

Journal of Education & Social Sciences

ISSN: 2410-5767 (Online)

ISSN: 2414-8091 (Print)

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Manuscript Information

Submission Date: November 17, 2023

Reviews Completed: January 30, 2024

Acceptance Date: February 13, 2024

Publication Date: February 19, 2024

Citation in APA Style:

Masood, A., & Ahsan, N. (2024). The Impact of Cognitive Social Capital and Family Social Capital on Individual Wellbeing: Moderating Role of Income Level, *Journal of Education & Social Sciences*, 12(1), 1-20.

DOI: <https://doi.org/10.20547/jess1212412101>





The Impact of Cognitive Social Capital and Family Social Capital on Individual Wellbeing: Moderating Role of Income Level

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Abstract: On account of the rapidly changing environment, the well-being and quality of life among individuals becomes a major point of concern. Therefore, this study seeks to analyze the influencing factors namely community identification, cognitive social capital and family social capital in the way of life satisfaction and depressive symptoms among individuals of Pakistan. The collection of primary data is carried out from 152 people residing in Pakistan via only survey questionnaire form. PLS-SEM technique is utilized for the analysis of data for developed hypotheses. The findings of this study show that cognitive social capital and family social capital are positively impacted by community identification. Cognitive social capital reflects a positive and significant association with life satisfaction. For depressive symptoms, cognitive and family social capital both reflect negative but insignificant relationships with depressive symptoms. However, family social capital reveals a negative but significant influence on life satisfaction. Our findings can aid government bodies, social agencies, NGOs and community workers for enhancing the well-being of individuals. The study provides insights about social capital for better quality of life and reduction of poverty and depression among societal members. This paper also contributes literature by endorsing a conceptual framework aligned with social capital theory. Additionally, the study faces certain limitations which are represented as future recommendations to future scholars.

Keywords: Well-being, Social Capital Theory, Life Satisfaction, Depressive Symptoms, PLS-SEM.

Introduction

In the light of rapid globalization and economic escalation, well-being of individuals and households requires considerable standards to measure the prosperity of a society or a nation. Well-being in other words such as quality of life leads to life satisfaction which can evaluate the life of people through physical health, mental health and social adaptability or social capital. In this era where social determinants of health and well-being are developed at a fast pace, quality of individual life depends upon the contribution of social capital which is excessively recognized (Christian, Sanuade, Okyere, & Adjaye-Gbewonyo, 2020). Social capital is one of the major elements of human prosperity which

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can increase the productivity in an economy as a result of better education, health and social relationships.

Well-being is crucially important to study the patterns and living standards of a society. Oftentimes, well-being of the individuals is measured by the degree of individual's level of their life satisfaction. Life satisfaction is the subjective measure in the cognitive assessment of the different aspects of life of an individual such as mental health. As per the study of [Lou \(2015\)](#) conducted in China, it is explained that the life satisfaction of older Chinese people affects their will to live and participate in the local community and are prevented from social withdrawal. Another study from a developed country shows that older adults report poor life satisfaction resulting in poor wellbeing. Hence, undertaking an investigation for social determinants is quite significant. Moreover, the literature demonstrates that the well-being of developed countries is heavily dependent upon social capital. In the prior studies, the role of social capital has been widely discussed in economic progress, social relations and business growth and interest ([Putnam et al., 2001](#)). According to the World Bank (2012), social capital contributes significantly to the reduction of poverty as the poor received an increased amount of benefits from social capital. For the time being, social capital is considered as the prominent holder for the well-being of individuals and its impact on the quality of life has been increasingly assessed ([Bartolini & Sarracino, 2015](#)). Furthermore, various studies also investigated the correspondence of well-being and financial resources and found out that higher well-being can be achieved through adequate economic resources. People in the USA find it necessary to have a distribution of wealth equally suggesting that income inequality is one of the other underlying reasons for lower well-being. In addition, among 34 countries, ([Oishi & Kesebir, 2015](#)) concluded that the economy of a country does not grow when income inequality grows simultaneously. Subjective well-being along with income has been studied widely in developed countries i.e., USA and China. Although several studies have been completed to analyze the well-being of a society and households in developed nations yet, very limited research can be seen in the regards of developing countries for instance, Pakistan. A lesser amount of work has been explored in the integration of social capital and depression especially among the elder individuals in the general population ([Cao, Li, Zhou, & Zhou, 2015](#)). Considering the statistics of developing countries, it is found that poverty in developing countries can be minimized through social capital which will eventually boost the economic performance. [Rani, Quddoos, Yaseen, Tabassum, and Asif \(2021\)](#), demonstrated an analysis of social capital and its role in the well-being of households in Pakistan where it was concluded that the well-being of society can be achieved through higher social capital. In addition, social capital of women contributed significantly in the business expansion and survival of their entrepreneurship projects ([Khan, 2020](#)). From prior research conducted in the sphere of developing countries, it can be concluded that social capital has not yet been explored dynamically with individual well-being. Therefore, previous researchers encouraged and emphasized that developing countries need to study and invest in social capital as it provides comprehensive and progressive impacts.

In a nutshell, the current study explores the impact of cognitive and family social capital on the betterment of individual quality of life and improved well-being. In addition, this study also casts light on the mediating job of income level in the way of individual

well-being. Since this study is carried out in the circumstances of a developing country such as Pakistan, it poses extensive significance and contributes to the literature by incorporating an inclusive research model with convincing variables in the prediction of individual well-being. This current research provides impactful evidence which can play a prominent role in increasing the standard of living and well-being of people in Pakistan by societal and government bodies and policy makers who lack enough insights in this regard. Therefore, identifying the factors and determination of crucial variables which can improve the well-being of people becomes an essential scope of the research.

