Measuring Bourdieu Capitals of Landscape Architects In Malaysian Landscape Architecture Firms

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Abstract. Pierre Bourdieu (1986) introduced the concept of capitals as forms of intangible resources that individual use to advance their socio-economic status. Past relevant researches have not focused on all Bourdieu capitals. This study conceptualises the Bourdieu capitals to empirically determine the intangible resources of Malaysian leader landscape architects. The aim of this study is to determine the type of capitals of leader landscape architects in Malaysian landscape architecture firms. All landscape architecture firms (73 nos.) in the database of the Institute of Landscape Architects Malaysia were chosen for the survey. The firms were given the letter of invitation and questionnaires through the post. Thirty-nine firms responded to the invitation which resulted in 90 subordinates landscape architects and assistant landscape architects as respondents. The subordinates were asked to rate their leaders' (landscape architects) capitals. The data were analysed using descriptive statistics and factor analysis. Factor analysis findings generated 5 factors (capitals). The capitals are social, human, emotional, cultural and design authority. The study findings provide evidence of the validity of scales to measure the intangible resources of the leading landscape architects in Malaysian landscape architecture firms. It also suggests a new research perspective for the Trait Theory of Leadership by replacing the traits with Bourdieu's forms of capitals.

1 Introduction

The influence of leadership as a catalyst for organisational performance is much documented. There is an abundance of research and opinion that deals with leadership in management [1-2]. Pierre Bourdieu [3], a prominent French sociologist describes capitals as powerful intangible resources that individuals use to advance their socio-economic status. He proposed three main capitals which are social, cultural and economic. The researches of these capitals have focused on many aspects of human development in various fields such as health determinants, sport, society, migration, community and education [4-9]. Past Bourdieu capitals researches [9-12] tend to focus on a single aspect of capital instead of using all the capitals. The Bourdieu capitals may enable leaders to influence their subordinates to change their work behaviour e.g. to be more creative. Hence, this study adopted the Bourdieu capitals theory to empirically determine the intangible resources of Malaysian leader landscape architects. The aim of this study is to determine the type of capitals of leader landscape architects in Malaysian landscape architecture firms.

2 Leadership and Bourdieu Capitals theory

Dubrin [1] stressed that leadership is instrumental for people at all levels in an organisation. Leadership is commonly defined as intentional influences exerted by one person over other people to guide, structure, and facilitate activities and relationships in a group of the organisation [13]. There are various theories of leadership such as House's [14] Path-Goal theory, Leader-Member Exchange Theory [15], Trait Theory and Fiedler's Contingency Theory. Trait theory proposes that every leader has certain traits which differentiate them from other individuals and are particularly suitable in leadership [16]. Persons who possess these traits have the advantage to lead in different situations. Yulk [13] stated that this theory emphasises more on the leader's natural attributes such as personality, motives, values, and skills. Trait theory is relevant to Bourdieu capitals' theory. Bourdieu [3] proposed the concept of capitals in his Theory of Field; the capitals being forms of intangible and tangible resources that a person uses to advance his socio-economic status within a field. A person lives simultaneously in many fields (or social

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environments) such a work field, a friendship field, a neighbourhood field, a recreational field etc. According to Zahari et al. [17], most of a person's capitals consist of intangible resources that arise from his social connection, academic qualification, work experiences or emotional attributes. A person in the field owns certain amounts of tangible and intangible resources called capitals with powers to maintain or enhance his/her position in the field [18]. The ability of the person to achieve his goals depends on how he uses his capitals with respect to the doxa and habitus specifically associated with the field [3]. Thus, the person can either sustain or enhance his social position in the field through successful attainment of his goals using his capitals. Likewise, failure to achieve his goals can lead to the diminishing of his capitals. [3,19]. There are three main capitals (social, cultural, and economic) as introduced by Bourdieu [3]. Various researches have been conducted in regard to these capitals. The research by Akram, Lei, Haider, and Akram [10] found that social capital has a positive impact on innovative work behaviours of employees in China. Human capital also was found to enhance innovation performance of employees in Spain [11]. In the emotional capital perspective, Tsai and Lee [12] concluded that it does contribute to the creativity of travel agency employees in Taiwan. Cultural capital has been studied by Gaddis [9] who deduced its positive influence among American student's academic achievement. The past researches have proved the impact of capitals on many aspects. However, the past researches on Bourdieu capitals were segregated and did not focus on the aspect of leadership. The impact of Bourdieu capitals in leadership perspective, especially in the design-based business organisation which requires a high level of supervision from the leader was hardly researched. With respect to the concept of Trait's theory of leadership, we argue that capitals are intangible resource traits that leader has. A leader aims to influence others in his group to achieve the group and his own personal goals. Successful attainment of the group goals also leads to successful attainment of his personal goals that include either sustaining or enhancing his leadership position. We argue that knowledge of one's own capitals associated with leadership can be achieved through the perspectives of his followers. Such knowledge enables the leader to act to enhance his capitals and thus improve his leadership effectiveness.

