Local government policies affect aboriginal community development with TQM analysis

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Abstract

This paper exams the relationship between sustainable development in indigenous community and the application of TQM from local government. With the broad support from local government application of total quality management by leadership, communication, employee involvement, strategic planning, and continuous improvement the results of this study show that leadership, communication, employee involvement, strategic planning, and are significant impact to develop the sustainability in indigenous community. Pingtung County was selected to be a study case, and data were analyzed by both SPSS and structural equation modeling (SEM).

Keywords:sustainability, indigenous community, total quality management, local government

Introduction

Many researchers have stated local governments are responsible for developing policy statements to sustain local communities’ development (Natcher and Davis, 2007; Lisbon Strategy, 2000; The renewed EU Tourism policy, 2006; Agenda for a sustainable and competitive European Tourism, 2007; Quebec Declaration on Ecotourism, 2002; Ruhanen, 2004; Finlayson, 2007; World Tourism Organisation, 2003). The policies were consistent with government aim to achieve economic independence, and preserve significant culture heritage for indigenous community. For a government as a citizen service sector, this study helps to enhance the understanding of how government practices TQM to implement policies effectively and has significant positive impact to develop the sustainability in indigenous community (Jun, Cai, & Shin, 2006; Hart & Thompson, 2007).

 From empirical studies, the majority of the organizations have gained benefits from application of TQM (Walker *et al*., 2006; Lazari and Kanellopoulos, 2007; Demirbag *et al*., 2006a; Feng *et al*., 2006; Claver-Cortés *et al*.,2008; Agus *et al*.,2000; Kaynak, 2003; Sousa, 2003;). TQM has been modified to adapt the service of specific industries, e.g. tourism ( Holjevac & Avelini, 2008), healthcare (Kannedy & Fiss, 2009; Carol & Justin 2011; Lee *et al*., 2000; Lim & Tang, 2000), education (Ledden *et al*.,, 2011;) information systems (Kettinger & Lee, 1997; Richard *et al.*, 2013), hotel (Wang *et al*., 2012; Abdelkader *et al*., 2009 Presbury *et al*., ; Piccoli et al., 2003), and banking (Sunayna, 2013; Lin, 2009). However, there are a few studies that identify the casual effect on application of key attributes of TQM in citizen service sector and sustainability in indigenous community.

 Taiwan’s Pingtung County Government (PCG) has applied TQM method for several years. PCG has practiced key attributes of communication, leadership, employee involvement, strategic planning, and continuous improvement to develop and implement policies for indigenous communities through entire organization. Consequently, the purpose of this study is to exam TQM practice on citizen service sector will certainly effect on policies implementation of sustainability in indigenous communities.

This study tested the research model using gathering from PCG using a questionnaire survey method, and applied the Structural Model and discriminate analysis for analysis and testing. A literature review discusses four variables and establishes the hypothesis. Subsequent sections then describe the methodology, result, and analysis. Finally, the last section discusses conclusion and recommendations.

Literature review

According to different communities, the definition of sustainable community development varies according to their needs, interest, culture and education system (Chan, 2004). Sustainable community policies should provide workable definition, implementation strategies, action plans and monitoring system (Whitford , 2010). TQM would be the method to evaluate and improve processes of facilitating public policies. (Dinh *et al*., 2006; Ismail, 2006; Sila and Ebrahimpour , 2002; Ruhanen , 2004; Li *et al*., 2007). The current literature of TQM concepts is based on the quality theory and approaches suggested by, Deming (1981-1982), Feigenbaum (1983), Garvin (1988), and Juran (1988). TQM implementation will result in improved communication, improved leadership, improved employee involvement, and improved strategic planning and continuous improvement in organization. (Healy et.al., 2012; Antony *et al*., 2002; World Tourism Organisation, 2003; Li *et al*., 2007; Montes *et al.* 2003; Keng *et al*.,2007; Sila and Ebrahimpour, 2002; Bakar *et a*l.,, 2007). Governments in many countries have developed exquisite policies to sustain aboriginal communities, but few of them have specific techniques to appraise themselves against the government practices. TQM is recognized as a method for continuous process improvement to achieve desired goal (Rao et al., 1999; Montes et al. 2003)

