



## An indigenized model for audit behavior based on social capital

**Alireza Zand**

Accounting Department, Kish International Branch, Islamic Azad University, Kish Island, Iran  
(corresponding author).

**Ali Najafi Moghaddam**

Assistant Professor, Accounting Department, South Tehran Branch, Islamic Azad University, Tehran, Iran  
Email: alinajafimoghadam@gmail.com

**Roya Darabi**

Associate Professor, Accounting Department, South Tehran Branch, Islamic Azad University, Tehran, Iran

Submit: 22/08/2021 Accept: 09/11/2021

### ABSTRACT

The present research develops and examines an indigenized model for understanding the determinants and consequences of social capital among Iranian audits. This is a mixed exploratory paper and the thematic method was used for qualitative analysis. The statistical population of the research includes professional audits including trustable audits of the Tehran Stock Exchange and managers of the Iran Auditing Organization. Purposeful sampling was used to pick sample members for the qualitative phase. Data reached saturation in the 18<sup>th</sup> interview but 20 interviews were conducted for a higher validity. Using a qualitative method, research model constructs were identified namely organizational management, moral principles and professional rules, human capital, cognitive factors, strategic considerations, organizational environment, and social capital. Then, the created model was tested among the certified public accountants of Iran using simple random sampling. The structural equations modeling with partial least squares (PLS) was used to analyze data. The results show that all research hypotheses were supported. At the end of the paper, practical implications and future research are discussed.

### Keywords:

audit behavior, social capital, structural equations modeling, partial least squares

## 1. Introduction

Social capital is regarded as a kind of capital or production asset or source for profit maximization for a society or commercial enterprise (Rekib et al, 2018). It is referred to as an effective factor for economic growth (Souri, 2014). This kind of capital impacts on economic and political factors of a society like human interactions, shared norms and trust and crime reduction (Paten, 2000). Studies have revealed that contrary to the developed countries, social capital has not received enough attention in developing countries (Saadat, 2006, 2009). Evidence shows that social capital is not satisfying in Iran (Saadat, 2006). Therefore, identifying the determinants of social capital and its potential outcomes is very vital in Iran. Many studies showed that social capital can affect individuals' behavior both directly (Ghaderi, 2017; Panahi, 2019, Evans and Smokowski, 2015; Choi, 2016) and indirectly (Chou and Chang, 2008; Yang and Farn, 2009; Bani Mahd and Darvish, 2016; Castillo et al, 2021). Investigation of social capital in audits as an influencing group on organizations performance (Eden and Moriyah, 1996; Kiable, 2012) is of great importance. Auditing is an essential element in the management structure of the public sector and helps with supervision and future planning of strategies. Independent audits are important parts of efficient capital markets because audits help increase the validity and reliability of companies' financial information and allow for more efficient allocation of resources (Ghosh and Moon, 2005). Audits and auditing institutes are dealing with challenges and social inter-and intra-organizational problems like a conflict of interests among partners and members, lack of intellectual capital, financial scandals, competition in labor market and signature selling. Since social capital can be a solution for such challenges via trust-building, synergy and cooperation improvement, intellectual capital provision and control of unethical behaviors (Mehrabanpour et al, 2020), identifying the factors affecting audits' social capital and its consequences is of great importance. Therefore, the present study tries to collect data from specialized and professional audits of the Tehran Stock Exchange and managers of Auditing Organization and develop an indigenized model for examining the factors affecting social capital in audits and its consequences. Although social capital is a very decisive factor that affects audits' behaviors, little research has been done

identifying determinants and consequences of social capital in audits. A review of the literature reveals that despite some research (Abdollahi and Mousavi, 2007; Asgari and Tohidnia, 2007; Fedderke et al, 1999; Zak and Knack, 2001; Guiso et al, 2004; Francois, 2002; Ghaderi, 2017; Mehrabanpour et al, 2020) conducted on social capital, comprehensive research on factors which influence on social capital in audits and its consequences is needed. Identifying and examining these factors can give some solutions for improving audits' social capital. This study also tries to measure the impact strength of these determinants in the created indigenized model. Moreover, the model can be a new step for spreading theoretical and empirical studies focusing on social capital. In other words, this paper contributes to the literature by identifying and examining the determinants and consequences of social capital in audits. Practically, this research can learn audits how to develop their social capital and what factors they should consider in order to increase its positive outcomes.

## 2. Literature review and research background

### 2-1. Audit's behavior

Ardiyos (2012) believed that auditing is investigation of accounting data to determine the accuracy and certainty in financial statements presented by management. Auditing is an important part of a good management and leadership of public sector and responsiveness towards stakeholders. Auditing, as a basic element of powerful leadership structure of the public sector, helps fulfill the supervision, strategy-making and future planning of leadership. Independent audits are important parts of efficient stock markets because audits try to increase the validity and reliability of companies' financial information and allocate resources more efficiently (Ghosh and Moon, 2005). Ethical behavior is necessary for auditing profession. Ethical behavior is a necessity for attraction of service users and the services require honesty and reality in financial statements (Ahmad, 2011). Professional behavior indicates a set of ethical rules and virtues which are necessary for existence and endurance of the profession (Arens et al, 2012). Studies conducted on scandal of Enron Company and its audits (Arthur Anderson Company) showed that the reason for the scandal was not absence of enough

international accounting standards but was absence of the audits' ethical professional behavior. Audits' commitment to auditing standards and professional rules, along with competent and expert personnel, has positive influence on auditing quality. Auditing institutes observe quality control criteria and maintain audits' independence and thereby improve their services. Further, there is a positive relationship between audits and quality of independence, objectivity, trustworthiness, and auditing qualification. Professional behavior principles in auditing aim to improve auditing profession credit, develop cooperation among accountants and audits, care for audits' benefits, development of comfort and self-confidence for users, legal conditions preparation for use of audit's knowledge and expertise, and audit's independence at work (Bouhawia et al, 2015).

Abnormal auditing behavior is a term which is used in academic texts to describe a behavior which leads to auditing quality reduction and finally auditing failure (Bryan et al, 2005). Abnormal audit behavior directly influences on auditing quality. Audit abnormal behavior includes numerous items like report less than the audit time limit (Kelley and Margheim, 1990) and premature signing of auditing procedures (Alderman and Deitrick, 1982). Some commentators have investigated ethics in auditing and abnormal behavior of audits. Taylor et al (2012) showed that from 238 respondents, 66 people showed 88 abnormal behaviors. Most of the abnormal behavior belonged to audits' behavior and a small number belonged to working environment. Other studies also investigated the influence of time budget pressure on independent audits' behavior. Mahdavi and Naimi (2003) found that although audits believe in adherence to professional ethics observation, they express non-professional behavior when exposed at time budget pressure. Furthermore, the possibility of non-professional behavior expression increases with increase of time budget pressure. Moreover, Mahdavi and Houshmand (2013) showed that audits' understanding of institute's ethical culture does not influence on audits' behavior. Furthermore, audits' personal traits do not increase auditing quality via audits' abnormal behavior.

**2.2. Social capital**

Although social capital concept roots go back to 19<sup>th</sup> century texts, it was first used by Jane Jacobs in 1961. This concept was also vastly studied by James Coleman in 1980s and Robert Putnam (Lorenz, 2017).

