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The interaction between social capital, creativity and efficiency in organizations

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ABSTRACT

Some have argued social capital provides synergy for creative cooperation among employees. Creativity and efficiency have been established as two concepts that oppose each other; however, they are both essential to maintain the competitiveness of an organization. This study investigated the interaction between social capital on organizational creativity and efficiency and examined the links between organizational creativity and efficiency. In addition, it is aimed to provide recommendations based on results regarding the effectiveness of social capital on organizational creativity. In this empirical study, the data on perceptions concerning social capital, organizational creativity and organizational efficiency was gathered by means of a questionnaire completed by 131 managers working in the Turkish Employment Agency. Subsequently, data was analyzed with the SmartPLS software and presented in tables. The findings showed that social capital has an effect on organizational creativity and organizational efficiency. Results also provided support for the effect of organizational creativity on the organizational efficiency.

1. Introduction

To survive in today's rapidly changing environment, organizations are compelled to continuously re-evaluate their products, services, and their market edge in comparison with other organizations and the emerging trends. In such an environment, creativity and efficiency are vital elements for public and private organizations (Cankar, 2013; Manzoor, 2014; Serrat, 2009). Organizations increasingly search for ways to improve creativity and efficiency in terms of the performance of individuals (their employees) and the organization as a whole in order to gain and maintain a competitive advantage (Foster & Kaplan, 2011). Creativity can be defined as "the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (Plucker, Beghetto, & Dow, 2004), and organizational creativity is considered as a function of the creative outputs of its constituents and contextual effects such as organizational culture, rewards, resources (Woodman, Sawyer, & Griffin, 1993). On the other hand, a creative organization is characterized as "any business entity whose main source of income comes from the production of novel and appropriate ideas, processes, products or services to tackle clients' problems or opportunities identified" (Andriopoulos, 2000, p. 16). This is reminiscent of Guilford's classic take on creativity where "the creative person has novel ideas. The degree of novelty of which the person is capable, or which he habitually exhibits… can be tested in terms of the frequency of uncommon, yet acceptable, responses to items" (Guilford, 1950). However, Guilford's wording of "acceptable" has been challenged, considered to be begging the question (Runco & Garrett, 2012). Andriopoulos's use of the word "appropriate" may fall under the same criticism. I humbly suggest an alternative word, useful, found in the definition of organizational creativity from Woodman, Sawyer, & Griffin (1993). These organizations need to encourage their employees to engage

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in the processes of creativity, and to provide the organization with new and innovative ideas that differ from the current products, platforms, and processes (Jaussi & Randel, 2014).

Aubyn, Pina, Garcia, & Pais (2009, p. 5) defined efficiency as "essentially a comparison between inputs used in a certain activity and produced outputs." According to Farrell (1957), efficiency means a success in producing as much output as possible from the input provided. Efficiency success is related to limited resources such as time, finance, space, and energy, being well used for the intended task or to achieve the objectives (Yampolskiy, 2013). The concept of efficiency can be applied in both the public and private sector. In the public sector, efficiency is performed by offering high quality of service in activities such as taxation, spending, regulation, and policy-making. Providing efficiency in these applications is related to the quality of the services given. In this regard, the efficiency can be achieved under the conditions of maximizing the results of the actions mentioned above in relation to the resources used, and it is calculated by comparing the effects obtained in their efforts. Although the relationship appears to be simply the difference between output and input, the public sector has particular difficulties in its operation (Mihaiu, Opreana, & Cristescu, 2010).