Literature Review

Theoretical Background

Preliminary Social Capital Theory as interpreted by Bourdieu (1985) is the collection of resources either aggregate or potential which link to the network of relationships acquired through mutual recognition or acquaintance. Another scholar stated social capital theory as the social resources of trust, support and positive interaction with networks that will magnify the quality of an individual's life. From the scholarly traces, Hanifan initially conceived the term 'social capital' (SC) which almost two decades ago started rooting in the research of sociology. Later on, the conception of social capital grew its extended applications in the Italian region where scholars of sociology such as (Bourdieu, 1985) along with Coleman (1988) adopted this term in the late 1990s. Several researchers studied social capital in various fields of research. Although SC was continuously used in the welfare of society but was rarely studied for the development of the economy. Putnam et al. (2001) used this term after Hanifan and demonstrated the role of social capital in diverse fields including business activities, social networks and economic processes. Li (2012) elucidated social capital as a way of building relationships through meeting people and establishing social, individual and economic welfare. Moreover, social capital was also defined as a concept of society's aggregate and mutual actions and understandings for the betterment of society. The literature portrays three kinds of social capital known as bridging social capital, bonding social capital and linking social capital while bonding and bridging social capital are widely used by most of the researchers. Li (2012) explained bonding social capital, a system of strong support and bond between homogenous groups such as ethnic, family, clubs and friends. Another researcher Lewandowski (2008) provided a definition of Bridging social capital that it refers to the weak relationship between heterogeneous groups for instance, interaction with people with colleagues and people of different communities. Along with social capital, welfare is another concept which has been deeply embedded in the literature. Welfare is the form of a utility that drives happiness and well-being. Hence, researchers adopted social capital along with welfare and empirically investigated the relationship between them. Macro-level social capital demonstrates a positive link with the development of economic welfare. Reviewing the literature reveals a number of studies that investigated the dimensions and impacts of social capital. Norbutas and Corten (2018) focused on the association of social capital

and its forms with the economic well-being at municipality level. Likewise, social capital theory has also been incorporated in the analysis of women's social capital resources and networking.

The broader conceptual research framework comprises the two extended forms of social capital namely, cognitive social capital and family social capital along with community identification in the evaluation of individual's life satisfaction and depressive symptoms in terms of examining individual well-being. Additionally, the study embodies income level as a moderating variable in the interpretation of its relationship amongst other variables.

Hypothesis Development

Community Identification

According to [Tsai and Hung \(2019\)](#), Community Identification (CI) is the perception of individuals of the community as a result of their individual positive categorization from the membership of the community. The dimension of social capital known as cognitive dimension referring to perceived similarity in a community is positively influenced by community identification and sense of belonging reflecting a notion that people develop increased sharing of values and language when they perceive positive similarity with other members of community ([Zhao, Lu, Wang, Chau, & Zhang, 2012](#)). [Tsai and Hung \(2019\)](#) in their research explored that an individual's identification with its community strengthens the interpersonal trust, values and relationship.

[Schmidts and Shepherd \(2015\)](#) explored the factors which contribute to increasing family understanding. They found out that social identity such as belongingness to community can play a prominent role in understanding and demonstrating the family dynamics. Moreover, a sense of belongingness to a community relates to the dimensions of social capital in a way that it reflects a presence of mutual connection and interest with a partner due to the presence of community identification ([Pooley, Cohen, & Pike, 2005](#)). [Yetim and Yetim \(2012\)](#) stated that a necessity of capacity of fulfilling the needs of community exists in the background of putting one's trust in family. Based upon the above discussion, following hypothesis can be developed as:

H1a: Community Identification has a positive and significant impact on Cognitive Social Capital.

H1b: Community Identification has a positive and significant influence on Family Social Capital.

Cognitive Social Capital

As per the definition of [Lee \(2009\)](#), Cognitive Social Capital (CSC) refers to the communicative actions, perceptual tools and meanings derived by individuals in the adoption of norms, codes and shared language. Social capital in terms of cognitive and structural components has been widely examined by various researchers for its positive effects on the well-being of mental health, depressions and life satisfaction. [Portela, Neira, and](#)

Salinas-Jiménez (2013) investigated social capital at individual and aggregate level depicting that individual level social capital along with aggregate level social capital proved to be a significant contributor in the assessment of life satisfaction. Individuals who tend to encompass stronger and positive social capital such that trust live a more satisfied life and increase their well-being. Furthermore, Pang (2019) also found the significance of social capital in the investigation of life satisfaction among the Chinese overseas students residing in Germany.

The literature also shows that fewer symptoms of depression have been reported among those individuals who incorporate a high level of social capital and its components such as social trust towards others. Bassett and Moore (2013) in a study showed that cognitive social capital based upon the individual level community has been found to be a prominent predictor of analyzing depressive symptoms. Reciprocity and social capital with others help in coping stress resulting in the demise of depressive symptoms. Hence on the basis of literary traces, following hypothesis are formulated as:

H2a: Cognitive Social Capital has a significant and positive impact on Life Satisfaction.

H2b: Cognitive Social Capital has a significant impact on Depressive Symptoms.