There are many definitions for social capital (Acquaah, 2007). In the primary definitions, Putnam believed that a good governance is closely related to civil participation and social integration depends on social networks, behavioral norms and trust. He confirmed that these items constitute social capital and it is necessary for life quality improvement, civil participation and development of communities. Coleman believed that social networks can create closer relationships among people and this in part can create limitations and commitments for a society or organization. Bordio also found that how social capital is placed beside cultural and economic capital and can be a part of organizations' strategy to reproduce more social capital or convert it into other forms of capital (Lorenz, 2017). In newer definitions, social capital is a good understanding which has been created by social relationships and can be moved to facilitate good performance (Agois et al, 2012). In another definition, social capital is a set of potential or actual resources which result in a more or less institutionalized network of enduring relationships for mutual realization or familiarity (in other words, membership in one group) (Bartee and George, 2019). Social capital, which can be defined also as a source inside communities, organizations and groups is created via high levels of trust, mutual action, common behavioral norms, formal and informal social networks and effective information channels (Rekib et al, 2018). Therefore, social capital involves social networks by which individuals are placed inside a structural ecosystem of networks (Faucher, 2018).

In general, social capital goals in organizations include (Lorenz, 2017):

- Use of social capital to keep organization
- Establishment of formal and informal links with other organizations and entities
- Development of relations with key decision-makers and using them
- Having a local support network
- Creation of social capital in favor of local communities via:
- Social partnership creation
- Facilitation of development of other companies
- Support of initiatives beneficial for society
- Encouragement of other organizations for being active in society

Social capital is a multidimensional concept which must be attended from different aspects (Lehner, 2014). Nahapiet and Ghoshal (1998) differentiated three structural, content (cognitive), and relational dimensions which are correspondent to social interaction, common targets and culture and trust in networks. Social capital dimensions are not independent of each other. In fact, all social dimensions must be highly dependent on each other (Castro and Roledan, 2013). The dimensions are explained in the following section.

#### Structural dimension

The Network theory and social capital theory were basically developed based on Bert's "structural cavities" approach and Granovetter's "strong and weak nodes" approach (Theodoraki and Messeghem, 2017). The structural dimension of social capital refers to structural features of a network (Castro and Roledan, 2013). In other words, this dimension describes the model of interaction between individuals/organizations like network density or restrictions (Baharati et al, 2015; Lewin et al, 2016; Lefberek et al, 2016). This dimension is characterized by formal relations in a network, their configuration and stability (Theodoraki and Messeghem, 2017). Indices like the number of partners and network nodes number are used for measurement of structural dimension of social capital (Castro and Roledan, 2013).

#### Content dimension (cognitive)

Cognitive dimension describes the organizations' common understanding of the interactions (Baharati et al, 2015). This dimension refers to methods of thinking (Levin et al, 2016), common vision (Lefebvre et al, 2016), common culture and targets, and common language and codes. In other words, this dimension is related to similarities in members' perceptions and interpretations. Common goals are concentrated on development of a common understanding of favorable achievements and outputs of members. A common culture refers to common beliefs among members of a society or organization. Common language and codes facilitate knowledge sharing among members (Theodoraki and Messeghem, 2017). A common outlook also refers to sharing targets, concerns, and perceptions among network members (Lefebvre et al, 2016).

#### Relational dimension

This dimension of social capital refers to relations achievements like trust which are grown via interaction (Bharati et al, 2015; Castro and Roledan, 2013), members' commitments and expectations and norms. Norms are powerful tools for creation of trust in an ecosystem (Theodoraki and Messeghem, 2017). Relational components of social capital include emotional closeness, Interaction frequency, and trust and trustworthiness. In order to measure relational dimension, usually indices which show node power (Levin et al, 2016) like multiple partners and accumulative ratio of coalition actions with others are used, because these indices can be regarded as symbols of trust among partners and coalitions and quality in relations (Castro and Roledan, 2013).

From domestic (Iranian) studies, Salehi Dashti and Saedi (2020) investigated the influence of occupational and social psychological pressure factors on occupational performance of audits. They used structural equations modeling technique and found that occupational psychological pressure, social pressure, and time pressure on audits can decrease their performance. They did not find any significant relationship between overwork and conflict between work and family with audit's occupational performance. Panahi (2019) conducted a research titled "a meta-analysis of causes and effects of social capital in organizations". He identified 20 independent and 35 dependent variables. He showed that human capital, citizenship behavior, ethical intelligence, organizational strategies, organizational justice, social networks, organizational intelligence, vertical relations, transformative leadership and social responsibility have the highest influence on formation and intensification of social capital. Further, important organizational variables like organizational health, participation, organizational success, life quality, occupational satisfaction, team effectiveness, knowledge management, talent management, responsiveness, performance improvement, customer orientation, organizational learning, intellectual capital, value creation, happiness can influence on organizational commitment. Davoudi Nasr et al (2018) conducted a research to investigate an appropriate model for audits' social capital (social ethics) from human rights and social values viewpoint using exploratory factor analysis and structural equations modeling technique. Their results showed that audits'

social responsibility dimensions from human rights and social values viewpoint include social base, use of mass media, presence in public, citizenship rights, , responsiveness and responsibility, civil participation, informing and transparency, quality and quantity of services and social mission commitment. Nikbakht et al (2018) proposed a model for audit independence. The results of 22 structured interviews with experts of auditing revealed that factors like human resource quality, absence of manager's influence on audit, absence of financial dependence on work manager, auditing work distribution quality, proper cycle of auditing institutes, auditing salary quality, competitiveness of atmosphere in auditing, observation of professional regulations and professional supervision sufficiency can influence on audit's independence. Moreover, factors like professional qualification of auditing institutes, manager's quality of demand for auditing service, and stakeholders' knowledge of auditing and contextual conditions like law-making features, executive and supervision features, socio-cultural and economic features of the society and auditing profession play intervening roles. Mehrabanpour et al (2019) investigated the relationship between social capital and auditing wage. They found that social capital arisen from religiousness; collectiveness and relationship with other companies have negative and significant influence on auditing wage. For other indices of social capital like family values and relationship with government, however, no significant influence was found. They also found that cognitive and structural dimensions of social capital have positive and significant relationship with financial position of commercial units. They believed that social capital can play a key role in economic vision and investors' decision-making model. Bani Mahd and Darvish (2016) investigated the relationship between social trust and audits' attitude towards independence. They found that social trust and audit's occupational position are influencing factors on audits' attitude towards independence. Tabandeh (2016) investigated the relationship between audit's professional ethics and auditing quality. He found that factors like audit's commitment to integrity and honesty, audit's independence and his/her professional neutrality, audit's commitment to professional behavior, secrecy, and audit's professional performance have positive and significant influence on auditing quality. Karimi et al

(2015) designed a conceptual model for social capital dimensions from Islamic system viewpoint. They investigated social capital features from western and Islamic viewpoints. The research had a qualitative and content analysis approach. The research studied western and Islamic references to introduce dimensions and sub-dimensions of social capital including structural, relational and cognitive dimensions to contribute to the literature.