Previous theoretical and empirical studies have shown that several factors affect organizational creativity and efficiency. One factor, social capital, has been the subject of many studies (e.g., Baughn, Neupert, Anh, & Hang, 2011) due to its link to various organizational dynamics and outcomes including organizational creativity (Chen, Chang, & Hung, 2008; Hsu & Fan, 2010; Liu, 2013) and efficiency (Nemoto, Gloor, & Laubacher, 2011; Nahapiet & Ghoshal, 1998). Nahapiet & Ghoshal (1998) defined social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (p. 243). Although, Coleman (1990) argued that "[A] given form of social capital that is useful for facilitating certain actions may be useless or harmful for others" (p. 302), there are areas in which social capital is increasing its importance. Various forms of social capital can be seen as contributing to information sharing, economic development, general problems of collective action, low transaction cost, human development, facilitating interunit resource exchange and product innovation, value creation, cross-functional team effectiveness, influencing career success, good supplier relationships, inter-firm learning and reduce turnover rates (Adler & Kwon, 2002; Cohen & Prusak, 2001; Kraatz, 1998; Krackhardt & Hanson, 1993; Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Zheng, 2010). For Bourdieu (1985), social capital is resources based on connection, networks and group membership: basically who you know, used in pursuit of favour and advancement. And within this capital can be increased or decreased depending on how it is operationalized for one's advantage. Arguably, capitals are accrued or lost. For Putnam (1993), social capital results from civic engagement which builds trust and encourages shared knowledge and norms. In contrast to this macro focus, Coleman's (1990) approach to social capital believed resources gained from the structure of the family, family relationships and community relationships constitute social capital and encourage educational attainment. For Portes (1998), social capital gain novelty and heuristic power from positive consequences of sociability and calls attention to nonmonetary forms. Bourdieu and Coleman have different interpretations on social capital in the context of ability to acquire resource through membership in different social structures. The distinction explicit in Bourdieu but implicit in Coleman. In the literature, there is a consensus that social capital refers to the ability of actors to provide their interests by virtue of membership in social networks or social structures (Portes, 1998).

There are a large number of empirical studies (e.g., Chen et al., 2008; Laužikas & Dailydaitė, 2015) that have tested the link between social capital and organizational creativity; however, apart from certain developed western countries, the link between social capital and organizational efficiency has not been sufficiently explored. To our knowledge, there seems to be no such study in Turkey and furthermore, although the link between organizational creativity and organizational efficiency has been studied in different sectors, the public sector seems to be an untapped area of research. This is significant because Turkey has particular cultural, political, economic and social characteristics, which are drawn from the country's own development and the influence of its varied immediate neighbors. Therefore, the current study aims to explore the interaction between social capital, organizational creativity and efficiency focusing on a public organization. In addition, the link between creativity and efficiency within branches of the organization will be examined. An empirical approach was designed to facilitate the research and achieve the research objectives. A questionnaire was used to collect data from 131 managers working in the Turkish Employment Agency in Turkey. The data was analyzed using the SmartPLS software.

The following sections present the theoretical background with hypotheses, methodology, analyses, results and discussions.

2. Theoretical background and hypotheses

2.1. Social capital and organizational creativity

While social capital is defined as "an instantiated informal norm that promotes co-operation between two or more individuals" (Fukuyama, 2001), creativity is defined as "the generation of products or ideas that are both novel and appropriate" (Hennessey & Amabile, 2010). In this study, it is proposed that social capital enhances the creativity in organizations and Liu (2013) argues that social capital is an important facilitator and boosts creativity. Employees who have good relationships with their colleagues in terms of mutual trust, respect and friendship serve to enhance organizational creativity. Furthermore, Nahapiet & Ghoshal (1998) supposed that "the pattern of linkages and the relationships built through exchanges are the foundation for social capital"; thus, the members of an organization contribute their functional expertise by communicating, cooperating, coordinating, and sharing information, and in this way, social capital has a direct effect on the capability for creating intellectual capital. Also, since the workplace is one of the types of social environment (Amabile, 1997), perceptions of the work environment can influence the creative work actualized in organizations (Amabile, Conti, Heather, Lazenby, & Herron, 1996; Nahapiet & Ghoshal, 1998).