The majority of research has focused on employee satisfaction and enhanced process re-engineering process in government (Auluck, 2002; U¨ stu¨ner & Cos¸kun, 2004; Mengesha & Common, 2007). However, available empirical studies lack analysis of measuring the sustainable policies in government. The objective of this study aims to develop an empirical model for establishing connection among TQM application, communication, leadership, employee involvement, strategic planning, and continuous improvement (Mason and Cheyne, 2000；Gursoy, Jurowski and Uysal, 2002；Ko and Stewart , 2002；Andereck, et al., 2005; P´erez and Nadal, 2005). Particularly, the underlying premise is that sustainability in indigenous community is likely to be affected by TQM practices. Consequently, develop a sustainable indigenous communities can be influenced by a set of TQM application associates with Malcolm Baldrige National Quality Award (MBNQA) (Besterfield *et al*., 2003), particularly for leadership, strategic planning, customer and market focus, information and analysis, and human resource. The research model is proposed in figured 1.

**Figure 1. Conceptual model of the relationship between the constructs**

*Total quality management*

 According from Saraph *et al*. (1989), many studies have intended to construct critical success factors to measure organizations’ performance. MBNQA set the criteria for the performance excellence. Sustain communities development should gain more effective supports from the government. TQM method accords to the IPO (Input-Processing -Output) concept to display the relationship between the TQM system and participants (Longo and Cox, 1997; Youssef *et al*., 1996). Input refers to participants between internal (employees) and external (indigenous) cooperation. Processing focuses on strategic planning to achieve desired goal. Output is defined as development of indigenous community. TQM is comprehensive management philosophy that motivates an organizational culture committed to satisfaction for internal and external participants through continuous improvement (Kanji, 2002).

TQM requires the commitment from the senior executives (Deming, 1981-1982). Top management’s guidance is expected to lead continuous quality management. Senior executives’ involvements in developing policies, such as planning, coordinating, reviewing, and directing are an important part ensuring the success of TQM implementation. Leadership means that the senior executives share vision, value, and beliefs with entire organization and expect to achieve the goals (Sureshchandar *et al.* 2002). Leadership means that senior executives would set the standard and maintain the qualification of policies (Lytle *et al*. 1998) and willing to delegate authority to solve the problem with assistances and supports (Besterfield *et al.* 2003; Nahm et al. 2003; Keng, *et al.* 2007).

Communication structure should support both internal and external flow of information. Internally, this means that information about the actual sources of problems and the results of subsequent improvement activities are conveyed to employees who are actually performing the work as well as a greater use of bottom-up data gathering techniques such as statistical process control ( Ittner and Larcker, 1995). Internal cross-functional communication is important among departments like operations, finance, marketing, IT, and customer service. Better external communication includes building the relationships and trusts with community and promptly responsive to complaints from the communities. Strongly encourage community participation and involvement (Healy *et.al*., 2012; World Tourism Organisation, 2003).

 TQM puts a heavy emphasis on employee involvement and recognizes the need to advance people’s mindset and change people’s behavior, attitude, and philosophy of doing business. TQM stress the importance of commitment to life-long learning, and having organization thinking. Employees take responsible of innovation and making decision. TQM assumes that people naturally want to do a good job and will try to improve as long as they are provided with the necessary training and resources (Grant *et al*.,1994; Hackman and Wageman, 1995), while feeling they are being sufficiently rewarded for their efforts, under appropriate appraisal schemes. In fact, TQM requires a new set of competences. The changes in working practices demanded by TQM are only possible if supportive people management practices are implemented. Moreover, people perform better if they work in a cooperative and friendly environment. The nature of most organizational problems requires a high degree of cross-function interaction to break down boundaries and flatten the organization structure to make the policies implementation more efficiency (Parker & Wall, 1998; Nahm *et al.* 2003; Keng *et al.* 2007). With encouragement and sufficiency knowledge of employee involvement, organizations should provide continually training courses related to aboriginal culture (CEC 1998, 2002; Tihanyi et al., 2000; Boudreau *et al*., 2001; Claver *et al*., 2006; Jun et al., 2006; Ooi, *et al*., 2007).