Family Social Capital

Furstenberg (2005) defined Family Social Capital (FSC) as the resources of social support dwelling in the family system of individuals where cultural norms, values, social obligations and reciprocity are shared. Alvarez, Kawachi, and Romani (2017) illustrated some measures of FSC namely family relationships, family interactions, family structures and family support. These components portrayed a significant impact on the well-being and life satisfaction of individuals. Family relationship of FSC protects the level of satisfaction of life by individuals. When individuals feel more connected and involved with their family, their psychological and emotional needs are catered thus chances of their satisfaction level increase (Lu, Spencer, Sun, & Lou, 2021). Additionally, the influence of parent-child interaction is found to be a significant predictor in the well-being of individuals (Martinea & Sunarti, 2019).

Moreover, prior empirical studies recognized family social capital and its components i.e. family relationship, support and interaction as a strong influencing element of psychological well-being, mental health, quality of life and depressive symptoms of older adults (Lu, Xu, Lou, & Chi, 2018). Relationships of family and support systems within a household develop a strong effect on the depressive symptoms of older individuals in the East Asian region. Alvarez et al. (2017) determined FSC in the prediction of well-being and mental health using the perspective of family network support where findings supported the hypotheses. A comprehensive and day to day communication between child and parents intercept the psychological disorders and help maintaining emotional and mental well-being (Niazi, Javaid, & Gul, 2022). On the basis of above discourse, following hypothesis are developed as:

H3a: Family Social Capital has a significant and positive impact on Life Satisfaction.

H3b: Family Social Capital has a significant impact on Depressive Symptoms.

Moderating Role of Income Level

Income is contemplated as the provoking element in the happiness of people which is why subjective well-being and income are extensively studied together in contemporary studies. A common pattern of society believes that basic necessities and miscellaneous desires can be satisfied by income (Diener & Oishi, 2000) where there is an increase in the level of income, there is greater happiness to be seen. Happiness leads to a better objective well-being which can be measured by income and wealth in order to help people lead and live a quality life.

A number of scholars attempted to evaluate the satisfaction of people in terms of their financial conditions and have undertaken relative income for its outcomes on the happiness of individuals (Bartolini & Sarracino, 2015). Also, in another study, (Easterlin, 2001) implied a comparison of relative income i.e. individuals comparing their present income to previous income or to the income of others concerns to be a plenteous indicator of people's happiness. Aldridge, Halpern, and Fitzpatrick (2002) adopting a German sample reported less social interaction, less external support and satisfaction by individuals with low income as compared to those individuals with higher income. Various studies yielded signified evidence that adults specifically belonging to higher income and education families or groups associate themselves with more friends and develop social trust with communities and generate higher satisfaction. Saris (2001) also studied the relationship of income effects and satisfaction enhancement by comparing the Gross National Product of Russia and Germany. Another researcher (Ferrer-i Carbonell, 2005) used the data of the German Socioeconomic Panel and explained that families are happier when there is a higher income of one's own family while compared to the income of the reference group. Therefore, the significance of income and its relation to life satisfaction is incorporated in various prior researches where a curvilinear relationship is found between the variables.

From the traces of literature, it has been revealed that communities in a society enjoy a high level of income, education, less crime rates and poverty due to increased social capital. Increased income equality, higher subjective and objective well-being and better psychological health give rise to significance of social capital. Individuals depend upon the perceived feelings developed through comparisons between groups whereas perceived relative income is associated with low income. Han et al. (2018) found out that households with low income, unemployment and no religion happened to have a significant association with depressive symptoms. Hence, aligned with the literary review, this research proposed following hypothesis:

H4a: Income Level moderates the relationship between Cognitive Social Capital and Life Satisfaction.

H4b: Income Level moderates the relationship between Cognitive Social Capital and Depressive Symptoms.

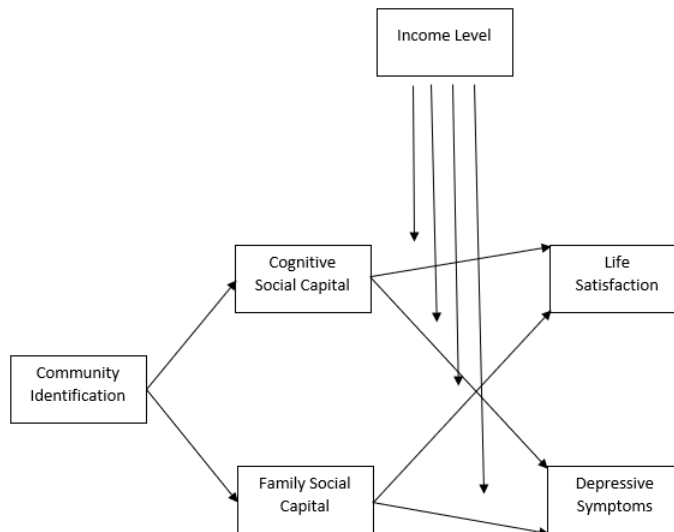
H4c: Income Level moderates the relationship between Family Social Capital and Life Satisfaction.

H4d: Income Level moderates the relationship between Family Social Capital and Depressive Symptoms.

Research Methodology

Research model

Figure 1
Conceptual Research Model



An extensive and all-inclusive conceptual model of this research has been developed which can be seen in Figure 1. The relationship of independent variables with dependent variables is illustrated in the model. The conceptual framework embraces variables such as community identification, cognitive social capital and family social capital to analyze life satisfaction and depressive symptoms of individuals. The model also contains income level as a moderator between cognitive social capital, family social capital and life satisfaction and depressive symptoms.