Empirical evidence has shown that the process of communication and interaction between people is important for organizational

creativity (Handzic & Chaimungkalanont, 2004); thus, the social environment of the workplace is a factor to be considered (Hennessey & Amabile, 2010). Chen et al. (2008) examined the impacts of social capital on creativity of people working in R&D project from an intra-team perspective and concluded that social interaction and network ties had significant and positive impacts on the creativity of R&D project teams. Another study (Perry-Smith, 2006) used archival records and Web-based survey data from 109 researchers employed in two laboratories of an applied research institute in the United States. The author reported that the impact of weaker ties in social networks led to lower levels of creativity in the organization (Perry-Smith, 2006). This is supported by other empirical research, which indicates that better interactions between people in the work environment improve the level of creativity (Hsu & Fan, 2010; Hunter, Bedell, & Mumford, 2007). Similarly, some studies also found that social capital positively affects creativity (Gu et al., 2014; Shang, Tein, & Lee, 2010).

Based on the theoretical arguments and empirical findings from the literature, the following hypothesis was formulated in this study:

H1. Social capital has a positive impact on organizational creativity in organizations.

2.2. Social capital and organizational efficiency

This study is also concerned with the relationship between social capital and organizational efficiency. Efficiency is defined as "a measure of how productively resources are used to achieve a goal" (Jones & George, 2016, p. 5). Putnam (1993) defines social capital as including "the features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions". In this study, it is suggested that social capital developed through trust, norms and network along with subsequent coordinated actions improves organizational efficiency in the workplace.

It is also considered that social capital has an economic impact by reducing transaction costs; thus, it is important for the efficient functioning of modern economies (Nahapiet & Ghoshal, 1998; Fukuyama, 2001) and the optimization of the size of an organization to maximize efficiency (Fukuyama, 1995). Social capital improves productivity and value development in teams through enabling collaboration among the team members by means of virtual or face-to-face contact. In addition, social capital can be a key element in the transformation of a business from being efficiency-driven to innovation-driven by creating competitive advantages for organizations (Laužikas & Dailydaitė, 2015).

A number of researchers reported that social capital contributes to efficiency by enabling collaboration between individuals with conflicting interests towards the achievement of increased output and fair distribution (e.g. Brown & Ashman, 1996; Heller, 1996; Knack & Keefer, 1997; Arrow, 2000; Pearson & Carr, 2011). Although social capital was found to be effective predictors of organizational efficiency, only a few studies (e.g., Nemoto et al., 2011; Nahapiet & Ghoshal, 1998) have examined this issue outside non-Western countries but there seems to be no study on this subject in Turkey. Having considered the theoretical discussions and empirical findings in the literature, the following hypothesis was developed to test the impact of social capital on organizational efficiency:

H2. Social capital has a positive impact on organizational efficiency in organizations.

2.3. Organizational creativity and organizational efficiency

The last component of the study is related to the link between organizational creativity and efficiency. Creative behavior is the generation of novel and useful ideas, and the adoption of others' ideas that are new to the organization and can bring about innovative behavior (Yuan & Woodman, 2010). Organizational creativity occurs as a group function consisting of the interaction of creative individuals within an organization (Woodman et al., 1993). Thus, the creative behaviors of individuals and groups determine the level of organizational creativity.

Although some researchers have pointed out that creativity can negatively affect efficiency (James, Clark, & Cropanzano, 1999; Klijn & Tomic, 2010), Woodman et al. (1993) proposed that "creativity for individuals and organizations – doing something for the first time anywhere or creating new knowledge – represents a dramatic aspect of organizational change that may provide a key to understanding change phenomena and, ultimately, organizational effectiveness and survival." (p. 293). Many researchers investigating the effect of creativity on efficiency in various fields revealed the positive impact of organizational creativity on organizational efficiency in various sectors (Gilson, Mathieu, Shalley, & Ruddy, 2005; Shrivastava, Ivanaj, & Ivanaj, 2012). Despite the fact that the link between organizational creativity and efficiency has been found in different sectors, public sector seems to be an untapped area of research. Hence, the researchers developed the following hypothesis:

H3. Organizational creativity has a positive impact on organizational efficiency.