Strategic planning is quality plan and the way to discover the future needs of the indigenous. It basically covers for three to ten years (Besterfield, 2003). It is the process starts with the principle that quality and customer satisfaction are the center of an organization’s future. It brings together all the key stakeholders (Besterfield, 2003; Dew, 1994). Planners must predict the future condition that will affect the community development. They also determine where the organization wants to be in relation to the indigenous. Planners must identify the core value of the indigenous community. All stakeholders should be included in the development of the plan. The plans must align with the mission, vision and core value of the indigenous community. Finally, the monitoring activities have to ensure the progress is being implemented. Strategic planning is highly effective, and allows the organizations do the right thing at the right time (Dew, 1994). Consequently, the study hypothesizes:

***Hypothesis*** *TQM positively affects indigenous community development.*

Policies of sustainable community development indicate that strengthen adaptive capacity of communities to mitigate poverty and wellbeing issues. It tends to lead towards greater self-sufficiency, and independence (Petheram, 2010). The policies strongly concern about indigenous knowledge and pass down, culture heritage to younger generation. Community members are motivated to carry out particular strategies that align with community values, attitudes, and norms. With policies implementation, government supports and community action work together, it will help improve indigenous maintain traditional values, and sustainability (Sithole et al., 2009). Effective policies planning for sustainable indigenous community development has to be based on an analysis of actual and potential environment, social and economic conditions and the needs of indigenous community (Hezri, 2004; Rydin, Holman, & Wolff, 2003). Sustainable community development should be integrated with local authority management decision (Godfrey, 1998). Indigenous community development policies are often centralized and most decisions are made through government intervention (Choi & Sirakaya, 2006; Tosun & Timothy, 2001). Policies in practice are the product of political influence (Yasarata *et al.*, 2010). A qualitative study stated that government’s effective policies will facilitate the development of indigenous community (Whitford & Ruhanen, 2010). In sum, indigenous community policies focus on strategies that provide indigenous people with an opportunity for economic advancement, job and education opportunities and preservation of an ancient culture heritage (SATC, 2002).

Methodology

*Sample*

This study will focus on Pingtung County Government located in southern Taiwan. About seven percent of population (57, 634) is aboriginal people. Most of them are inhabit the east part of Pingtung. The majority of them dwell in Wutai, Sandimen, Majia, Taiwu, Laiyi, Chunri, Shizi, Mudau, Manzhou townships (see figure 2). Pingtung County Government (PCG) has approximately 1,100 administrative employees and 852286 residents. The survey was conducted in Chinese. All the items in the survey were measured on five-point Likert-type scale ranging from strongly agree to strongly disagree. A total of 360 employees of the PCG participated in this survey. All the questionnaires were filled out with anonymity and confidential. The questionnaires were distributed and collected once a week. A total of 236 were returned and fully completed. A return rate is approximately 66%.



Figure 2. Pingtung township class that downloads from website of Pingtung County Government

*Measurement*

The questionnaire contained 24 items for the main study. (shown in Appendix). All the variables were analyzed with pilot –test to ensure all of them had reliability exceeding value 0.7 suggest by Hair *et al.* (1998). Items with lower reliability were eliminated. Finally TQM has four constructs (refer to table 1) with 16 items, leadership has 4 variables, communication has 4 variables, employee involvement has 3 variables, strategic planning has 5 variables. The effective sample size was 236, the overall response rate was 65%. The sample of 236 was appropriate for the model with four constructs recommendation of Hair et al. (2006).

Table 1 Construct measurement.

|  |
| --- |
| Construct Construct definition Construct sources |

**Leadership** Senior executives’ involvements in developing policies,

Li et al. ( 2007). Montes et al. (2003)

Antony et al. (2002) Keng et. Al. (2007)

 Sila and Ebrahimpour (2002)

such as planning, coordinating, reviewing, and directing are

an important part ensuring the success of TQM implementation.

**Communication** Communication structure should support both internal and

Healy et.al. (2012) World Tourism

 Organisation,( 2003) Grootaert (2001)

external flow of information.

Boudreau et al. ( 2001); Claver et al. (2006)

Tihanyi et al. (2000) Antony et al. (2002)

 Keng et al. (2007) Sila & Ebrahimpour

(2002)

**Employee Involvement** Employee involvement and recognizes the need advance people’s

mindset and change people’s behavior, attitude, and philosophy of

doing business.