Data collection and instrumentation

The procedure of data collection included a survey questionnaire for the analysis of this study. The questionnaire was developed and distributed via online platforms to our target audience. The study targeted the individuals of Pakistan. The study followed a convenience sampling technique under the roof of non-probabilistic sampling method which refers to data collection from the individuals of a targeted population who are easily and conveniently available. The survey questionnaire included closed ended questions and

the questions were adopted from previous studies. The items of community identification were adopted from prior studies (Steffens et al., 2021) based on a 5-point likert scale from “strongly disagree (1) to strongly agree (5)”. The items of cognitive social capital and life satisfaction were adopted from Rani et al. (2021) based on a 5-point likert scale from “not at all to (1) to always (5)”. The items of two sub groups for family social capital were adopted from Ge (2020) based on 3-point likert scale for subgroup A from “not intimate (1) to intimate (3)” and 5-point likert scale for sub group B from “never (1) to once a week (5)”. The items of life depressive symptoms were adopted from Eaton, Muntaner, and Smith (2001) based on a 5-point likert scale from “never (1) to all of the time (5)”. The sample size which was taken out of the population is referred to 152 respondents. This sample sized selected for the study is based upon the guidelines of earlier scholars that the sample size of 50 is reviewed as inadequate, sample of 300 as adequate, sample of 500 as very good and sample of 1000 is stated as the excellent. Lastly, the study follows correlational research design as it is intended to identify and analyze the association between independent and dependent variables.

Demographics

Table 1 represents the detailed information of demographic variables of respondents for example, gender, age, education level, work experience, income level, primary occupation and family system.

The table shows the gender distribution of male and female respondents where 47 percent of the respondents were male while 53 percent of them were female respondents. Considering the age group distribution, 31 percent of respondents belonged to the age group of 18 to 24, 49 percent were in the age bracket of 24 to 30, 18 percent belonged to 31 to 35 and only 2 percent were the respondents who reported above 35 age group. Keeping in view the education level, 25 percent of respondents were undergraduate. Most of the people were graduates making 56 percent of the respondent profile while 13 percent were post graduates and only 6 percent highlighted “other” as their education level. Regarding the distribution of work experience, 28 percent of the respondents had a work experience of less than a year, 16 percent encompassed the work experience of 1 to 2 years, 18 percent referred their work experience as more than 2 years but less than 3 years while most of the people making 38 percent had a work experience of more than 3 years. Moreover, the section of income level represents that 20 percent owned less than 20000 income, 23 percent belonged to the range of 20001 to 35000, 26 percent referred to the range between 35001 to 50000 whereas the highest of 31 percent reported income level above 50000. As far as the primary occupation is concerned, business was reported as the primary occupation by 36 percent of respondents, job was the main occupation of 48 percent individuals while 14 percent of respondents stated both business and job as their primary occupation. However, only 2 percent of people reported that they were unemployed. The demographics also contained the family system of the respondents in which it has been reported that 55 percent were associated with a joint family system while 45 percent belonged to a nuclear family system.

Table 1
Demographics

Demographic Items	Frequency	Percent
Gender		
Male	70	47
Female	82	53
Age		
18 to 24	47	31
24 to 30	74	49
31 to 35	29	18
Above 35	2	2
Education Level		
Undergraduate	38	25
Graduate	85	56
Post graduate	20	13
Other	9	6
Work Experience		
Less than 1 year	44	28
1-2 years	24	16
More than 2 less than 3 years	27	18
More than 3 years	57	38
Income Level		
less than 20,000	30	20
20,001-35000	35	23
35001-50000	40	26
Above 50,000	47	31
Primary Occupation		
Business	54	36
Job	73	48
Both	21	14
Unemployed	4	2
Family System		
Joint	84	55
Nuclear	68	45

Data Analysis

The analysis of data in this research has been performed carrying out “Structural Equation Modeling (SEM)” as a statistical technique. SEM is the technique which can validate the theory used by the research via statistical facts and figures. The present research paper employed a variance based method known as “PLS-SEM” in order to measure the hypothetical model. PLS SEM is termed as the most appropriate approach for the evaluation of complex and integrated models (Chin et al., 1998; Henseler, Ringle, & Sinkovics, 2009). As a result Smart PLS 3.0 software has been deployed for data analysis. The estimation of the data is founded upon a two-step approach. Initially, the measurement model is evaluated to assess the validity and reliability of the hypothetical model. Next, a structural model is verified to assess the hypotheses that whether the developed hypotheses could be supported.

Measurement Model

The scale’s competency is evaluated through a measurement model. In order to do so, the measurement model includes various tests such as construct reliability, individual item

reliability, convergent validity and discriminant validity.

