The Relationship between National Culture and Organizational Culture in Determining the Project Success Factors in the Perception of Project Professionals in Malaysia

Kanesan Muthusamy1* and Roslinda Che Adnan2

1 Faculty of Engineering, UCSI University, 56000 Cheras, Kuala Lumpur, Malaysia
2 Faculty of Science and Technology, OUM, 50480 Kuala Lumpur, Malaysia
*Corresponding author: kanesan@ucsiuniversity.edu.my

Abstract. Project success factors have become fundamental to project management practice in assuring successful projects. Yet, project failure has become common and a recurrent feature of infrastructure construction projects, not only in developing countries but also in most developed countries including Malaysia resulting in total abandonment of projects, prolonged project delay, cost overrun and client dissatisfaction. Researches on critical success factors impacting project results are important. Nevertheless, these researches are widely done in developed countries such as the USA and the UK under their culture orientation, while neglecting certain aspects, with limited evidence from developing countries such as Malaysia. This paper presents findings from a survey response from Malaysians who are project leaders, project management practitioners and project delivery team on their perception of project success factors. Selected literature review and survey questionnaire were used as data collection method for this study. Respondents’ national and organisational culture dimensions were analysed using Hofstede’s culture models and compared to the national and organisation culture dimensions of both the USA and the UK. The result of the analysis have suggested that that over and above age, and gender, individual perceptions of success factors varies with cultural differences. These findings have important implications for how companies can manage adaptation effectively to be able to achieve advantages in the various cultures where they operate while extending their main sources of advantage across borders, and in some cases even creating cultural diversity itself a supply of advantage.

1. Introduction
Quite often project success is associated with how an organization functions favourably in achieving successful delivery of that project. Companies with strong cultures will most likely influence the effectiveness of the organization in the long run. However, a strong culture can also do the exact opposite; create barriers to running successful projects. [1]. It can block an organization's (or project) strategy or catalyse it [2]. A project is considered successful when it meets or exceeds the expectation of the stakeholders. The PMBOK Guide defines stakeholders to be internal and external to the organisation performing the project [3]. How success is measured has remained an open debate for decades and since project stakeholders have different needs and expectations, it is not unusual for the stakeholders to define project success in the way they understand it.

Despite evidence of project success stories with the implementation of success factors, there are many more projects that failed [4]. In a survey conducted by the Association of Project Management (APM) on the critical factor for project success which over eight hundred respondents from project
management practitioners and academicians in the UK participated, it was revealed that while the success criteria is known, they are often not employed and consequently, nearly 80% of the projects failed to wholly meet their planned objectives [4]. Additionally, in a 2018 report by Project Management Institute (PMI), it was disclosed that for a $1 million project, poor performance may cost organizations $99,000 on correction of work [5].

Though it is agreed that the determination of critical success factors and their impacts on project results is important, still, most of these researches are done widely in a developed country for example researches done in the USA, UK under the individualistic culture orientation while neglecting certain aspects, and the evidence from developing countries is limited [5]. The social–cultural, political and economic context of a project is critical in understanding what is successful, particularly in developed countries, has been largely ignored [5].

The fact is, two organizations perusing identical business structure and project management processes can have completely different levels of success. There must be more to project success than just the application of project management system, perhaps, cultural differences affect how people conduct their lives and behave on jobs [7]. Interestingly, Hofstede have suggested that the societal practices, gender expectations and national cultures that people learned from their earliest childhood are likely to stay with them than any vocational cultures acquired at school and on the job [6]. He explained that national cultures differ mainly on the level of values that affect organization structures, motivation, performance appraisal, objective setting, strategic management, and humanization of work and that it does not converge over time. Subsequently, national cultures can create, even at times change an organizational culture, overriding the more local and sometimes foreign organizational cultures. Management can never change a national culture; it can only understand and use it [9].

Notwithstanding the growing interest to the human aspect of project success in project management textbooks, empirical researches investigating the effect of differing cultural norms in organizations are limited. It would be fair to say, in author’s opinion, that there is still a considerable gap in understanding how social behaviour of a particular people or society that formed the project team members can impact their perception of the PSFFs [10-11]. In this era of globalization, the subject of national culture will become increasingly critical and will require serious consideration due to job migration and offshoring, global supply chains, digitalization and IoTs, multinational corporation and low-cost transportation [12].

2. Methodology

Authors have selected literature review and survey questionnaire as their data collection method for this study. A quantitative approach is used with questionnaires as the instrument to collect data from targeted respondents who are among the project leaders, project management practitioners and project delivery team in Malaysia. The questionnaire comprised of three sections with a total of 58 closed ended questions to ensure thoroughness of information collected.