Among similar foreign studies, Castilo et al (2021) investigated the influence of planned behaviors on social capital. Their results showed that mental norms, perceived control and mental attitudes influence on social capital. Asry and Ginting (2020) conducted a study to investigate the influence of professional behavior and emotional quotient on audit performance in Indonesia. They used linear regression and indicated that EQ and professional behavior significantly influence on audits' performance together with each other (simultaneously). Bianchi et al (2019) investigated the influence of social capital and human capital of an audit on his/her wage in Italy. Their results revealed that an audit's personal traits significantly influence on audit's wage. Furthermore, they found that value and social capital of audits in companies which use small auditing institutes is more and they pay more wages. Akintimehin et al (2019) conducted a research titled: "investigation of social capital and its influence on commercial performance" in Nigeria using structural equations modeling technique and partial least squares. They proved that all dimensions of social capital influence on commercial performance. Further, company's lifetime intensifies the relationships as a control variable. Joeha (2017) dealt with the impact of social capital on financial reports. His results revealed that when an enterprise is located in an area with a high social capital, it has higher quality in financial reports. He found that enterprises located in such an area in USA present financial information with less probable fraud. Joeha and Chen (2015) investigated the audit's wage and social capital. They found that companies located in low social capital pay more costs for auditing their financial statements. Hasan et al (2015) investigated social capital and debt contract. They used regression analysis and found that companies in environments with more social capital face easier conditions in debt contracts.

## Research methodology

In terms of purpose, this was an applied research and in terms of data gathering technique, it can be regarded as a mixed exploratory research. Exploratory mixed studies have two stages in which the results of the first method (qualitative) contribute to the results and analyses of the second method (quantitative). This is useful especially when a researcher wants to develop a model or test it, because these methods cannot investigate research variables alone. In this method, first, interview is used to identify important variables, develop a categorization system, develop a new theory or study the details of a subject. The variables and their relationships are identified to respond to research questions. In the quantitative section of the research, the model obtained in the first section was validated. Questionnaire-based surveys are used usually in this section (Muhammadpour, 2012).

### 3.1. Data gathering tools

Semi-structured interview was used to collect qualitative data. First, research questions were prepared and new ideas of experts were added during interviews and new questions were asked if necessary. In this methodology, acceptable and effective results were obtained to identify the constructs. A researcher-made questionnaire with 5-point Likert scale was used in the quantitative section.

### 3.2. Analysis method

Thematic method was used to analyze data. According to Braun and Clarke (2006), thematic analysis is a method for identifying, analyzing and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail. Thematic analysis offers an accessible and theoretically flexible approach to analyzing qualitative data. Therefore, three encoding stages, i.e. open, axial and selective encoding of verbal data were used. In the quantitative section, structural equations modeling with partial least squares was conducted using Smart PLS.

### 3.3. Statistical population and the sample

The statistical population of the research included formal accounting and auditing experts. The experts were divided into two sections: a) theoretical experts: university lecturers who were educated in auditing

field and were members of universities scientific board and had more than 10 years of experience. B) Empirical experts: including members of formal accounting society with more than 10 years of experience in auditing with minimum master degree. The statistical population of the research, in quantitative section, included all members of formal auditing society. Sampling was non-random and purposeful in the qualitative section and was cluster random in the quantitative section. Sample size in the qualitative section was determined based on theoretical saturation, where the saturation was reached in the 18<sup>th</sup> interview. In the 18<sup>th</sup> interview, the extracted data was repetitive and no new code was explored. However, For more certainty, two more interviews were conducted.

In the quantitative section, sample size was calculated by Cochran's formula for a limited population:

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left[ \frac{z^2 pq}{d^2} - 1 \right]} = \frac{\frac{1.96^2 \times 0.5 \times 0.5}{0.05^2}}{1 + \frac{1}{320} \left[ \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} - 1 \right]} \approx 174$$

Therefore, minimum required sample size was 174 people and 180 people were picked for more certainty.

### 3.4. Reliability and Validity

To increase validity of data obtained from interview, all verbal data were sent back to interviewees to confirm/modify them. The face and content validity of the questionnaire was confirmed by 10 academics. Average variance extracted (AVE) was used to investigate construct validity. Cronbach's alpha and composite reliability were used to investigate reliability of the questionnaire.

## Data analysis

### Demographic variables

The qualitative data was gathered among 20 experts. 17 respondents were male and 3 were female. Two respondents were below 35 years old, 7 were aged 35-45, and 11 were above 45. 5 experts had master degree and 15 had PhD degrees. 8 people had an experience between 10 to 20 years, 12 had more than 20 years. 116 respondents were male (64%) and 64 people (36%) of them were female in the quantitative section. 75 people (42%) had bachelor degree and 85 people

(47%) had master degree and 20 people had PhD degree (11%). 34 audits were below 35 years old (19%), 96 people were 35-45 (53%) and 50 people (28%) were 45 and above.

The semi-structured interview questions of the research are as follows. Regarding the answers to the following questions, more questions were asked from respondents. After data gathering, open, axial and selective encoding stages were conducted and a sample can be observed in table 2.

**Qualitative data analysis results**

**Table 1. Interview questions**

Questions	
1	What are the dimensions of audits' behavior in your opinion?
2	What are the dimensions of social capital in your idea?
3	Which factors influence on audit's behavior based on social capital dimensions?
4	How do you evaluate audit's indigenized behavior model based on social capital dimensions?

**Table 2. A sample of coding of verbal data**

	Answer in text form	Primary coding (open)	Axial coding	Selective coding
1	Ethical rules are not the results of fixed personal traits but are the results of interaction between an individual and ethical environment. studies revealed that there is a significant relationship between ethical atmosphere and audits' ethical judgment. this shows that senior management of enterprises play important role in ethical regulation.	Senior management important role in ethical orientation	Ethics-oriented audits' training	Organization's management

In the first stage, verbal data were analyzed by open encoding. In the second step, axial codes were extracted after classification and elimination of

repeated items. In the third step, axial codes were integrated in larger categories by selective encoding (table 3).

**Table 3. Axial and selective encoding of research data**

Selective codes	Axial codes
Organization's management	Institutionalization of behavioral values
	Inclusion of behavioral education in accounting educational system
	Management of ethical values in work environment and managerial actions legitimacy
	Instruction of ethical accountants
	Behavioral sensitivity presence in management
	Improvement of audits' compatibility with ethical standards
	Organization's managers and policy-makers' admiration of ethical values
Professional principles and rules	Design of professional behavior code
	Proper behavioral values and ethical decision-making
	Design of rules and standards
	Framework creation by organizational behavior
Human (individual capital)	12. High levels of self-knowledge, self-regulation and self-confidence
	Self-efficacy and emotional intelligence
	Accountants' adherence to fundamentals of professional behavior
	Independence and neutrality, secrecy and honesty
Cognitive factors	Proper understanding of organizational ethical principles
	Proper understanding of ethical principles of accounting profession
	Understanding and maintenance of common ethical values
	Group work morale and cooperation in works
Strategic considerations	Organizational policies and directions
	Behavioral values based on organizational policies, processes, and activities
	Design of behavioral codes, ethics instruction, and behavioral decision-making teaching

	Strategy design based on ethical models
Organizational environment	Ethical rules observation in accounting
	Behavioral motivations presentation
	Appropriate organizational behavior atmosphere
	Ethical standards implementation
	Role conflict in the organization
Social capital	Norms arisen from family, trust, and ethical behavior among individuals
	Creation of an ideal environment for formation of useful cooperation among individuals
	Strengthening of family values, integration and friendship among people
	Mutual trust, achieving benefits and collective synergy
	Religiousness, family values and collectiveness
	Culture, beliefs, norms, values, tendencies and beliefs

The research proposed model is presented in figure 1 as the final step in qualitative section.