Table 2
Measurement Model Results

Constructs	Items	Loadings	Cronbach's α	Composite reliability	Average Variance extracted
CI	CI1	0.871	0.716	0.841	0.640
	CI2	0.789			
	CI3	0.829			
CPVB	CPVB1	0.744	0.764	0.833	0.506
	CPVB2	0.852			
	CPVB3	0.902			
	CPVB4	0.852			
DEPS	DEPS1	0.876	0.750	0.704	0.570
	DEPS2	0.842			
	DEPS3	0.910			
	DEPS4	0.846			
	DEPS5	0.829			
	DEPS6	0.741			
	DEPS7	0.799			
	DEPS8	0.723			
	DEPS9	0.742			
	DEPS10	0.709			
LS	LS1	0.745	0.723	0.898	0.590
	LS2	0.786			
	LS3	0.794			
	LS4	0.780			
	LS5	0.763			
NC	NC1	0.771	0.765	0.800	0.514
	NC2	0.781			
	NC3	0.795			
	NC4	0.715			
	NC5	0.763			
	NC6	0.711			
PCI	PCI1	0.780	0.857	0.898	0.640
	PCI2	0.723			
	PCI3	0.725			
PCR	PCR1	0.716	0.745	0.827	0.594
	PCR2	0.746			
RSS	RSS1	0.818	0.745	0.827	0.594
	RSS2	0.808			
	RSS3	0.832			
	RSS4	0.722			
	RSS5	0.734			
SAFT	SAFT1	0.794	0.775	0.847	0.652
	SAFT2	0.776			
	SAFT3	0.816			
SP	SP1	0.764	0.742	0.805	0.583
	SP2	0.862			
	SP3	0.744			
TRUST	Trust1	0.835	0.747	0.848	0.654
	Trust2	0.791			
	Trust3	0.765			

Notes: CI= Community identification, CPVB= Civic participation voting behavior collection decision, DEPS= Depressive symptoms, LS= Life satisfaction, NC= Neighborhood cohesion, PCI= Parent child involvement, PCR= Parent child relationship, RSS= Reciprocity and social support, SAFT= Safety, SP= Social participation, TRUST= Trust.

As observed in Table 2, each variable has the Cronbach's alpha value more than 0.55. Composite reliability which measures the internal consistency is also said to be achieved

as the values appear to be significant than the criteria which 0.7 (Straub, 1989). Moreover, the values of "Average Variance Extracted" are found to have a minimum value of 0.50 which meets the standard set by prior studies (Fornell & Larcker, 1981). Therefore, the findings reveal that convergent validity of the model is achieved.

Right after the assessment of convergent validity, discriminant validity is assessed. Discriminant validity is measured after the assessment of Fornell and Larcker criterion, loadings and cross-loading analysis and Heterotrait-Monotrait ratio (HTMT) depicted in Table 3, 4 and 5. Fornell and Larcker criterion is represented via Table 3 which shows that diagonal values are significant than the correlation existing amongst the variables, hence meeting the benchmarks of Fornell and Larcker (1981). Next, Table 4 shows the analysis of HTMT and the findings reflect that no value is greater than 0.85 by meeting the proposed benchmark (Henseler, Ringle, & Sarstedt, 2015). At last, table 5 represents the findings of loadings and cross loadings. The results indicate that all the items are highly and positively correlated with their own constructs while the difference of cross loadings is higher than the proposed standard of 0.1. Finally, the convergent and discriminant validity is achieved now the structural model can be analyzed.

Table 3
Discriminant Validity - Fornell-Larcker Criterion

	CI	CPVB	DEPS	LS	NC	PCI	RSS	SAFT	SP	TRUST
CI	0.800									
CPVB	0.550	0.763								
DEPS	0.105	0.109	0.819							
LS	0.580	0.430	0.245	0.724						
NC	0.342	0.249	0.340	0.172	0.744					
PCI	0.109	0.401	0.446	0.107	0.114	0.800				
RSS	0.454	0.300	0.106	0.190	0.296	0.109	0.703			
SAFT	0.299	0.102	0.100	0.150	0.412	0.225	0.410	0.808		
SP	0.434	0.199	0.106	0.380	0.503	0.370	0.502	0.466	0.764	
TRUST	0.509	0.198	0.5300	0.175	0.389	0.128	0.429	0.288	0.438	0.808

Table 4
Heterotrait-Monotrait Ratio (HTMT)

	CI	CPVB	DEPS	LS	NC	PCI	RSS	SAFT	SP	TRUST
CI										
CPVB	0.340									
DEPS	0.291	0.533								
LS	0.184	0.569	0.370							
NC	0.431	0.484	0.276	0.219						
PCI	0.210	0.25	0.554	0.178	0.207					
RSS	0.574	0.576	0.313	0.213	0.804	0.298				
SAFT	0.428	0.268	0.233	0.176	0.638	0.230	0.575			
SP	0.623	0.467	0.273	0.120	0.702	0.179	0.667	0.708		
TRUST	0.692	0.225	0.368	0.226	0.475	0.195	0.572	0.482	0.605	