3 Study Methodology

All Malaysian landscape architecture firms in the database of the Institute of Landscape Architects Malaysia (ILAM) were surveyed [20]. ILAM is the professional association of landscape architects in Malaysia. As of 22 August 2017, there were seventy-three firms across Malaysia listed in session 2017/2018. These firms were mailed questionnaire forms with requests that these questionnaires be completed by the subordinates of the firms who work as landscape architects or assistant landscape architects. The subordinates were required to rate their leader (landscape

architects)' capitals based on a unipolar Likert scale rating ranging from "1" as "disagree", "2" as "slightly agree" to "5" as "totally agree" in correspond to their design helpfulness. The period for the firms to respond was two months. The data was then subjected to descriptive analysis and factor analysis.

4 Findings

A total of ninety valid responses were received which involves thirty-nine participated firms (53% response rate). Factor analysis was conducted on all items of the scales to discover the underlying capital dimensions. The data were analysed with descriptive analysis to determine the frequencies of demographic, and the mean of each capital.

4.1 Profile of Respondents

The females constitute 55.6 percent of the respondents. Most respondents (67 percent) were within a range of 25 to 30 years of age. Malays constituted the majority of the respondents (87.8%), followed by Chinese (11.1%) and Kadazan Dusun (1.1%). Respondents with Bachelor degrees made up 88.9 percent of the respondents while 8.9 percent have Diploma degrees and only 2.2 percent own Master degree. Most respondents (80%) worked as landscape architects and the rest worked as assistant landscape architects. The majority (81.1 percent) of the respondents had worked in their respective firms for less than five years.

4.2 Factor Analysis of the Leader's Capitals

Diagnostics tests in the factor analysis procedure included a multicollinearity test, Kaiser-Meyer-Olkin (KMO), Barlett's test of sphericity and the test of an anti-image correlation matrix. There is no item which has a matrix greater than 0.9, hence there is no multicollinearity problem [21]. KMO test yields a result with a 'great' value of 0.845 [22] thus the sampling adequacy for conducting factor analysis is verified. In Barlett's measure test, the significant value is 0.00 which is below 0.05 hence indicates that it is highly significant. The diagonal elements of the anti-image correlation matrix were examined for any item with the value below 0.5. The values of all items surpassed the requirement (>0.5), hence, no variables were excluded [22]. These statements were factor analysed by using Principal Axis Factoring and Varimax Rotation. The selection criteria were based on three statistical calculations. First is the factor loading must be above 0.4 for each statement as suggested by Stevens [23]. Secondly, the eigenvalue factor must be higher than 1.0 (following Kaiser's recommendation) and lastly, the test for internal reliability (Cronbach alpha) must be bigger than 0.7 [24]. An initial analysis was run to extract eigenvalues for each factor in the data. Eight factors had eigenvalues over Kaiser criterion of 1 and in combination explained 73.7 percent of the variance. The communalities of the data after extraction are also analysed. Communality can

be defined as the proportion of common variance within a variable, the closer the communalities are to 1, the better the factors can be used to explain the original data [25]. A study by McCollum et al. [26] produces guidelines of sample size requirements according to communalities result. They stated that sample size below 100 is adequate when communalities extraction value is high which is above 0.6 [27]. This study yields an average communality of 0.68 which is acceptable to accept the suggested factor loading from Kaiser's criterion. The factors generated from the factor analysis approximated with the initial capital dimensions of the scale. Table 1 shows the scale items and their means, factor loadings from a varimax rotation, overall mean relevant to each capital, and the cumulative variance.