3. Method

3.1. Participants

A total of 131 (96 males and 35 female) managers working in the Turkish Employment Agency participated in this study. The Turkish Employment Agency is a public organization serving the needs of labor market in several ways; as employment agency for

business and job seekers, offering employment opportunities and providing a temporary income support to those who have lost their jobs, and providing free vocational courses aimed to enhance the employability of the unemployed.

Initially, 503 managers across the organization were invited to complete the questionnaire. A total of managers completed the survey about their provincial departments of the organization, representing an overall response rate of 26%. The participants from 64 departments (be located in different cities of Turkey) ranged in age from 27 to 55 (M = 41.50, SD = 1.115), with a job tenure from 8 to 26 years (M = 18.20, SD = 1.362), and an educational level from bachelor's degree to master's degree.

3.2. Measures

The measurement items were adapted from the related literature. The researchers used a 5-point Likert scale for all the measures. A scale ranging from 1 = strongly disagree to 5 = strongly agree was used to measure social capital and organizational creativity. However, organizational efficiency was measured by a scale ranging from 1 = very weak to 5 = very good. The measured items are outlined below.

3.2.1. Social capital

This study assessed social capital as an overall element. There were nine items adapted from Liu (2013), Tsai & Ghoshal (1998), and Yli-Renko, Erkko Autio, & Sapienza (2001) used to measure the social capital. Examples of the items are: "People in our unit are enthusiastic about pursuing the collective goals and mission of the whole organization," "Our unit shares the same ambitions and vision with other units in the workplace," "I maintain close social relationships with my colleagues," "In this relationship, both sides avoid making demands that can seriously damage the interests of the other colleagues," and "my colleagues always keep their promises to me". For this scale, Cronbach's alpha was .92, internal consistency reliability was .93, which is above the suggested value of .70. Also, a common measure to establish convergent validity on the construct level is the average variance extracted (AVE) value. AVE for this study was .60, which is higher than the recommended value of 0.50 (Field, 2009; Hair, Hult, Ringle, & Sarstedt, 2014).

3.2.2. Organizational creativity

Organizational creativity was measured by ten items. Seven of the items were adapted from Zhou & George (2001), and the remaining three items were adapted from Scott & Bruce (1994). Examples of the items are: New technologies, processes, techniques, and/or product ideas are researched in my organization, to increase quality, new ways are suggested in my organization, I am not afraid to take risks in my organization, and promote and champions ideas to other. Organizational creativity was evaluated by the participant managers who were familiar with practices in the agency departments, and the work behavior in the creativity and idea generation of their superiors and subordinates. Cronbach's alpha, internal consistency reliability and AVE were .93, .94, and .62 respectively.

3.2.3. Organizational efficiency

The scale to determine organizational efficiency consisted of ten items measuring variables, as utilization of financial and manpower resources, readiness to unexpected developments, cost of services, the quality of services in point of speed, punctuality, and responsiveness to customer demands and customer satisfaction. which were adapted from Atiyyah (1999). The respondents were asked to assess their organization in terms of efficiency during the last three years under the following items: Utilization of manpower, improvement in work methods, techniques and procedures in the past three years, development of competencies and skills of personnel during the past three years, expansion of services achieved in the past three years, improvement in the quality of services during the past three years, speed of providing services, punctuality in providing services, responsiveness to clients' needs, utilization of available resources, and cost of services. Cronbach's alpha, internal consistency, and AVE of the construct were .90, .92 and .52, respectively.

3.3. Procedure

The Turkish Employment Agency held a meeting concerning a promotion exam with 503 managers with 8 years or more job tenure. The researcher was given permission to attend the meeting to deliver the questionnaires. The purpose of the study was clearly explained to the managers and their consent to participate in this study was obtained from all the individuals. Participation was voluntary and the participants were assured that their individual results would never be shared with their organization. The printed questionnaires were distributed to the participants. The questionnaires contained demographic questions, measures assessing managers' perceptions of social capital, organizational creativity, and the degree of organizational efficiency. The completed questionnaires were collected from the participants after two weeks.