Table 5
Loadings and Cross Loadings

	CI	CPVB	DEPS	LS	NC	PCI	PCR	RSS	SAFT	SP	TRUST
CI1	0.871	0.118	0.159	0.370	0.304	0.410	0.435	0.333	0.384	0.395	0.488
CI2	0.789	0.310	0.139	0.130	0.240	0.202	0.293	0.168	0.313	0.325	0.416
CI3	0.829	0.180	0.169	0.170	0.279	0.150	0.346	0.282	0.341	0.340	0.309
CPVB1	0.178	0.744	0.184	0.126	0.150	0.189	0.160	0.260	0.140	0.143	0.360
CPVB2	0.168	0.852	0.440	0.280	0.129	0.178	0.202	0.300	0.153	0.158	0.100
CPVB3	0.174	0.902	0.270	0.190	0.200	0.180	0.287	0.380	0.143	0.164	0.430
CPVB4	0.124	0.852	0.240	0.470	0.219	0.130	0.123	0.195	0.149	0.210	0.176
DEPS1	0.184	0.180	0.876	0.264	0.450	0.155	0.510	0.290	0.106	0.109	0.194
DEPS2	0.167	0.137	0.842	0.36	0.187	0.104	0.149	0.167	0.118	0.127	0.281
DEPS3	0.214	0.150	0.910	0.169	0.250	0.406	0.178	0.111	0.122	0.121	0.178
DEPS4	0.300	0.163	0.846	0.152	0.255	0.595	0.138	0.173	0.198	0.131	0.105
DEPS5	0.430	0.137	0.829	0.377	0.214	0.180	0.190	0.122	0.132	0.490	0.131
DEPS6	0.210	0.179	0.741	0.100	0.260	0.370	0.160	0.149	0.189	0.266	0.202
DEPS7	0.130	0.217	0.799	0.109	0.360	0.110	0.460	0.101	0.120	0.103	0.141
DEPS8	0.212	0.150	0.723	0.304	0.200	0.131	0.133	0.246	0.111	0.101	0.130
DEPS9	0.189	0.151	0.742	0.440	0.140	0.121	0.198	0.470	0.106	0.334	0.149
DEPS10	0.200	0.270	0.709	0.220	0.112	0.145	0.194	0.170	0.180	0.145	0.320
LS1	0.106	0.207	0.154	0.745	0.180	0.159	0.200	0.117	0.220	0.294	0.139
LS2	0.122	0.150	0.212	0.786	0.147	0.185	0.133	0.155	0.330	0.491	0.106
LS3	0.155	0.160	0.189	0.794	0.159	0.158	0.187	0.105	0.170	0.367	0.151
LS4	0.235	0.196	0.110	0.780	0.195	0.180	0.150	0.360	0.390	0.168	0.189
LS5	0.177	0.149	0.156	0.763	0.235	0.134	0.370	0.165	0.158	0.203	0.136
NC1	0.215	0.370	0.188	0.270	0.771	0.166	0.417	0.287	0.152	0.290	0.303
NC2	0.158	0.180	0.105	0.106	0.781	0.184	0.334	0.332	0.301	0.257	0.266
NC3	0.323	0.117	0.162	0.108	0.795	0.189	0.125	0.273	0.258	0.350	0.480
NC4	0.263	0.380	0.131	0.240	0.715	0.280	0.246	0.361	0.347	0.248	0.265
NC5	0.212	0.290	0.190	0.270	0.763	0.213	0.158	0.388	0.250	0.442	0.274
NC6	0.140	0.341	0.197	0.158	0.711	0.202	0.462	0.297	0.449	0.434	0.380
PCI1	0.165	0.150	0.165	0.110	0.230	0.780	0.211	0.210	0.197	0.143	0.149
PCI2	0.162	0.155	0.187	0.230	0.168	0.723	0.191	0.284	0.189	0.101	0.103
PCI3	0.186	0.135	0.255	0.168	0.268	0.725	0.135	0.121	0.101	0.197	0.121
PCR1	0.169	0.140	0.345	0.268	0.195	0.307	0.716	0.313	0.472	0.209	0.418
PCR2	0.200	0.169	0.449	0.195	0.500	0.505	0.746	0.208	0.289	0.201	0.212
RSS1	0.413	0.328	0.160	0.150	0.200	0.442	0.374	0.818	0.402	0.472	0.292
RSS2	0.184	0.243	0.154	0.200	0.120	0.417	0.190	0.808	0.173	0.289	0.199
RSS3	0.363	0.400	0.150	0.102	0.300	0.446	0.153	0.832	0.356	0.402	0.321
RSS4	0.139	0.237	0.216	0.300	0.490	0.348	0.383	0.722	0.478	0.173	0.360
RSS5	0.390	0.203	0.170	0.490	0.160	0.272	0.352	0.734	0.358	0.356	0.197
SAFT1	0.334	0.270	0.167	0.160	0.176	0.407	0.279	0.306	0.794	0.478	0.264
SAFT2	0.238	0.118	0.147	0.176	0.580	0.212	0.258	0.303	0.776	0.358	0.164
SAFT3	0.232	0.156	0.380	0.158	0.370	0.314	0.343	0.279	0.816	0.428	0.447
SP1	0.137	0.270	0.103	0.370	0.105	0.141	0.128	0.298	0.439	0.764	0.343
SP2	0.402	0.106	0.006	0.090	0.478	0.034	0.322	0.248	0.382	0.862	0.105
SP3	0.407	0.349	0.093	0.045	0.330	0.077	0.193	0.106	0.381	0.744	0.111
Trust1	0.463	0.108	0.130	0.110	0.347	0.115	0.320	0.331	0.352	0.382	0.835
Trust2	0.441	0.102	0.264	0.188	0.307	0.151	0.305	0.221	0.311	0.381	0.791
Trust3	0.384	0.434	0.204	0.076	0.338	0.144	0.211	0.332	0.303	0.352	0.765

Structural Model

The structural model evaluates the testing of the developed hypotheses. The analysis of structural model is carried out via standardized paths. The analysis of paths and their results are depicted in Table 6 whereas the results of moderation analysis are depicted in table 7. The results are described on the basis of a criteria "(t-value > 1.96, p-value < 0.1)". In sum, six hypotheses have been developed and the findings show that four of them have been accepted i.e., H1 a, H1 b, H2 a, and H3 a. On the other hand, H2 b and H3 b are not accepted. Additionally, table 7 portrays the findings of moderation analysis including H4 a, H4 b, H4 c and H4 d where only 2 hypotheses are supported such as H4

b and H4 c while the rest of them have not been supported.