**Strategic Planning** Strategic planning is quality plan and the way to discover the future needs

Dinh et al. (2006) Ismail (2006) Sila and Ebrahimpour (2002) Besterfield et al., (2003) Ruhanen (2004)

of the indigenous. It is the process starts with the principle that quality and

 customer satisfaction are the center of an organization’s future.

Grandzol and Gershon (1998) Montes et al. (2003)

**sustainable community** Policies of sustainable community development indicate that strengthen

Petheram (2010) Sithole et al. (2009)

**development** adaptive capacity of communities to mitigate poverty and wellbeing issues.

It tends to lead towards greater self-sufficiency, and independence.

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|  |

 In any type of survey research, non-response bias shall be tested. This study adopted the approach used by Armstrong and Overton (1977) of testing for non-response bias in mail survey. The data was divided into two parts according to the number of days from initial mailing until receipt of the returned questionnaire. Early respondents were compared with late respondents in terms of questionnaire items included in each scales, and the *t*-test was applied in the procedure to exam the difference between the early and late respondent. In addition, a single respondent filled out all measurement items usually comes out with Common Method Variance (CMV) problem (Podsakoff and Organ, 1986) that is one of the main sources of measurement error. Measurement error causes doubtfulness validity of conclusions (Bagozzi and Yi, 1991; Nunnally, 1978; Spector, 1987). Consequently, this study applied the Harman’s single-factor test to CMV (Andersson and Bateman, 1997; Aulakh and Gencturk, 2000). All factors were extracted, with the first factor explaining 0.47 of the total variance. It is lower than 0.50 (Peng et al., 2006). Clearly the observed relationships among constructs are largely unexplained by the systematic variance associated with the measurement technique.

Table2 Constructs Reliability Analysis

|  |  |  |
| --- | --- | --- |
| **Construct** | **Construct Description** | **Cronbach’s α** |
|
| **Leadership** | 1. Senior executives improve policies and achieve the goal. | 0.863 |
| 2. Senior executives share vision, value and beliefs. |
| 3. Assistance and supports to do the job. |
| 4. Delegate authority to solve the problem. |
| **Communication** | 5. Build relationships and trusts with community. | 0.862 |
| 6. Encourage community participation and involvement.  |
| 7. Encourage Bottom-up community proposals. |
| 8. Promptly responsive to complaints. |  |
| **Employee** **Involvement** | 9. Willing to contribute myself to develop activities. | 0.801 |
| 10. A team breaks down functional area boundaries. Boundaries |
| 11. The training courses help us to solve the problems. |
| **Strategic****Planning** | 12. Have short, middle, long term plan communities. | 0.889 |
| 13. Determines education environment for communities. |
| 14. Support and assist aboriginal culture for communities. |
| 15. Provides aborigines with financing. |
|  | 16. Build up the implementation plan. |  |
| **TQM**  |  | **0.93** |
| **Economy** | 17. Provide aboriginal education environment.  | 0.892 |
| 18. Provide job opportunities and training program. |
| 19. Encourages aborigines to manage their own business.  |
| 20. Improve the infrastructure for the communities.  |
| 21. Boost the living standard for the communities. |
| **Culture** | 22. Improve and promote the image of aboriginal communities. | 0.903 |
| 23. Preserve the aboriginal heritage and culture.  |
| 24. Cultivate young generation to recognize aboriginal heritage. 8cC |
| **Community Development** |  | **0.91** |

* 1. *Structural model and hypotheses testing*

LED

COM

ECO

EI

SP

CUL

 **0.92**

 **0.68 0.85 (8.81) 0.93**

 **0.85 0.65**

  **0.84**

Note:

1. The figure with parentheses () is critical ration (t value), \*denotes p< 0.001
2. *Χ 2* (Chi-square) = 322.02, df = 210; *χ2*/df = 1.5; GFI = 0.91; CFI = 0.97; IFI = 0.97; AGFI = 0.89; NFI = 0.93; RMR = 0.03; RMSEA = 0.05, SRMR=0.05; PGFI= 0.63; PNFI=0.7. \*\*\* p< 0.001.