5 Discussion

There are six categories of factors generated from the factor analysis of the scale items (see Table 1). The sixth factor (political capital) was discarded as only one scale item loaded on it. The first factor is the leader's social capital. Four scale items that loaded on this factor mirror the leader's intra-organisational relationships with people within the firm. The other six scale items reflect the leader's social network outside the organisation. Bourdieu [3] defined social capital as the cluster of actual or potential resources which are related to one's relationship of a durable network of people from mutual acquaintance and recognition. It simply refers to a trusted network of people that an individual can depend on. The volume of social capital possessed by an individual is depending on the size of the connections that he/she can effectively mobilise and the volume of capitals possessed by those connections. The volume of social capital can be grouped by internal relationships in the organisation and external relationships outside the organisation. Internal social capital is related to relationships between members of the community or organisation while external social capital is in the form of the network of connections between the communities, employees or organisations that belong to external organisational actors [28-29]. The second factor is the leader's emotional capital. The concept of emotional capital is not directly defined in Bourdieu [3] form of capitals theory, but in his definition of cultural capital, he mentioned a cultural sub-capital called embodied state (culture's value) which referred to a person's means of communication and self-presentation which cannot be transmitted instantaneously like other tangible property such as money, land, or title of nobility. The aspects of communication and self-presentation are relatable with emotional attachments between two persons. The benefits of Bourdieu theory that relevant to the process of engagement may also be related to emotional considerations [30]. Emotional capital can be viewed as a parent's emotionally valued assets and skills, love and affection, expenditure of time, attention, care and concern that are available to their offspring [31-32]. Factor three is human capital which is divided into three categories. First is the leader's recognition in the

landscape architecture industry as perceived by his/her subordinates. Second is the leader's competencies (skill, experiences, creativity) and lastly is the leader's knowledge openness. Bourdieu [3] did not directly define human capital but its values are found in his concept of cultural capital (institutionalised state). Institutionalised state refers to a method society measures a person's value based on their academic or education qualification [33]. Human capital can be defined as a group of elements including education, skills, knowledge, firm-know-how, and personal experiences that are focused to improve the productivity and competitive advantage of an individual [34-35]. The definitions by these scholars highlight similarities between Bourdieu's institutionalised-cultural capital [3] with human capital. One aspect that Bourdieu [3] stressed is the recognition from the society perspective. He mentioned, with an academic qualification, a certificate of competence is evident thus granting the holder a guaranteed value with respect to culture. Factor four is the leader's cultural capital. According to Bourdieu [3], cultural capital in an objectified state (material objects people use to indicate social class) has a certain amount of properties which are described only *vis-à-vis* cultural capital in its embodied form. The value of culture (embodied state) influences the amount of symbolic objects that an individual possess (objectified state). The leader's dressing style and material possession indicate objectified properties which were guided by their personal interest, behaviours and family background (culture). Referring to Lamont and Annette [36], cultural capital is consisting of widely shared high-status cultural signals such as tastes (lifestyle), behaviours and attitudes. The fifth factor is labeled as the leader's design authority capital. This factor explains how the leader's design authority capital influences the subordinate's design direction. The subordinate following the leader's preferences even disagree with it showing the range of the leader's full authority on the subordinate's design direction. All five factors generated showed the existence of Bourdieu capitals among leaders in Malaysian landscape architecture firms. Factor three, leader's human capital yields the highest mean score of 4.47. It shows that the agreement level of subordinates towards the items in the factor is high. That might be caused by the subordinates expecting the leader to use and share his unique human capital in guiding subordinates which are mostly creative workers. Design authority capital produces the lowest mean score of 3.40. The two items in the factor are describing the agreement level of the subordinates when faced against the leader's design authority capital. The low mean score suggests that the leader's design authority capital has a negative effect on the subordinate's design authority. Subordinates' creativity can be developed by the leader giving his subordinates design autonomy (authority). Hence, leaders in the Malaysian landscape architecture firm should increase their human capital and reduce their design authority capital to better influence their subordinates, notwithstanding the other capitals.