Authors had used key questions from previously validated and published questionnaire as it will foremost help authors in comparing author’s own findings with those from other studies and secondly, it saved authors the time and resources. The selected key questions were obtained from APM’s Conditions of Success for Projects, Hofstede’s cultural dimension Value Survey Module 2013 and on The Effects of Organizational Culture, which were slightly restructured to suit this study [13, 7]. The questionnaire was designed as a series of Likert type and Likert scale close-ended questions and as user-friendly as possible. The factors related to national cultures are measured based on Hofstede’s cultural dimensions models of power distance, individual collective, masculinity femininity, uncertainty avoidance, long term orientation, and indulgence restraint. Measurement of organizational culture were based on Hofstede’s organization models of means-oriented and goal-oriented, internally driven and externally driven, easy-going work discipline and strict work discipline, local and professional, open system and closed system and employee-oriented and work-oriented [7]. Respondents were asked to rate the factors based on Likert-type 5-point scale from 1 equals to strongly disagree to 5 equals to strongly agree.

For the questions relating to level of success of their most recent completed project according to cost, time, quality, client’s satisfaction and overall success project success factors, respondents were asked rate based Likert-type 5-point scale from 1 equals to wholly unsuccessful to 5 equals to wholly
successful, and the extent of success factors which they viewed as being important to project success i.e. 1 equals to not important, 2 equals to important, 3 equals to moderately important, 4 equals to very important and 5 equals to critical. In lieu of a pilot study to assess the targeted respondents’ comprehension and reliability of the questions, a reliability test of the questionnaire was conducted and undertaken by 10 of author’s current and previous work colleagues who are in various stage of project delivery. The results of test were incorporated, and a second test was held to find acceptance. The questionnaire was then finalized, published using a web-based survey tool and the invitation link forwarded to the 100 targeted audience based on non-probability sampling technique for completion. Of the 100 respondents invited, 56 completed the survey with one unusable due to respondent having no work nor project management experience. The total number of questionnaires are 55, providing a 55% of response rate. The data captured from all 55 respondents was then subjected to computer analysis, with the use of MS Excel application and converted into percentages then organized in tables, graphs and figures for presenting the data.

3. Results and Analysis

Respondents to the survey were widely varied in respect of age, gender, ethnicity, experience, sectors and project roles. Table 1 shows there was particularly strong representation of 35-44 years old and older respondents who worked in mid to senior positions in project delivery. The respondents were 1:1 male to female ratio which means this research has equal view from both genders.

| Table 1. Demographic of respondents. |
|-------------------------------|-----------------|-----------------|
| Demographics | N | Percentage |
| Age Category | | |
| 25 – 34 years | 14 | 25% |
| 35 – 44 years | 25 | 45% |
| 45 – 54 years | 10 | 18% |
| 55 – 64 years | 6 | 11% |
| Total | 55 | 100% |
| Gender | | |
| Male | 27 | 49% |
| Female | 28 | 51% |
| Total | 55 | 100% |
| Project Management Role Experience | | |
| Project sponsor | 3 | 5% |
| Leader of the project delivery team | 20 | 36% |
| Member of the project delivery team | 22 | 40% |
| Stakeholder providing resources or services to project(s) | 7 | 5% |
| Stakeholder within the governance process for project(s) | 3 | 5% |
| Total | 55 | 100% |

Table 2 shows that majority of the respondents reported of working with the oil and gas industry that most very likely practices project management processes and tools. More than 33% reported of having come from organization size of less than 100 employees as shown in Table 3. This is a significant find as it can be assumed that small organizations tend to have local superiors with local cultural values as opposed to being headed by expatriates or foreigners who may dilute the national culture.

Respondents were asked to rate themselves on a 5-point Likert-type scale between two extreme statements (1 = Strongly disagree, 5 = Strongly agree) based on Hofstede’s six cultural dimension of power distance, individualism collectivism, uncertainty avoidance, masculinity & femininity, long term
orientation (LTO), indulgence restraint. Figure 1 illustrates that on average the respondents rated power distance at 3.3. Although the collectivism trait was high at average of 3.75, respondents had rated the individualism trait even higher on average at 4.0. The avoidance trait was rated higher than uncertainty trait at average of 3.3, masculinity trait was rated higher than the femininity trait on average at 3.1 although 62% of the respondents had remained “neutral” when rating this specific femininity trait. The long-term orientation was rated high on average at 3.7 whilst the indulgence restraint scored low on average of 2.8.