4. Results

The partial least squares structural equation modeling (PLS-SEM) technique was used for the data analysis. PLS-SEM is referred to as a second-generation statistical method (Hair et al., 2014), suitable for large and small sample sizes and was considered as a reasonable choice for this analysis since it models and validates predictive models (Chin, 2010). The specific software tool used was SmartPLS 2.0.M3 developed by Ringle et al. (2006). In addition, to compute the means and standard deviations of variables, SPSS 16 software program was utilized. Table 1 presents the means, standard deviations, correlations, reliabilities, AVEs, and square root of

Table 1
Reliability Assessment of the Measurement Model (Means, Standard Deviations, Correlations, Reliabilities, AVE[a], and SRAVE[b]).

Variables	Mean	Std. Dev.	AVE	Composite Reliability	Cronbachs Alpha	SC	OC	OE
SC	3.28	0.78	.60	.93	.92	(.78)		
OC	2.84	0.81	.63	.94	.93	.52	(.79)	
OE	3.25	0.75	.52	.92	.90	.59	.53	(.77)

Note: $N = 131$. SC = social capital; OC = organizational creativity; OE = organizational efficiency.
[a] Average Variance Extracted.
[b] The elements in parentheses and in the matrix diagonals are the square root of AVEs (SRAVE).

AVEs for all measures and shows all the variables at various significant levels and positive correlations with each other. Organizational efficiency and social capital were significantly and positively correlated with organizational creativity ($r = .53$, $p = .007$; $r = .52$, $p = .004$, respectively). Social capital reflected significant and the highest positive correlation with organizational efficiency ($r = .59$, $p < .001$). The correlation analysis gives preliminary support for the research hypotheses.

The PLS approach supports two assessment models for the PLS-SEM results; the evaluation of (a) the measurement model and (b) the structural model. The bootstrapping technique is used for significant testing of coefficients in the formative measurement model and the blindfolding technique is used for the significant testing of the path model coefficients in the structural model.

4.1. Evaluation of the measurement model

This method is used to provide information about the psychometric properties of a model in terms of internal consistency reliability, convergent validity, and discriminant validity. The internal consistency of the data measures is verified when the composite reliability of each measure in a scale is above .70 (Hair et al., 2014; Nunnally & Bernstein, 1994). The internal consistency reliability of all the measures was supported with acceptable values in both the Cronbach's alpha range from .90 to .93, and the composite reliabilities ranging from .92 to .94 and they are indicated individually for each measure.

Table 1 also shows the test results relating to the discriminant validity of the measurement scales. The elements in parentheses in the matrix diagonals representing the square roots of the AVEs are greater in all cases than the off-diagonal elements in their corresponding row and column. This result provides support for the discriminant validity of the scales. In general, the psychometric tests properties of all the constructs used in this study are more than adequate. This method is known as Fornell and Larcker Criterion (Fornell & Larcker, 1981) and more conservative approach to assessing discriminant validity (Hair et al., 2014).

Convergent validity is assured when each construct has an average variance extracted (AVE) of at least .50 (Fornell & Larcker, 1981). This means that an indicator's outer loading should be above .708 since that number squared ($.708^2$) equals .50, however, in most instances, .60 is considered an acceptable level (Hair et al., 2014; Hulland, 1999). In this study, the AVE values ranged from .52 to. 63 and Table 2 shows that the factor loadings and cross loadings of all indicator items ranged from .62 to .87, and more highly on their respective construct than on any other construct. This result supported the convergent validity of the scales. Discriminant validity is established when the loading of an indicator on a construct is higher than all of its cross loadings with other constructs (Hair et al., 2014). Factor loadings and crossloadings are shown in Table 2 with the loaded items shown in bold and related to their respective construct.