Results and analyses

*Reliability and validity analyses*

Two-step structural equation modeling was used for model testing. Maximum likelihood was used for all parameter estimation with Amos16. First confirmatory factor analysis (CFA) is conducted to evaluate the model used to measure the modeled constructs. CFA enables testing of the reliability, convergent validity and discriminate validity of the measurement model. The reliability and internal validity of the measurement model is examined by calculating the composite reliability (CR) and average variance extracted (AVE). Table 2 shows that all the constructs have acceptable composite reliability coefficients, since they exceed 0.6 (Bagozzi and Yi, 1988; Hair et al., 1998). The AVE of each measure accounts for more than 50% of the variance, as suggested by Bagozzi and Yi (1988), and indicates that the variance captured by the construct exceeds that due to the measurement error (Fornell and Larcker, 1981). Therefore, the measurement model has adequate internal validity. Convergent validity measures the correlation between two observed variables used to measure the same construct and is expected when the estimated pattern coefficient on the underlying construct factor of the estimated pattern of each coefficient is significant. Items have factor loadings exceeding 0.45(Jöreskog and Sörbom, 1996). Table 3 lists the convergent validity result of each latent variable. The standardized factor loadings of each sub-dimension all exceed 0.45 and are significant. Convergent validity thus was achieved for all the study constructs. Discriminate validity was assessed using the approach suggested by Fornell and Larcker (1981). Table 4 exams the AVE for each of the latent constructs and comparing this with the squared correlations among the constructs revealed that the shared variance among any two constructs (that is, the square of their inter-correlation) was always less than the average variance explained by the construct, suggesting discriminate validity. Table 3 lists the result of discriminate validity. This study concludes that all measures exhibit construct validity. Based on all of the reliability and validity analysis, the construct scale appears to exhibit satisfactory measurement qualities and is adequate.

*Structural model and hypotheses testing*

The simultaneous maximum-likelihood-estimation procedures are used to examine the hypothesized relationships among total quality management, market orientation and hotel performance. Table 5 shows that the structural model exhibits a good fit with the data, with fit indices of Root Mean Square Error of Approximation (RMSEA), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), and Comparative Fit Index (CFI) fulfilling the respective benchmarks (Bagozzi and Yi, 1988; Hairetal.,1998). Table 6 also shows the path coefficients for the model and their significance. Regarding the hypothesis tests, all of the hypothesized relationships are supported for the estimated structural model. Total quality management significantly and positively affects community development (TQM-DEVP) = 0.85, t-value =8.81). Hence, Hypothesis is supported.

Table 3 Construct reliability and convergent validity coefficient

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Construct  | Number of items |  SFL[[1]](#footnote-1)a (min- max) |  t-Value[[2]](#footnote-2)b (min- max)  | α[[3]](#footnote-3)c  | CR[[4]](#footnote-4)d  | AVE[[5]](#footnote-5)e P[[6]](#footnote-6)f |

**TQM (2nd order CFA)** 4 0.50-0.83 7.83-15.25 0.93 0.90 0.83

Leadership 4 0.68-0.90 12.08-16.50 0.87 0.87 0.79 \*\*\*[[7]](#footnote-7)g

Communication 4 0.71-0.85 12.48-15.21 0.86 0.86 0.78 \*\*\*

Employee involvement 3 0.71-0.83 12.41-13.24 0.80 0.80 0.76 \*\*\*

Strategic planning 5 0.6-0.92 10.16-17.41 0.90 0.90 0.80 \*\*\*

**Development (2nd order CFA)**  2 0.64-0.83 10.38-17.65 0.91 0.78 0.80

 Economy 5 0.60-0.88 10.41-15.32 0.89 0.89 0.79 \*\*\*

 Culture 3 0.80-0.92 13.75-14.57 0.91 0.91 0.87 \*\*\*

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|  |

Table 4 Discriminate validity coefficient [[8]](#footnote-8)a

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Leadership | Communication | Employment | Strategy | Economy | Culture |
| Leadership | **0.781** |  |  |  |  |  |
| Communication | 0.572 | **0.781** |  |  |  |  |
| Employment | 0.678 | 0.481 | **0.761** |  |  |  |
| Strategy | 0.734 | 0.455 | 0.570 | **0.794** |  |  |
| Economy | 0.587 | 0.571 | 0.617 | 0.643 | **0.787** | \* |
| Culture | 0.449 | 0.574 | 0.382 | 0.402 | 0.643 | **0.872** |

