step is assessing the path coefficient of all latent variables (paths) by comparing $\beta$ values among all the paths. The highest $\beta$ value symbolizes the strongest effect of predictor (exogenous) latent variable towards the dependent (endogenous) latent variable (Aibinu & Al-Lawati, 2010). However, $\beta$ value has to be tested for its significance level through t-value test. The test is achieved by performing a non parametric bootstrapping technique (Chin, 1998; Davison & Hinkley, 1997; Efron & Tibshirani, 1993). Bootstrapping technique computes t-value by creating pre specified number of samples. Hair et al. (2003) suggested that acceptable t-values for a two-tailed test is 1.65 (significance level = 10 percent), 1.96 (significance level = 5 percent), and 2.58 (significance level = 1 percent). In this study, bootstrapping generated 5000 samples and these samples are used to compute t-values as presented in the following figure 4.

![Figure 4: T-Values of Path Analysis](image-url)
Results presented in figure 4 demonstrate that all the paths attained t-value is higher than the cut-off point for a significance level of 1 percent, that is, 2.58. This implies that all the paths in the model have a strong effect on wellbeing. The t-value of SC = 3.716, for related factors. This most significant construct (the group of factors) influences critically in affecting wellbeing. In this model, four control variables (general education, household size, health and Log of basic income) were introduced to check the impact on the WB. The above analysis indicates that the control variable has a significant impact on wellbeing.

| Table 3: Coefficients, Mean, STDEV, T-Values, P-Values |
|----------------|----------------|----------------|----------------|----------------|----------------|
| SC -> WB       | 0.345           | 0.379           | 0.095           | 3.635           | 0.000          |
| l.Bincom -> WB | 0.189           | 0.179           | 0.053           | 3.577           | 0.000          |
| G.Edu -> WB    | 0.388           | 0.379           | 0.057           | 6.755           | 0.000          |
| Health -> WB   | 0.142           | 0.140           | 0.066           | 2.139           | 0.033          |
| HHsize -> WB   | -0.092          | -0.092          | 0.042           | 2.167           | 0.031          |

| Table 4: Decision Table |
|-------------------------|----------------|----------------|
| Alternative Hypothesis  | Statement                  | Accepted/Rejected |
| H₁₁                     | Social capital has a positive impact on wellbeing. | Accepted          |
| H₁₂                     | Income has a positive impact on wellbeing.        | Accepted          |
| H₁₃                     | General Education has a positive impact on wellbeing. | Accepted          |
| H₁₄                     | Health has a positive impact on wellbeing.         | Accepted          |
| H₁₅                     | Household size has a negative impact on wellbeing. | Accepted          |

The fit indices for the SR model were acceptable. The control variables and SC had a significant effect on the dependent variable in the study.

Results Discussion

Results in tables 3 and 4 indicate that social capital (Trust, Cooperation and Voluntary work) contributes expressively to the level of subjective wellbeing. Social capital, as it is used frequently in current social science, refers to the impact of networks on individuals and the community. (Putnam 1993, 2000), wellbeing depends much on
personal relationships, for example, the quantity and quality of social relations that people have with family, friends, workmates and fellow community members. If these relationships, often referred to as social capital, are good, people experience high wellbeing (Meier and Stutzer, 2008). Given the importance of social relations for wellbeing, changes in their quality have been argued to drive long term positive trends in people’s subjective wellbeing (Bartolini 2012, Sarracino 2010). the previous studies that we mentioned above supported our results.

As can be seen from the above table, income has significant positive effects on subjective wellbeing. Income is considered important for human wellbeing because it provides means of living and economic security, which many people value highly. Our results are supported by the previous study that the income is positively related to subjective wellbeing. However, despite that income substantially helps in meeting the physical requirements of humans, the effect of income on physical wellbeing has only a modest effect on subjective wellbeing (Diener and Oishi 2000; Diener and Biswas-Diener 2002).

The above results show that general education has a positive and significant effect on wellbeing. Education changes the behavior of individuals by improving their knowledge in different aspects of life and their perception, skills and life plans. Empirical evidence proves that education status is a source of income because highly educated people will get more earning from their job than less educated. The individuals who are highly qualified can improve their living standard by efficient allocation of resources (OECD, 2012). The above reason justifies the role of education status in human wellbeing. The previous studies support education is a strong determinant of wellbeing (Hayward, Pannozzo and Colman 2005). Clark (1996) and Helliwell (2002) indicate that a higher level of education leads to a higher expectation about the living standard which in turn lead to high level of self-satisfaction or wellbeing.

The results in the above table indicate that health positively affects the individual’s wellbeing. Obviously, health is important for performing every daily activity of the human. Positive health is associated with positive outcomes such as individuals’ ability to develop their potential, work productively and creatively, build
strong and positive relationships with others and contribute to their community) and these outcomes positively contributing in the improvement of individuals wellbeing. Household size has a negative impact on wellbeing. The reasons behind that are a large number of infant and elders dependent in a house decrease the per capita income of the household. This phenomenon may negatively affect the wellbeing of household members. Our results are supported by Clark and Oswald (1994) study is that large size of household or having more children have a negative impact on one’s level of wellbeing.

**5. CONCLUSION**

Being a fundamental goal of human, the measurement and analysis of human wellbeing occupies the central place in the economics literature. However, most of the received empirical studies on the subject analyze the impact of conventional factors on wellbeing. Unlike previous empirical studies in this study, we analyze the impact of social capital on the shaping of human wellbeing. For empirical analysis primary data of 847 households have been used collected from different districts of Azad Jammu and Kashmir. To measure social capital and human wellbeing we constructed indices through indicators of unobserved (latent variables). The empirical analysis has been carried out through Confirmatory Factor Analysis has been used for the construction of above indices. We used structural equation modeling for estimation of the results. The empirical estimates of the study indicate that keeping other factors constant, an individual that embodied more social capital enjoy more wellbeing in their life.

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