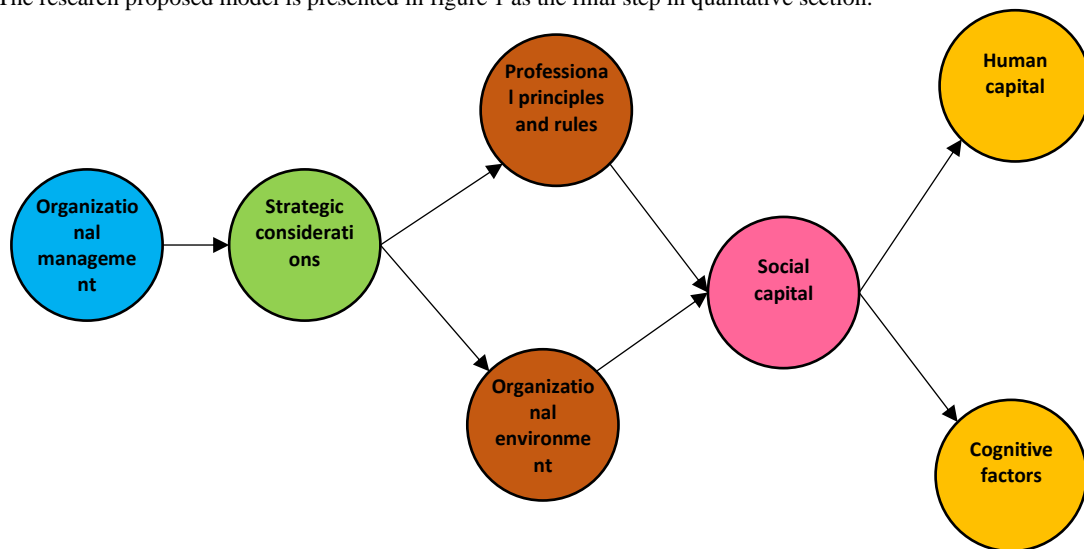


Figure1. Indigenized model for audit's behavior based on social capital

**Quantitative data analysis results**

The model was tested by means of structural equations modeling technique and partial least squares approach in Smart PLS. several points should be cared about in partial least squares technique: the strength of relationship between factor (latent variable) and observable variable is indicated by factor loading. Factor loading ranges between zero and 1. If its vale is less than 0.3, the relationship is weak. If it is between 0.3 and 0.6, it is acceptable and it is very desirable if it is above 0.6. bootstrapping or Jackknife cross-validation method are used to investigate significance of the observed correlations. Bootstrap method was used in this research, which leads to t statistic. In a 5% error level, if t-value is greater than 1.96, the observed correlations are significant. In general, there are two

kinds of inter-variable relationship in partial least squares technique: outer model, which reveals the relationships between latent and obvious variables. The Inner model investigates relationships among latent variables (Davari and Rezazadeh, 2014). Questions 33 and 34 were eliminated due to small factor loading and the model was re-executed. The results of the final model have been presented in Table 3 and Table 4.



**Table 4. Outer model (research constructs measurement model)**

Constructs	Statements	Factor loading	T value
Organizational management	Q01	0.787	13/187
	Q02	0.817	20/44
	Q03	0.80	19/800
	Q04	0.766	13/764
	Q05	0.869	18/709
	Q06	0.860	32/848
	Q07	0.860	33/198
Professional principles and rules	Q08	0.870	28/03
	Q09	0.888	46/840
	Q10	0.830	17/418
	Q11	0.893	30/906
Human capital (individual)	Q12	0.861	26/049
	Q13	0.802	20/089
	Q14	0.803	30/18
	Q15	0.840	29/922
Cognitive factors	Q16	0.676	8/008
	Q17	0.862	29/720
	Q18	0.408	3/012
	Q19	0.798	13/992
Strategic considerations	Q20	0.886	09/917
	Q21	0.678	7/766
	Q22	0.802	31/403
Organizational environment	Q23	0.666	7/126
	Q24	0.879	37/313
	Q25	0.922	77/687
	Q26	0.887	43/030
	Q27	0.814	16/738
	Q28	0.711	9/203
Social capital	Q29	0.733	10/142
	Q30	0.809	17/003
	Q31	0.700	16/063
	Q32	0.778	10/833

Three indices were used to evaluate reliability and validity of the outer model:

- Convergent validity
- Composite reliability
- Cronbach's alpha

Convergent validity shows how convergent the variables of a construct are. It is investigated based on outer model and by calculation of AVE. AVE index indicates the shared variance between each construct and its own indices. In other words, AVE shows the correlation between a construct and its own indices, the more this correlation, the better the fit. Fornell and Larcker believe that if AVE is greater than 0.5, the

measurement model has convergent validity (Davari and Rezazadeh, 2014).

Composite reliability (CR) is a better and more valid index than Cronbach's alpha in structural models. This is because in Cronbach's alpha, all indices of a construct are imported in calculations with the same importance. In calculation of composite reliability, however, indices with higher factor loadings have more importance. This in part causes CR values of constructs to be more realistic and exact than Cronbach's alpha.

The following conditions must hold for convergent validity and composite reliability:

Condition 1

$$CR > 0.7; CR > AVE; AVE > 0.5$$

**Table 5. Reliability and validity of the research constructs**

Main constructs	Convergent validity (AVE)	Composite reliability (CR)	Cronbach's alpha
Cognitive factors (CF)	0.512	0.800	0.781
Human capital (HC)	0.727	0.914	0.870
Organizational (OE) environment	0.710	0.926	0.898
Organizational (OM) management	0.780	0.937	0.921
Professional principles and rules (PPR)	0.760	0.927	0.890
(SC) Social capital	0.514	0.799	0.770
Strategic (SF) considerations	0.591	0.800	0.760

AVE is greater than 0.5. Thus, the convergent validity holds.

Cronbach's alpha was greater than 0.7 for all variables. Thus, the reliability is confirmed.

Composite reliability is also greater than AVE and is greater than 0.7 in all cases. Therefore, the third condition also holds.

The relationship between variables in each hypothesis has been tested by partial least squares (PLS) method in order to evaluate the internal model of the research. The general model of the research is presented in figure 2. This model, which is the output of Smart PLS software, the summary of results of standard factor loadings of variables has been presented. T statistic and bootstrapping value for measurement of significance of relationships has been presented in figure 3.