Table 6
Results of Path Analysis

Hypothesis	Regression Path	Effect type	SRW	p value	Remarks
H1 a	CI->CSC	Direct effect	0.118	0.039	Supported
H1 b	CI->FSC	Direct effect	0.527	0.000	Supported
H2 a	CSC->LS	Direct effect	0.476	0.000	Supported
H2 b	CSC->DEPS	Direct effect	-0.131	0.508	Not Supported
H3 a	FSC->LS	Direct effect	-0.390	0.027	Supported
H3 b	FSC->DEPS	Direct effect	-0.181	0.476	Not Supported

Table 7
Results of Moderating Analysis

Hypothesis	Regression Path	Effect type	SRW	p value	Remarks
H4 a	CSC->LS	Indirect effect	0.046	0.454	Not Supported
H4 b	CSC->DEPS	Indirect effect	-0.027	0.000	Supported
H4 c	FSC->LS	Indirect effect	-0.091	0.002	Supported
H4 d	FSC->DEPS	Indirect effect	-0.191	0.409	Not Supported

Discussion

The H1a which shows the path between community identification and cognitive social capital (CI → CSC) is supported as the path reflects a positive and significant association between variables ($\beta = 0.118$, $p < 0.05$). These results correspond to prior studies (Tsai & Hung, 2019; Zhao et al., 2012). It means that when individuals are identified by a certain community, they tend to develop a comprehensive notion of norms, values and belongingness to a particular society. Therefore, individuals can better interpret the norms of a society or community when they actively participate in community based activities where they are recognized by community members. In order to increase cognitive social capital, communities can provide membership incentives and invitations to individuals. Additionally, community meetings should be organized at regular intervals so that people could get the chance to gather and solve the community related issues.

H1b (CI → FSC) reflects a positive yet significant association between community identification and family social capital. Therefore the hypothesis is accepted ($\beta = 0.527$, $p < 0.01$) and the results are consistent with the study of Pooley et al. (2005). The results conclude that social identity and community belongingness increases the understanding amongst family members. When individuals are socially recognized by their community, they also develop a sense of responsibility and affection towards their family as well. Optimistic community identification can result in enhancing the positive dynamics of a family. Moreover, by fulfilling the necessities of a community, people can develop trust in their family which results in increasing the social capital of the family. In other words, when individuals are highly referred to their community, it means they tend to start developing a sense of belongingness which also reflects a mutual connection with family members and partners.

H2a reveals a positive and significant association between cognitive social capital and life satisfaction (CSC → LS). The hypothesis therefore is accepted ($\beta = 0.476$, $p < 0.01$). Prior

studies also reflect similar findings. It can be concluded from the results that cognitive social capital is said to enhance the well-being of individuals. Human citizens feel satisfied when they appear to be socially connected by developing positive integration among their social connections. Life satisfaction is achieved by individuals when they develop trust and honesty with their family and community which is why it is necessary to enhance trust and honesty between people. Cognitive social capital requires optimistic perception of belongingness, values and code of conduct which can be endorsed by religious teachings, community and neighborhood cohesion and country's law practices.

H2b representing the association between cognitive social capital and depressive symptoms (CSC → DEPS) is not accepted as the path reflects negative and insignificant relationship ($\beta = -0.131$, $p > 0.1$). These results are consistent with [Bassett and Moore \(2013\)](#); [De Silva \(2005\)](#). The results suggest that although there is an inverse relationship between cognitive social capital and depressive symptoms but the impact is insignificant. In the context of Pakistan, CSC might minimize the symptoms of depression but there is no direct impact of low or high cognitive social capital on depressive symptoms because individuals believe that if they encompass a less or negative perception of safety, reciprocity or trust, these factors will not trigger their depression or anxiety directly.

H3a which shows the path association between family social capital and life satisfaction (FSC → LS) reveals a significant but negative relationship between variables ($\beta = -0.390$, $p < 0.05$). The results of this hypothesis are aligned with the previous studies of ([Takagi & Saito, 2012](#)). It means that family resources create an adverse impact on the well-being of individuals. The reason behind such findings is that when a family is highly involved in providing excessive attention, support and resources, the life stability of the individual is at stake. When parents constantly check on the matters of their children, they do not give room to children's privacy. Moreover, when a constant support and attention is given by the family, individuals become liable and dependent upon that support which makes them vulnerable to diverse situations in future that ruins their life satisfaction.

H3b referred to as (FSC → DEPS) reveals negative along with insignificant relationship ($\beta = -0.181$, $p > 0.1$) which is why the hypothesis is not supported. Such findings are pertinent to previous research. The results provide insights that although the greater family social capital reduces the depressive symptoms in individuals but still it does not directly impact depressive symptoms of people. The reason behind such insignificant association can be that alone family dynamics does not correspond to depressions. Social isolation, bullying, failures, harassment and other various factors can provoke depressive symptoms more than family orientation because in the context of Pakistan, most of the families live together with at least one parent having a constant interaction all day which is why individuals are not left family isolated which cannot trigger depressive symptoms.