4.2. Evaluation of the structural model

This model consists of the beta values of path coefficient (β), the Squared R (R^2), and *t*-Values. Beta values indicate the direct influences of the predictor upon the predicted latent constructs. The Squared R value represents the combined effects of the exogenous latent variables on the endogenous latent variable, and explains the percentage of a construct's variance in the model.

The hypotheses of the study were tested by considering path significance, estimated through t-test values. Fig. 1 shows the results of the structural model. The results indicated that social capital (SC) had a significant and positive impact on organizational creativity ($\beta = .52$, $p < .001$), supporting H1. The results also revealed that organizational creativity (OC) and social capital (SC) had a significant and positive effect on organizational efficiency ($\beta = .28$, $p < .001$; $\beta = .45$, $p < .001$, respectively). Thus, H2 and H3 were supported. All the preceding constructs together explained 41% of the variance in the dependent construct:

Table 3 shows the results of the structural model, where the beta values of the path coefficients indicate the direct influences of predictor upon the predicted latent constructs. According to the results, social capital positively influences organizational creativity and efficiency. Result also indicates that organizational creativity has a positive effect on organizational efficiency, thus supporting the related hypotheses (H1, H2 and H3).

5. Conclusion

This study aimed to investigate the interaction between social capital on organizational creativity and efficiency, and the link between organizational creativity and organizational efficiency in a public organization in Turkey.

The results showed that social capital has a positive effect on organizational creativity, supporting first hypothesis (H1). This

Table 2
Factor loadings and crossloadings.

Indicators	Social Capital	Org. Creativity	Org. Efficiency
SC1	**.7463**	.3501	.4714
SC2	**.7102**	.4919	.4679
SC3	**.8241**	.3312	.4544
SC4	**.7633**	.3711	.4367
SC5	**.7797**	.3579	.3757
SC6	**.8077**	.4486	.4670
SC7	**.7827**	.3557	.4888
SC8	**.7515**	.4922	.4969
SC9	**.8084**	.3713	.4511
OC1	.2926	**.7599**	.3736
OC2	.4745	**.8219**	.4417
OC3	.4809	**.7192**	.4370
OC4	.3518	**.7047**	.3581
OC5	.4017	**.8191**	.4761
OC6	.4540	**.8757**	.4562
OC7	.4381	**.7939**	.4102
OC8	.3969	**.8342**	.3467
OC9	.3615	**.7791**	.3500
OC10	.3872	**.7665**	.3546
OE1	.3213	.2447	**.6667**
OE2	.4111	.3584	**.6236**
OE3	.4492	.3945	**.6887**
OE4	.4686	.3211	**.6809**
OE5	.4475	.5104	**.7001**
OE6	.2984	.2502	**.6701**
OE7	.2810	.2896	**.7434**
OE8	.3774	.3398	**.7850**
OE9	.5403	.4379	**.8493**
OE10	.5392	.4283	**.7938**

SC = social capital; OC = organizational creativity; OE = organizational efficiency.

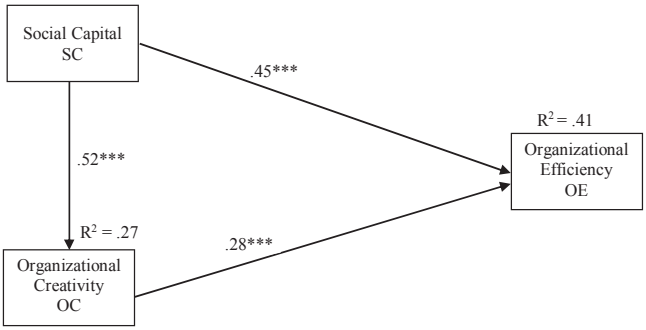

Fig. 1. The Structural Model with the Path Coefficients.
***p < .001, two tailed.

Table 3
Summary of the results.