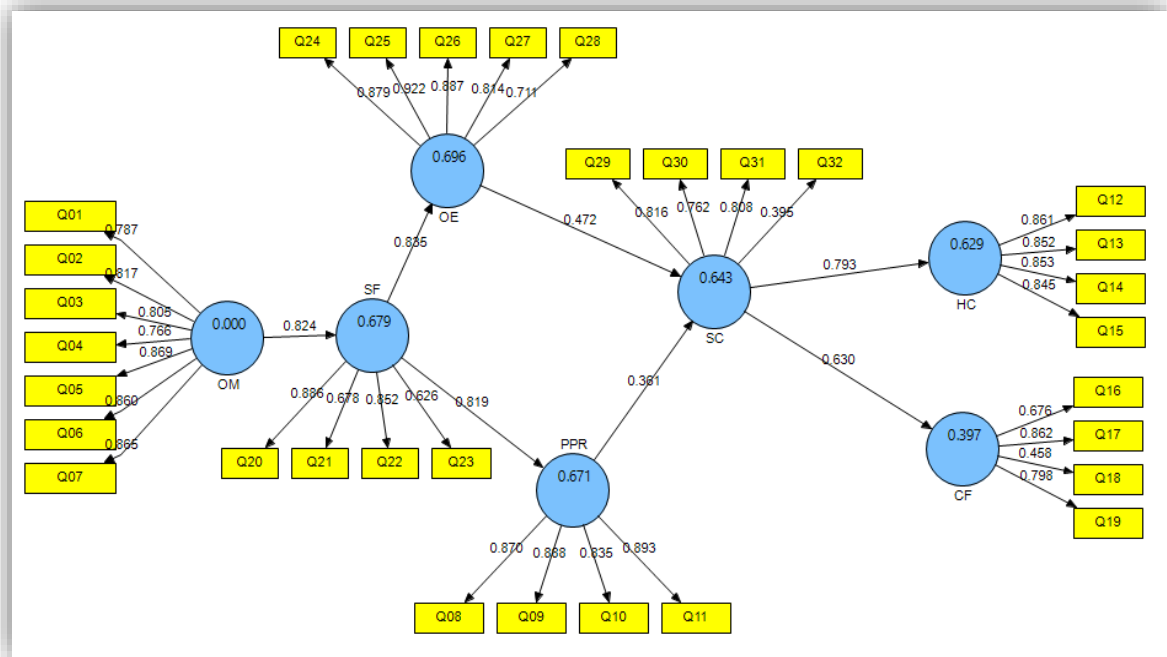


Figure 2. output of model validation with partial least squares technique (Path coefficient mode)

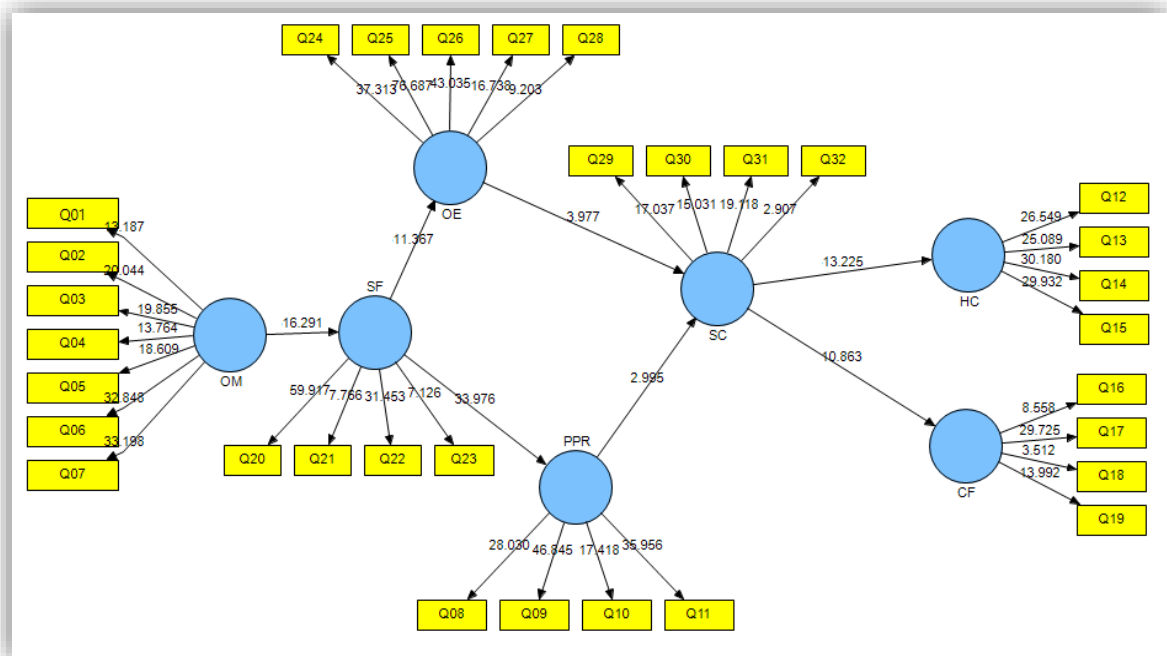


Figure 3. significance of relationships among variables with partial least squares method (Bootstrapping mode)

Standard factor loading of the influence of organizational management on strategic considerations is equal to 0.824. further, t value is equal to 16.291 which is greater than 1.96 critical value. Thus, it can be said with 95% of certainty that organizational management has a positive and significant influence on strategic considerations.

Standard factor loading of the influence of strategic considerations on organizational environment is equal to 0.835. Further, t value is equal to 11.367 which is greater than 1.96 critical value. Thus, it can be said with 95% of certainty that strategic considerations have a positive and significant influence on organizational environment.

Standard factor loading of the influence of strategic considerations on professional ethics and principles is equal to 0.819. further, t value is equal to 13.976 which is greater than 1.96 critical value. Thus, it can be said with 95% of certainty that strategic considerations have a positive and significant influence on professional principles and ethics.

Standard factor loading of the influence of organizational environment on social capital is equal to 0.472. further, t value is equal to 3.997 which is

greater than 1.96 critical value. Thus, it can be said with 95% of certainty that organizational environment has a positive and significant influence on social capital.

Standard factor loading of the influence of professional ethics and principles on social capital is equal to 0.381. further, t value is equal to 2.995 which is greater than 1.96 critical value. Thus, it can be said with 95% of certainty that professional ethics and principles has a positive and significant influence on social capital.

Standard factor loading of the influence of social capital on human capital (individual) is equal to 0.793. further, t value is equal to 13.225 which is greater than 1.96 critical value. Thus, it can be said with 95% of certainty that social capital has a positive and significant influence on human (individual) capital.

Standard factor loading of the influence of social capital on cognitive factors is equal to 0.630. further, t value is equal to 10.863 which is greater than 1.96 critical value. Thus, it can be said with 95% of certainty that social capital has a positive and significant influence on cognitive factors capital.

Table 6. Research hypotheses test

hypotheses	Independent variable	Dependent variable	Path coefficient	T value	Result
Hypothesis 1	Organizational management	Strategic considerations	0.824	16.291	Supported
Hypothesis 2	Strategic considerations	Organizational environment	0.835	11.367	Supported
Hypothesis 3	Strategic considerations	Professional principles and rules	0.819	13.976	Supported
Hypothesis 4	Organizational environment	Social capital	0.472	3.997	Supported
Hypothesis 5	Professional principles and rules	Social capital	0.381	2.995	Supported
Hypothesis 6	Social capital	Human capital	0.793	13.225	Supported
Hypothesis 7	Social capital	Cognitive factors	0.630	10.863	Supported

In the end, fit of the outer model was investigated. Contrary to measurement models, the structural model does not concern the questions and obvious variables of the model and only deals with latent variables and their relationships. The following indices were used for fit of the structural model in this research:

- Determination coefficient (R<sup>2</sup>)
- Stone-Geisser index (Q<sup>2</sup>)
- goodness of fit index (GOF)

As determination coefficient (R<sup>2</sup>) is greater for model endogenous constructs, the model has a better fit. Chin proposed three values 0.19, 0.33, and 0.67 as criteria values for weak, average, and strong values of

structural model fit in determination coefficient (Davari and Rezazadeh, 2014).