Table 2. Respondent’s industry sector.

| Respondents’ Industry                      | N  | Percentage |
|--------------------------------------------|----|------------|
| Airlines & Aerospace (including Defense)   | 1  | 2%         |
| Oil, gas, nuclear                          | 17 | 31%        |
| Manufacturing                              | 3  | 5%         |
| IT related                                 | 2  | 4%         |
| Construction                               | 5  | 9%         |
| Wholesale, retail                          | 1  | 2%         |
| Transportation or logistics                 | 1  | 2%         |
| Financial services                         | 3  | 5%         |
| Business or professional services           | 1  | 2%         |
| Consultancy                                | 3  | 5%         |
| Education                                  | 1  | 2%         |
| Health                                     | 2  | 4%         |
| Governmental agencies                       | 7  | 13%        |
| I am currently not employed (retired)       | 2  | 4%         |
| Other                                      | 6  | 11%        |
| Total                                      | 55 | 100%       |

Table 3. Respondent’s organization size.

| Organization Size   | N  | Percentage |
|---------------------|----|------------|
| < 100               | 18 | 33%        |
| 100 - 300           | 13 | 24%        |
| 300 - 500           | 5  | 9%         |
| 500 - 1000          | 8  | 15%        |
| > 1000              | 11 | 20%        |
| Total               | 55 | 100%       |

Figure 1. Weighted average of respondents scores on cultural dimensions.
Male and female respondents varied on the scale of culture dimension. Figure 2 shows the extent of gender influence in national culture. In comparing the degree how national culture are influenced by different gender, it was found that while males have high power distance (hierarchical and conform to community values), they do not like surprises (low uncertainty high avoidance) though they enjoy life and likes to have fun. The male respondents score high femininity traits which means they are cooperative, modest, care for the helpless and prefer quality of life. Female respondents rated low in power distance low, restraint and a slight difference in avoidance traits from their counterpart. They rated high in masculinity traits where they go for achievement, heroism, assertiveness, and reward themselves when succeeded.

The survey also found that organizations are reported to be more than average as driven by customer’s needs, goal oriented, has strict work discipline and task focused, tendency to be unfriendly towards new employees. However, it was observed that organizations tend to be more collective in nature than individualistic, and employees behave professionally at work.

![Figure 2](image-url)

**Figure 2.** Variation in cultural dimension between gender based on female = N28 and male = N27.

Figure 3 compares the weighted average based on respondents rating of 24 questions on organizational culture using pie-charts. A 5-point Likert-type scale was used for these questions where 1 equalled to strongly disagree and 5 equalled to strongly agree. Mean scores ranged from 1.8 (no one care about cost) to 3.9 (the organization’s major concern would be meeting customers’ needs).

Table 4 presents the frequency rating of respondents’ most recent project level of success from the view of project professionals. It showed that most ratings are a slightly above rating of 3.0. Respondents rated the report delivery to time at an average rating of 3.7 Overall success, in delivery to specification and quality, and key stakeholders' satisfaction were rated, on average, at 3.62, followed by in delivery to the funder's satisfaction, on average of 3.6. Delivery within budget rated the lowest, on average at 3.4.
Figure 3: Pie chart comparison on organizational cultural dimensions.

Table 4. Frequency rating of respondents on the extent of project success observed in their most recent completed project.

| Degree to which recent projects were successful | Frequency Rating | N | Mean | Std. Dev. |
|-----------------------------------------------|------------------|---|------|----------|
| In delivery to time                           | 1 2 3 4 5        | 55 | 3.67 | 0.85     |
| In delivery to or within budget               | 2 6 19 9         | 55 | 3.49 | 1.01     |
| In delivery to specification and an appropriate standard of quality | 0 4 25 14 12 | 55 | 3.62 | 0.9      |
| In delivery to the funder's satisfaction      | 1 4 8            | 55 | 3.56 | 0.89     |
| In delivery to the key stakeholders' satisfaction | 1 4 8 24 8      | 55 | 3.62 | 0.88     |
| Overall                                       | 1 5 17 23 9      | 55 | 3.62 | 0.92     |

Figure 4 illustrates the division in respondents’ perceptions of success in their most recent projects were fairly negligible. However, the data suggests that the more experienced project professionals were more likely to see their most recent projects as successful compared to the junior respondents. Whether this is a result of differences in the kinds of project in which the groups of respondents were involved or a subjective one (example, older respondents, through experience and maturity, having a marginally more relaxed view of what is possible in projects) is not known.

Respondents were also asked to rank each of the success factors seen in their most recent completed project. The result shows that the scores given are “moderately important and very important” with “critical” rating being in frequent and no respondent has selected “not important”. Figure 5 shows that all the factors were seen as important to the project success with significantly little differentiation between them. The average ratings varied in only between 3.4 and 3.9 and majority of the respondents gave ‘critical’ or ‘very important’ ratings to each of the success factor. Within this narrow range however, the top 3 factors given the highest scores were ‘commitment to project success’, ‘project planning and review’ and ‘goals and objectives’. At the other end of the range, ‘proven methods and tools’, ‘effective governance’ and ‘capable project sponsors’ were given the lowest scores.