Latent variables	Path coefficient	*t* -Value	*p* (Sig.)	R^2	Total Effect	Result
Social Capital → Org. Creativity (H1)	0.52***	8.2750	.001	0.27	.52	Supported
Social Capital → Org. Efficiency (H2)	0.45***	5.3885	.001	↓	.59	Supported
Org. Creativity → Org. Efficiency (H3)	0.28***	3.3287	.001	0.41	.28	Supported

***p < 0,001 (two tailed)

Note: The curved arrow indicates the added impact of the variable social capital and organizational creativity path on organizational efficiency.

result provides support for the theoretical arguments in the literature (Amabile et al., 1996; Liu, 2013) and previous empirical findings (Gu, Zhang, & Liu, 2014; Shang et al., 2010). As argued and reported in several studies, social capital is an important organizational phenomenon, affecting several organizational dynamics and outcomes including organizational creativity as found in this study. Based on these findings, it can be stated that social capital is an important construct for public organizations to consider when desiring to improve organizational creativity. Thus, public organizations need to take into account the importance of social capital and ensure that all the policies and practices are in place to develop and enhance social capital. They also need to understand the dynamics of social capital and eliminate all the barriers that would be detrimental to the development of social capital.

Another result from the current research revealed that social capital is positively related to organizational efficiency as stated in the second hypothesis (H2). Similar to the previous finding, this result also supports the theoretical arguments (Fukuyama, 2001; Nahapiet & Ghoshal, 1998) and empirical findings (Arrow, 2000; Nemoto et al., 2011; Pearson & Carr, 2011). Although there is a large amount of empirical research regarding the link between social capital and organizational creativity, most of the work relates to western countries, (Chang et al., 2010; Chen et al., 2008). This research correctly highlights two gaps in the literature, (1) the relationship between social capital and organizational efficiency in non-western countries, and (2) the relationship between organizational creativity and organizational efficiency in the public sector. However, the distinction made by the paper between these four areas (western countries and non-western countries, public and private organizations) should hold throughout the implications of the data analysis. The gaps in the literature that this study addresses should then be (1) the relationship between social capital and organizational efficiency in non-western countries within the public sector, and (2) the relationship between organizational creativity and organizational efficiency in the public sector within non-western countries.

As pointed out earlier, public organizations need to understand and examine this concept and its dynamics and establish effective strategies to cultivate social capital. They also need to effectively capitalize on social capital, considering its effect on organizational creativity and efficient as reported in this study.

Finally, the result related to the last hypothesis (H3) indicates that organizational creativity has a positive connection with organizational efficiency. This finding provides support for the theoretical discussion (Edwards, 2001; Hindo, 2007) and empirical findings (Ma et al., 2014). As pointed out above, despite several studies exploring the link between organizational creativity and efficiency in various sectors, previous research has neglected the public sector. Therefore, this study has made an important contribution to the literature by providing empirical evidence from a public organization. Similar to the empirical finding from different sectors, this study also reached the same conclusion that organizational creativity is necessary for both private and public organizations in order for them to achieve their objective efficiently and effectively and better serve their customers. As a public organization to fulfil their tasks and responsibilities, employment agencies need to be creative to improve performance outcomes such as efficiency. They need to put all necessary policies, practices and successfully implement them to create an organization where creativity can be realized in all aspects of their activities and services. Our finding shows that social capital is a decisive construct for organizations in general and public organizations in particular.

The current study has some limitations that need to be taken into account when evaluating the results. One limitation is that the participants in this study come from one organization that restricts us to generalize the findings; therefore, further studies should be conducted with other public organizations and this research could include other organizational outcomes other than efficiency. In terms of common-method biases inherent in this type of research, the researchers took certain measures. In accordance with the work of Podsakoff et al. (2003), the researchers ensured that the participants had sufficient information on the front page of the questionnaire regarding the confidentiality of their individual responses. In order to reduce the participant's concern about being evaluated, they were assured that there was no right or wrong answers to the questions in the questionnaire.

Disclosure statement

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Conflicts of interest

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