According to table 7, determination coefficient for model endogenous constructs is desirable. Sport hosting determination coefficient is 0.582 which is acceptable.

Table 7. determination coefficients

Main constructs	Determination coefficient
(CF) Cognitive factors	0.397
(HC) Human capital (individual)	0.729
(OE) Organizational management	0.796
(PPR) Professional principles and rules	0.771
(SC) Social capital	0.743
(SF) Strategic considerations	0.779

Stone-Geisser index ( $Q^2$ ) specifies model prediction power. Henseler et al (2013) proposed three values 0.02, 0.15, and 0.35 for weak, average and strong prediction power. Further, variables values are mainly in 0.15 and 0.35 interval or greater than 0.35. thus, prediction power of research constructs are average to strong.

Goodness of fit (GOF) index is the most important index in partial least squares technique. This index evaluates both measurement and structural models. This index is calculated by square root of the product of "R<sup>2</sup> average" and "communalities indices average":  
Equation 2

$$GoF = \sqrt{(R^2) \times (Commuality)}$$

GOF was invented by Tenhaus et al and is calculated as in equation 2. Wetzels et al proposed three values 0.01, 0.25, 0.36 as weak, average, and strong values for GOF (Davari and Rezazadeh, 2014). Therefore, GOF in this research is:

Determination coefficient values average  
( $R^2$ ) = 0.619

Commuality values average  
(Commuality)=0.390

$$GOF = \sqrt{0.619 \times 0.390} = 0.491$$

GOF index is equal to 0.491. thus, the model is of a good fit.

### Conclusion and discussion

The present research developed and tested an indigenized model for audit behavior based on social capital determinants and consequences. Qualitative method and semi-structured interviews were used to identify these factors. The results of the qualitative section revealed that factors which affect social capital includes professional principles and rules,

organizational environment, strategic considerations, and organizational management. Furthermore, outcomes of audit's social capital include human capital and cognitive factors.

Human capital includes knowledge, creativity, experiences, and occupational skills of audits. This factor results in creation of added value by audits in the process of conversion of knowledge and experience into service for auditing institute. The results of the quantitative section revealed that human capital, with significance coefficient of 13.225 and path coefficient of 0.793 should be regarded as one of the positive results of social capital. This result is similar to the results of studies conducted by Coleman (1988), Teachman et al (1997), Schuller and Field (1998), and Johnson et al (2012). Cognitive factors are those approaches and positive and flexible aspects of life and optimism and self-efficacy. This causes better self-understanding and helps achieve auditing goals and can cause success and merit for audits. The results showed that cognitive factor with a significance coefficient of 10.863 and path coefficient of 0.63 is an achievement of social capital for audits. This result is similar to the results of studies conducted by Hashemi Nosrat Abad et al (2011), Bahadori KhosroShahi et al (2012) and Mahfud et al (2020).

Audits' ethical and professional principles include behavioral Do's and Don'ts (Teodoraki and Messghem, 2017). They have roots in ethics. Ethical rules indicate the behavior, responsibility of profession members towards society, each other and third parties. Observation of these principles increases social capital responsibility level and individual responsiveness. The results showed that ethical and professional principles variable, with a path coefficient of 0.381 and significance coefficient of 2.995, has a positive and significant influence on social capital. This result is similar to the results of studies conducted by Pastoriza et al (2009), Illingworth (2012), Pastoriza and Arino (2013) and Pastoriza et al (2015).

Audits; organizational environment has a close relationship with different aspects of other organizations and audits' performance. These aspects include occupational roles and features. The results of the research showed that organizational environment, with a path coefficient of 0.472 and significance coefficient of 3.997 has positive and significant influence on audits' social capital. This is similar to the results of studies conducted by Cheong (2006), Pastoriza et al (2009) and Salehudin (2009).

Ethical and professional principles and also organizational environment are affected by strategic considerations. This construct refers to audits and their supervisors' decisions. Audits use a set of relating strategies instead of a comprehensive and unit strategy. Some audits use strengths to exploit external opportunities and events and some of them make use of external environment opportunities. Therefore, a relationship should be considered between auditing strategies and individual ethics. The results showed that strategic considerations with a path coefficient of 0.819 and significance coefficient of 13.976 has positive and significant influence on professional and ethical principles. This is similar to the findings of Gilbert (1986) and Hosmer (1994). Further, the results showed that strategic considerations, with a path coefficient of 0.835 and significance coefficient of 11.367, has a positive and significant influence on organizational environment. This is compatible with the results of Slevin and Kevin (1997) and Bantel (1998).

Finally, the results revealed that it is the organization's management which specifies the strategic considerations of influences on them. This is compatible with the viewpoints of Mintzberg (2000) in his book "the rise and fall of strategic planning". He believes that although participative management style is effective in strategy implementation step, planning and decision-making for organizational strategies should not be done by participative approach and should be done by senior management of the organization because lower-level people may involve their executive benefits in preparation of plans and strategies. Moreover, this increases the cost and time of planning.

## Practical implications

The following recommendations are presented based on the research results:

An important issue regarding the position of audits is their behavior. the results revealed that audits' behavior is effective based on social capital. Therefore, the following recommendations are presented:

a) human capital allows for emergence and fruition of creativity and innovation among audits from two aspects: understanding and attention to creativity and innovation and promotion of organizational technologies and re-definition and support of innovative behavior. Therefore, any kind of attempt in the field of human capital improvement is a kind of investment in creation of a creative and innovative auditing institute. Therefore, considering the relationship between human capital and creativity, two approaches can be adopted. one is development of human capital in regular manners which in part increases creative behaviors and the other is promotion of human capital in the meaning of development of knowledge and skill and expertise in creativity and creation of new ideas in administrative, educational and organizational processes.

b) according to the results of the research, audits' cognitive capital as a dimension of social capital can result in audits commitment and attempt. Managers and owners of institutes are responsible for social capital development. Therefore, this approach should be institutionalized.

c) spread of ethics among audits means learning a special style of organizational life. Indirect methods like social, cultural, and in-service instruction should be cared about. Besides the instruction type, the organization should specify instructional needs out of comparison of the present status and desirable status (what is necessary for answering ethical constitution and organizational goals) in order to effectively determine instructional content. It is necessary to support research on professional ethics in order to determine the present status (audits' level of adherence to professional ethics) and desirable status (audits' viewpoint to institute conditions as knowledgeable individuals).

d) the results of the present study can present recommendations for the statistical population programmers an experts: managers can hold periodical meetings and appraise select audits

ethically in order to increase other colleagues' motivations. Since audits have important roles in development of social capital of organizations, they should be provided with different aspects of social capital to play effectively in this regard. An application of dimensions of social capital concept can help strengthen this concept in auditing and transfer it to the society widely.

e) the results showed that social capital dimensions can be replaced in audit's behavior. it can be said that social structures can be effective in audit's behavior. considering the importance of audit position in society and among investors, Tehran Stock Exchange managers, law-makers and professional boards are proposed to include social capital concepts in audits' professional behavior code to increase audits' ethical knowledge.