A further comparison was made between respondents’ role in project management experience to see how each role rate the extent of success factors in their most recent completed project. The data showed that, perhaps with some contradiction, while the senior and leaders of the project team rank the
importance of the success factors, the majority of the respondents who identified themselves as member of the project team had low perception of most of the success factors. Figure 6 provides a retrospective view of the findings in the next page.

![Figure 4. Variation of different groups in project extent of project success.](image)

![Figure 5. Perception of project success observed by respondents in recent completed project.](image)
Figure 6. Variation of different groups in project extent of project success.

4. Conclusion

According to Hofstede, in cultures with high power-distance index, the superior and subordinate relations are very formal. Subordinates are expected to comply to their superiors without questioning. In cultures with high uncertainty avoidance, there is a strong inclination towards formal rules and guidelines and defying from established behaviours is viewed negatively. In masculine societies, assertiveness, performance, success, money, and materialism are favoured. These values are a reflection of the respondent’s individual cultural values.

Where the organization was reported to be of closed system i.e. tendency to be unfriendly towards new comers, this can be due to respondents high in individualistic value of meeting personal needs and goal foremost which is appreciative in this era of digital and globalization. Notwithstanding, it is very encouraging to observe that that organizations are high in collective values which is invaluable for project delivery. Hence, it is not surprising to find that the respondents have ranked “commitment to project success”, “project planning and review”, “project goals and objectives” as the top three project success criteria as these can are in line with the organizational cultural of goal oriented, with focus on task and externally driven.

This research aimed to investigate the causal relationship between national culture and organizational behaviour in influencing the perception of project success by Malaysians project professionals, and to find out how difference in importance the project success factors between Malaysian and British project professionals. By analysing the cultural values of respondents and respondents’ organizations, the results indicated that rank of project success importance differ between the two countries and can be concluded that, national culture does influence the organizational culture/behaviour and to a certain extent, impacts the way success factors for projects are perceived. Rondinelli [7] wrote “that in many cases, project management practices used in advanced countries have been prescribed for increasing the implementation capacity of developing nations; an attempt has been made to install complex project management techniques and procedures”. Even then, it will only work when it is incorporated into an indigenous framework based on local values, beliefs, and behavioural patterns [10]. Cultural differences
are a never ending subject and they are here to stay. They will constantly present challenges especially for multinational companies. Appreciating and embracing national culture with its values, beliefs, attitudes is a condition for the success in the organization in this global age.

Organizations that recognizes and manages culture differences effectively can achieve advantages in the various host countries where they operate while leveraging on their main sources of advantage across borders, and in some cases even making cultural diversity itself a source of power. However, culture and cultural diversity can be both an asset and a liability. Organizations must be able to tie the issue of managing cultural diversity to the need of business and be skilful in business issues, goals and results in order to achieve successful projects and results.

5. References

[1] Shenhar A J, Dvir D, Levy O and Maltz A C 2001 Project Success: A Multidimensional Strategic Concept Long Range Planning 34 699–725
[2] Suda L 2007 Linking strategy, leadership and organization culture for project success PM World Today 9 1–9
[3] PMI 2017 A guide to the project management body of knowledge (PMBOK® guide) (Pennsylvania: Project Management Institute) pp 503-504
[4] Association for Project Management 2015 Report Highlights Cost of Failure Retrieved on October 18, 2019 from https://www.apm.org.uk/news/report-highlights-cost-of-failure/
[5] PMI’s Pulse of the Profession 2018 Success in Disruptive Times (Pennsylvania: Project Management Institute) pp 3
[6] Thi C H and Swierczek F W 2010 Critical success factors in project management: implication from Vietnam Asia Pacific Business Rev. 16 567–589
[7] Belassi W Kondra A Z and Tukel O I 2007 New Product Development Projects: The Effects of Organizational Culture Proj. Management J. 38 12–24
[8] Hofstede G 2011 Dimensionalizing Cultures: The Hofstede Model in Context Online Readings in Psychology and Culture 2 1-26
[9] Hofstede G 1998 Think Locally, Act Globally: Cultural Constraints Management and Int. Rev. 38 7–26
[10] Lima N and Patah L A 2016 Cultural Issue and its Influence in the Management of Global Project Teams Future Studies Research J.: Trends and Strategies 8 90–112
[11] Jetu F T Riedl R and Roithmayr F 2011 Cultural Patterns Influencing Project Team Behavior in Sub-Saharan Africa: A Case Study in Ethiopia Proj. Management J. 42 57–77
[12] Lückmann P and Laumann M 2016 How National Culture Impacts the Success of Project Customer Engagement: An Empirical Investigation Procedia Computer Science 100 95–102
[13] BMG Research 2014 Factors in project success Retrieved on October 20, 2019 from www.bmgresearch.co.uk