Additionally, the results of moderation analysis can be seen in Table 5 where moderation analysis of income level is examined. Based upon the findings, income level does not happen to moderate the relationship between CSC and LS which is why H4a is rejected. It means that the level of income of an individual does not alter or weaken the impact of cognitive social capital on life satisfaction. Moreover, H4b is supported as income level appears to negatively moderate the association between CSC and DEPS which refers that depression symptoms will be affected by the inverse effect of cognitive social capi-

tal based upon the level of income possessed by individual such that lower income will bound individuals to have limited social interaction with communities and groups. Such a case will require more attention and social belongingness unless the individual will go through initial depressive symptoms. It can be postulated that low income level results in low reciprocity among people which in return pose higher depressive symptoms. These findings are aligned with prior study (Zhang, Tian, & Lu, 2021). The relationship between FSC and LS is also negatively moderated by income level. Therefore, H4c is accepted. This means that a lower income level generates a greater deal of dependency over family members which can ultimately resist the growth of individuals. As a result there are very limited chances for enhancing life satisfaction due to a sense of inferiority. Lastly, there is an insignificant but negative moderation between the FSC and DEPS. Hence H4d is rejected. The findings reveal that income level does not tend to affect or moderate the influence of family social capital and depressive symptoms in a significant manner although the impact is negative. Thus it can be said that income level is considered as an amplifying cause which can play a role in the well-being of individuals.

Conclusion, Recommendations, and Limitation

Conclusion

In the light of present-day globalization and ongoing waves of individualization, communities and individuals have faced a massive transition of family and societal structures due to urbanization, virtualization, and modernization and geographic gap between generations. As a result, the degree of traditional contacts, networks and cohesion has been weakened. Such circumstances give rise to a number of depressive symptoms and negative psychological well-being which leads to an unstable life satisfaction. Hence, the present study aims to dig into the fundamental causes that influence the well-being of individuals. For that purpose, the study constructed a thorough framework with the correspondence of social capital theory. The conceptual framework integrated probing factors such as community identification, cognitive social capital and family social capital for analyzing their impact on the depressive symptoms and life satisfaction of individuals. On top of that, income level has been employed as a moderator in the framework. These variables together were not found to be carried out in early studies with regards to the dynamic environment of a developing country such as Pakistan which is why the study indicates judicious knowledge to its beneficiaries mentioning policy makers, scholars, social workers, state's law and order enforcing agencies, government bodies and community workers. A sum of 152 individuals from all over Pakistan participated in the data collection of this study. After converting the raw data into meaningful information through PLS-SEM, it has been concluded that four out of six hypotheses manifest significant relationships. The results signify that trust, safety, family and community interaction and honesty plays a pivotal role in enhancing satisfaction of life among individuals. An ample amount of recognition and identification with a certain community positively impact the cognitive and family social capital. However, CSC and FSC do not signify a relation-

ship with depressive symptoms. Last but not the least, income level does moderate the relationship between CSC and DEPS and FSC and LS whereas income level does not moderate the association between CSC and LS and FSC and DEPS. These results indicate that individuals perceive the level of income to be one of the reasons behind their depression or life satisfaction.

Managerial or Policy Implications

The outcomes of this study explicitly indicate practical and managerial implications. First, government bodies can use the results of social capital to reduce poverty, enhance welfare and health of people to create a better society. As income level creates a moderation impact, so the government should take measures to create more employment opportunities and focus on skilled labor. Second, state's law and order enforcing agencies can improve the safety of individuals in order to let the community feel safe as safety under cognitive social capital has a positive impact on life satisfaction. The government can ensure the safety of citizens by deploying CCTV systems and special police squads to reduce crime rate. As a result the quality of life of the country can be achieved. Third, community workers and representatives can use the insights to create more community centers and public meeting places to increase more public cohesion as the association with community and continuous interaction increases the cognitive social capital. Fourth, social workers and NGOs can utilize the findings of this study to encourage more social peace among societies. Social and cultural activities can be arranged to increase social participation rate which will eventually contribute in developing trust and attention towards others.

Theoretical Contributions

The current study makes an attempt to bestow literature by making certain contributions in the theoretical compositions. First, the study developed a new and dynamic conceptual framework with the aid of social capital theory. The study incorporated two aspects of social capital such as family social capital and cognitive social capital together in the assessment of individual well-being. The two concepts were tested in the identification of their relation with depressive symptoms and life satisfaction. Second, community identification was also utilized in the model along with social capital aspects. To the best of knowledge, community identification was not aligned with cognitive and family social capital before. Third, the study attempted to analyze the moderating impact of income level which was overruled by prior studies as income was tested as a moderator under the umbrella of socioeconomic status. Lastly, the findings of this study add value in the literature as the outcomes reveal the factors which play part in the identification of well-being among individuals belonging to Pakistan. As a result, the current paper provides the basis for future scholars for their further research on individual well-being in the context of Asian or developing countries.

Future Recommendations

Apart from explicitly defined contributions in the field of literature and practical implications, the study is found to have some limitations as well which are expected by the authors to be surpassed by future researchers. The limitations of this study are carried out as future recommendations to contemporary scholars. In the very first place, contemporary studies are suggested to append a more advanced sample size as the present work focused on a relatively small scale data collection so it is suggested to gather data from a larger group of population which will interpret results in a comprehensive manner. Additionally, we recommend future scholars to add some external variables in the model to identify individual well-being such as social mobility, socioeconomic status and financial well-being. Moreover, the role of mediation can also be incorporated in future studies. Certain variables such as, education, functional health and community/ family based social capital can be taken out as mediators or moderators. We also recommend conducting future studies by targeting a specific population such as elderly people, adults living alone and households in rural and urban areas. We also recommend conducting a comparative study between the well-being of national and overseas individuals.

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