Table 1. Factor analysis loadings from the varimax rotation of leader landscape architect's capitals.

Attributes	Mean	Factor Loading	Factor	Overall Mean	Cumulative variance (%)
Leader's relationship with a member of the firms provides him/her information that helps in designing	3.96	0.81	Factor 1: Leader's Social Capital (reliability alpha score: 0.95)	3.96	37.64
Leader's relationship with a member of the firms provides him/her ideas and inspiration that helps in designing	3.92	0.80			
Leader's relationship with a member of the firms provides information in solving design problems	3.91	0.79			
Leader's social network provides him/her information that helps in solving design problems	4.02	0.76			
Leader's relationship with a member of the firms provides access to further information in designing	3.96	0.74			
Leader's social network provides access to further information in designing	3.93	0.74			
Leader's social network helps the firm solving problems in design implementation	3.96	0.72			
Leader's social network provides him/her information that helps in designing	3.96	0.71			
Leader's social network provides him/her ideas and inspiration that helps in designing	4.02	0.70			
Leader's social network ensure the firm secure future jobs thus making confident to continue designing	3.99	0.70			
Leader willing to make time discussing works related matters	4.16	0.71	Factor 2: Leader's Emotional Capital (reliability alpha score: 0.94)	3.97	47.63
Leader sensitive to feelings	3.30	0.70			
Leader concerned with personal wellbeing	3.75	0.68			
Respect from the leader	3.92	0.67			
Trust from the leader	3.94	0.64			
Leader is supportive of career	4.16	0.63			
Leader trust in making the design decision	3.77	0.63			
Leader opens to new ideas	4.22	0.62			
Leader opens to a different point of view	4.20	0.60			
Leader shows a collaborative relationship	3.92	0.60			
Leader is in control of his/her emotions	3.84	0.57			
Leader shows a rewarding relationship	3.60	0.57			
Leader gives encouragement in works	4.10	0.56			
Trust the leader	4.32	0.54			
Support the leader's work effort	4.41	0.50			
Leader is respected in the landscape architecture field	4.57	0.79	Factor 3: Leader's Human Capital (reliability alpha score: 0.95)	4.47	54.61
Leader got new jobs from recommendations from people in the industry	4.33	0.79			
Leader got new jobs from recommendations from former clients	4.44	0.78			
Leader is highly skilled in landscape architecture design	4.57	0.72			
Leader is open to new experiences to update his/her knowledge	4.41	0.69			
Leader is highly experienced in landscape architecture	4.63	0.68			
Leader is committed to update his/her skills in landscape architecture design	4.44	0.68			
Leader is committed to update his/her knowledge in landscape architecture design	4.53	0.68			
Leader is highly creative in landscape architecture design	4.52	0.63			
Leader has received awards for his/her landscape architecture design	4.29	0.60			
Leader's style of dressing reflects his/her creativity	3.61	0.70	Factor 4: Leader's Cultural Capital (reliability alpha score: 0.88)	3.82	58.70
Leader's interest reflects his/her creativity	4.07	0.69			
Leader's behaviour reflects his/her creativity	4.00	0.68			
Leader's choice of possession reflects his/her creativity	3.71	0.66			
Leader has an impressive family background	3.72	0.62			
I design as my leader's preferences although I'm against the idea	3.62	0.84	Factor 5: Leader's Design Authority Capital (reliability alpha score: 0.70)	3.40	61.79
I design as my leader's preferences as I will be rewarded	3.16	0.62			
Leader inspires me (<i>discarded</i>)	3.93	0.60	Factor 6: Leader's Political Capital	3.93	64.01

6 Conclusion

Five capitals of leaders in Malaysian landscape architecture firms were uncovered, i.e. social capital, emotional capital, human capital, cultural capital, and

design authority capital. The findings relatively concur with Bourdieu's concept of capitals in his Theory of Field. The finding suggests using capitals as traits in the Trait Theory of Leadership.

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Author's signature

A handwritten signature in black ink, appearing to be 'Ruzaini Zahari'.

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