### Limitations and Future research

Besides practical implications, the following recommendations for future research are proposed:

- a) Researchers should study the impact of local factors on audits' professional behavior.
- b) It is recommended to investigate the impact of audits' individual bias on auditing techniques.
- c) It is recommended to investigate the relationship between motivational psychology dimensions and auditing quality in a linear model.
- d) It is recommended to investigate the impact of organizational ethical culture on audit's judgment.
- e) This research is limited to Iranian audits. More studies can be conducted among other occupational groups as well as other countries.
- f) This study has not examined the moderating roles of demographics (gender, age, education, etc.) in the relationship between independent variables and dependent variables. Future research should be done considering these variables.
- g) This research found that organizational management can affect the determinants of social capital indirectly through strategic considerations. However, future research should find out how different leadership styles can affect these determinants.

### References

- 1) Abdollahi, M., & Mousavi, M. (2007). Social capital in Iran; present situation, future outlook, and transition feasibility study. *Social well-being*, 6(25), 195-233. (In Persian)
- 2) Asgari, M. M., & Tohidinia, A. (2007). The influence of social capital on economic growth and development. *Economic viewpoints*, 4(8), 209-220. (In Persian)
- 3) Bahadori Khosroshahi, J., Hashemi Nosrat Abad, T., & Babapour Kheirudin, J. (2012). Relationship between psychological capital and social capital in Tabriz University students. *Specialized journal of research and health*, 2(1), 145-153. (In Persian)
- 4) Bani Mahd, B., & Darvish, H. (2016). Social trust and audits' attitude towards independence. *Journal of accounting and management auditing knowledge*. 5(19), 17-26. (In Persian)
- 5) Davari, A., & Rezazadeh, A. (2014). Structural equations modeling with PLS software, Tehran: Jahad-e-Daneshgahi press. (In Persian)
- 6) Davoudi Nasr, M., Talebnia, G., Royayi, R. A., Salehi Amiri, S. Reza. (2018). A determination of an appropriate model for social responsibility auditing (social ethics) of companies from human rights and social values viewpoint using exploratory factor analysis and structural equations modeling. *Journal of accounting and management auditing*, 7(25), 99-122. (In Persian)
- 7) Ghaderi, K. (2017). The role of social capital in improvement of responsiveness of public sector managers. *Journal of management, economy and accounting*, 3(2), 31-42. (In Persian)
- 8) Hashemi Nosrat Abad, T., Babapour Kheirudin, J., & Bahadori Khosroshahi, J. (2011). The role of psychological capital in psychological well-being considering the intermediary impacts of social capital. *Social psychological studies*, 1(4), 123-144. (In Persian)
- 9) Karimi, M., Khanifar, H., & Taheri Nejad, F. (2015). Design of conceptual model for social capital dimensions from Islamic system viewpoint. *Journal of social capital management*, 2(4), 605-630. (In Persian)
- 10) Mahdavi, G. H., & Abdulhamid, H. (2013). Investigation of the influence of organizational ethical culture on independent audits' behavior. *Accounting and auditing investigations*, 10 (32), 43-61. (In Persian)

- 11) Mehrabanpour, M. R., Jandaghi Ghomi, M., & Rajab Beigi, M. A. (2019). Social capital and auditing salary. *Quarterly of accounting and auditing investigations*, 25(2), 269-288. (In Persian)
- 12) Mehrabanpour, M. R., Karami, G. R., & Jandaghi Ghomi, M. (2020). Social capital framework for Iranian auditing institutes. *Bi-quarterly of value and behavioral accounting*, 5(10), 29-68. (In Persian)
- 13) Muhammadpour, A. (2012). *Anti-method qualitative research method-first volume (logic and design in qualitative methodology)*. Tehran: sociologists publications. (In Persian)
- 14) Nikbakht, Z., Khalifeh Soltani, S. A. Hoseini, S. A., Maddahi, A., & Dadhir, A. (2018). A design of audit's independence model. *Journal of financial accounting*, 10(38), 90-112. (In Persian)
- 15) Panahi, B. (2019). A meta-analysis of causes and effects of social capital in organizations. *Quarterly of social capital management*, 6(3), 351-373. (In Persian)
- 16) Saadat, R. (2006). Estimation of the level and distribution of social capital in provinces. *Social welfare*, 6(23), 173-195. (In Persian)
- 17) Saadat, R. (2009). An estimation of social capital trend in Iran (using fuzzy method). *Economic research*, 43(83), 41-56. (In Persian)
- 18) Salehi Dashti, M. R., & Saedi, R. (2020). The influence of occupational and social psychological pressure factors on audits' occupational performance. *Journal of health accounting*, 9(1), 40-61. (In Persian)
- 19) Souri, A. (2014). Social capital and its growth in Iran. *Quarterly of economic studies and policies*, 22(69), 49-64. (In Persian)
- 20) Tabandeh, S. (2016). Relationship between audit's professional ethics and auditing quality. *Quarterly of ethics in science and technology*, 11(3), 77-86. (In Persian)
- 21) Acquaah, M. (2007). Managerial social capital, strategic orientation, and organizational performance in an emerging economy. *Strategic management journal*, 28(12), 1235-1255.
- 22) Agoes, Sukrisno. (2012). *Auditing Petunjuk Praktis Pemeriksaan Akuntan Oleh Akuntan Publik*. Jakarta: Salemba Empat.
- 23) Ahmed, A. C. A. (2010). Ethics in auditing; and ethical studies in different accounting bodies. Available at SSRN 1631346.
- 24) Akintimehin, O. O., Eniola, A. A., Alabi, O. J., Eluyela, D. F., Okere, W., & Ozordi, E. (2019). Social capital and its effect on business performance in the Nigeria informal sector. *Heliyon*, 5(7), e02024.
- 25) Alderman, C. W., & Deitrick, J. W. (1982). Auditor's Perceptions of Time Budget Pressure and Premature Sign-Offs: A Replication and Extension. *A Journal of Practice and Theory*, 1(2), 54-58.
- 26) Ardiyos. (2012). *Kamus Standar Akuntansi*. Jakarta: Citra Harta Prima.
- 27) Arens, A. A., Elder, R. J., & Mark, B. (2012). *Auditing and assurance services: an integrated approach*. Boston: Prentice Hall.
- 28) Asry, S., & Ginting, H. (2020). Effect of Professional Ethics and Emotional Intelligence on Auditor Performance. *Journal of Research in Business, Economics, and Education*, 2(3), 576-589.
- 29) Bantel, K. A. (1998). Technology-based, "adolescent" firm configurations: strategy identification, context, and performance. *Journal of business venturing*, 13(3), 205-230.
- 30) Bartee, R. D., & George, P. L. (2019). *Foreword: External Access and Internal Accountability: The Currency Conduits for Maximizing Social Capital in Public Schools and Higher Education*. In *Contemporary Perspectives on Social Capital in Educational Contexts* (pp. ix-xxii). Information Age Publishing.
- 31) Bharati, P., Zhang, W., & Chaudhury, A. (2015). Better knowledge with social media? Exploring the roles of social capital and organizational knowledge management. *Journal of Knowledge Management*, 19(3), 456-475.
- 32) Bianchi, P. A., Carrera, N., & Trombetta, M. (2020). The effects of auditor social and human capital on auditor compensation: Evidence from the Italian small audit firm market. *European Accounting Review*, 29(4), 693-721.
- 33) Bouhawia, M., Gugus, I., & Zaki, B. (2015). The effect of working experience, integrity, competence, and organizational commitment on audit quality. *IOSR Journal of Economics and Finance*, 6(4), 60-67.

- 34) Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- 35) Bryan, D. O., Quirin, J. J., & Donnelly, D. P. (2005). Locus of control and dysfunctional audit behavior. *Journal of Business & Economics Research (JBER)*, 3(10), 9-14.
- 36) Castillo, G. M. L., Engler, A., & Wollni, M. (2021). Planned behavior and social capital: Understanding farmers' behavior toward pressurized irrigation technologies. *Agricultural Water Management*, 243, 106524.
- 37) Castro, I., & Roldán, J. L. (2013). A mediation model between dimensions of social capital. *International Business Review*, 22(6), 1034-1050.
- 38) Cheong, H. P. (2006). Communication context, social cohesion and social capital building among Hispanic immigrant families. *Community, work and family*, 9(3), 367-387.
- 39) Choi, Y. (2016). The impact of social capital on employees' knowledge-sharing behavior: An empirical analysis of US federal agencies. *Public Performance & Management Review*, 39(2), 381-405.
- 40) Chou, S. W., & Chang, Y. C. (2008, January). An empirical investigation of knowledge creation in electronic networks of practice: social capital and theory of planned behavior (TPB). In *Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008)* (pp. 340-340). IEEE.
- 41) Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, 94, S95-S120.
- 42) Eden, D., & Moriah, L. (1996). Impact of internal auditing on branch bank performance: a field experiment. *Organizational Behavior and Human Decision Processes*, 68(3), 262-271.
- 43) Evans, C. B., & Smokowski, P. R. (2015). Prosocial bystander behavior in bullying dynamics: Assessing the impact of social capital. *Journal of youth and adolescence*, 44(12), 2289-2307.
- 44) Faucher, K. X. (2018). *Social Capital Online*. University of Westminster Press.
- 45) Fedderke, J., De Kadt, R., & Luiz, J. (1999). Economic growth and social capital: A critical reflection. *Theory and society*, 28(5), 709-745.
- 46) Francois, P. (2002). *Social capital and economic development* (Vol. 2). Routledge.
- 47) Ghosh, A., & Moon, D. (2005). Auditor tenure and perceptions of audit quality. *The Accounting Review*, 80(2), 585-612.
- 48) Gilbert, D. R. (1986). Corporate strategy and ethics. *Journal of Business Ethics*, 5(2), 137-150.
- 49) Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. *American economic review*, 94(3), 526-556.
- 50) Hasan, I., Hoi, C. K., Wu, Q., & Zhang, H. (2017). Social capital and debt contracting: Evidence from bank loans and public bonds. *Journal of Financial and Quantitative Analysis*, 52(3), 1017-1047.
- 51) Hosmer, L. T. (1994). Strategic planning as if ethics mattered. *Strategic management journal*, 15(S2), 17-34.
- 52) Illingworth, P. (2012). Ethics and social capital for global well-being. *International Review of Economics*, 59(4), 389-407.
- 53) Jha, A. (2019). Financial reports and social capital. *Journal of Business Ethics*, 155(2), 567-596.
- 54) Jha, A., & Chen, Y. (2015). Audit fees and social capital. *The Accounting Review*, 90(2), 611-639.
- 55) Johnson, S. G., Schnatterly, K., & Hill, A. D. (2013). Board composition beyond independence: Social capital, human capital, and demographics. *Journal of management*, 39(1), 232-262.
- 56) Kelley, T., & Margheim, L. (1990). The Impact of Time Budget Pressure, Personality and Leadership Variable on Dysfunctional Behavior. *A Journal of Practice and Theory*, 9(2), 21-41.
- 57) Kiabel, B. D. (2012). Internal auditing and performance of government enterprises: a Nigerian study. *Global Journal of Management and Business Research*, 12(6), 5-12.
- 58) Lefebvre, V. M., Sorenson, D., Henchion, M., & Gellynck, X. (2016). Social capital and knowledge sharing performance of learning networks. *International Journal of Information Management*, 36(4), 570-579.
- 59) Lehner, O. M. (2014). The formation and interplay of social capital in crowdfunded social ventures. *Entrepreneurship & Regional Development*, 26(5-6), 478-499.



- 60) Levin, D. Z., Walter, J., Appleyard, M. M., & Cross, R. (2016). Relational enhancement: How the relational dimension of social capital unlocks the value of network-bridging ties. *Group & Organization Management*, 41(4), 415-457.
- 61) Lorenz, G. (2017). The implementation of social capital features in social auditing procedures to secure community accountability of social enterprises in the third sector. In CONSCISE Project: The Contribution of Social Capital in the Social Economy to Local Economic Development in Western Europe (pp. 121-135). European Union.
- 62) Mahfud, T., Triyono, M. B., Sudira, P., & Mulyani, Y. (2020). The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: the mediating role of psychological capital. *European Research on Management and Business Economics*, 26(1), 33-39.
- 63) Mintzberg, H. (2000). *The rise and fall of strategic planning*. Pearson Education.
- 64) Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266.
- 65) Pastoriza, D., & Ariño, M. A. (2013). Does the ethical leadership of supervisors generate internal social capital?. *Journal of Business Ethics*, 118(1), 1-12.
- 66) Pastoriza, D., Ariño, M. A., & Ricart, J. E. (2009). Creating an ethical work context: A pathway to generate social capital in the firm. *Journal of Business ethics*, 88(3), 477-489.
- 67) Pastoriza, D., Arino, M. A., Ricart, J. E., & Canela, M. A. (2015). Does an ethical work context generate internal social capital?. *Journal of Business Ethics*, 129(1), 77-92.
- 68) Patton, M. Q. (2000). *Qualitative evaluation and research methods*. SAGE Publications, Inc.
- 69) Rakib, M., Chakrabarty, S., & Winn, S. (2018). Gender-differentiated social and human capital and the use of microcredit in Bangladeshi female entrepreneurship. In *Social capital and enterprise in the modern state* (pp. 181-202). Palgrave Macmillan, Cham.
- 70) Salehudin, I. (2009). *Social/Network Power: Applying Social Capital Concept to Explain the Behavioral Tendency of Individuals in Granting Favors within the Organizational Context*. In *Proceedings of 4th International Conference on Business and Management Research*.
- 71) Schuller, T., & Field, J. (1998). Social capital, human capital and the learning society. *International Journal of Lifelong Education*, 17(4), 226-235.
- 72) Slevin, D. P., & Covin, J. G. (1997). Strategy formation patterns, performance, and the significance of context. *Journal of management*, 23(2), 189-209.
- 73) Taylor, E., Curtis, M., & Chui, L. (2012). Staff auditors' observations of questionable peer behavior. *The CPA Journal*, 82(6), 66-71.
- 74) Teachman, J. D., Paasch, K., & Carver, K. (1997). Social capital and the generation of human capital. *Social forces*, 75(4), 1343-1359.
- 75) Theodoraki, C., Messeghem, K., & Rice, M. P. (2018). A social capital approach to the development of sustainable entrepreneurial ecosystems: an explorative study. *Small Business Economics*, 51(1), 153-170.
- 76) Yang, S. C., & Farn, C. K. (2009). Social capital, behavioural control, and tacit knowledge sharing—A multi-informant design. *International Journal of Information Management*, 29(3), 210-218.
- 77) Zak, P. J., & Knack, S. (2001). Trust and growth. *The economic journal*, 111(470), 295-321.