Table 5 Results of the overall Model Fit

|  |  |  |  |
| --- | --- | --- | --- |
| Fit Indices | Recommended values for good fit |  Model values | Supported |
| *χ2*(Chi-square) | the smaller the better | 322.02 |  |
| *χ2*/df | <3 | 1.50 |  Yes |
| GFI | >0.9 | 0.91 |  Yes |
| AGFI | >0.8 | 0.89 | Yes |
| RMSEA | <.08 | 0.05 |  Yes |
| CFI | >0.9 | 0.97 |  Yes |
| NFI | >0.9 | 0.93 |  Yes |
| NNFI | >0.9 | 0.97 |  Yes |
| RMR | <0.08 | 0.03 |  Yes |
| SRMR | <0.08 | 0.05 | Yes |
| RFI | >0.9 | 0.91 | Yes |
| IFI | >0.9 | 0.97 | Yes |
| PGFI | >0.5 | 0.63 | Yes |
| PNFI | >0.5 | 0.70 | Yes |

Table 6 Hypothesis Reuslt

|  |  |  |  |
| --- | --- | --- | --- |
| 假設  | 路徑關係 | Factor loading |  |
| 1 | TQM🡪Indigenous Community Development | 0.85\* |  |

*P<0.05*

SEM Model



Conclusion and implication

Based on literature review, this study proposes that indigenous community development may be sustainable through TQM practices. The analytical results found that the model of the hypothesis to be strongly supported. This study shows that leadership, communication, employee involvement and strategic planning are significant positive predictors of indigenous community development. The principal findings are as follows: (1) the theoretical model for TQM-community development has adequate goodness-of- fit through SEM analysis. (2) TQM has a significant and positive effect on indigenous community development. SEM analysis indicates that leadership (0.92) plays a critical role in TQM process; however, communication (0.68) is lower than the other observed factors. That indicates the government should give more consideration on communication with indigenous community to find out what’s really problem to improve community. Governments must continuously improve their efforts in quality operation to meet the needs and sustainability of the indigenous community. This subsequently would lead to better government performance to help community development. In summary, this study contributes to the quality management by proposing theoretically and verifying empirically a perspective that links TQM practices within the government to indigenous community development. This result confirms theoretical framework of TQM practices within government policies of sustainable community development indicate that strengthen adaptive capacity of communities to mitigate poverty and wellbeing issues. It tends to lead towards greater self-sufficiency, and independence (Petheram, 2010). Therefore, TQM practices is simply a management tool for improving quality, but can also promote a culture of trust, sharing, openness, and sustainability when supported by leadership, communication, employee involvement and strategic planning.

*Theoretical and managerial implications* (1) TQM positively affects community development. TQM-adopting government achieves improvements in leadership, communication, employee involvement, and strategic planning. It also shows that local government identifies the areas of TQM in which they implement policies, and the areas requiring improvements. However, the degree of implementation of the basic elements of TQM influences business performance (Powell, 1995). (2) Effective polices enhances community development. Government should be aware of making polices to sustain indigenous community. Government must also continuously educate and train employees to detect and understand the changes among communities. Furthermore, sharing employees information within community fulfills indigenous people’ needs and expectations with new solutions. (Yam et al., 2005).

The contribution of this study is critical to the literature on government quality management, as these links have never been studied before. Based on our practical experiences, some possible reasons with related suggestions for this worrying finding were proposed as follows. TQM practice with lower but significant impact on development in culture that may be attributed to not cultivating young generation to recognize aboriginal heritage; Hence, it is important for those government managements to build trust and openness with indigenous people . However, some future studies with qualitative interviews/open ended survey questions should be urgently conducted by indigenous community in order to clarify the real reasons behind this low culture effect, and further provide feedback for building policies for indigenous community. Other TQM practices are also very important as the government undertakes service quality improvement projects. The government should organize the employees as a team and establish trust with indigenous. The government can also give the indigenous people enough empowerment to make them feel greater identification and reduce the feeling of powerlessness related to policies. Establishing a long-term relationship between government and indigenous people can enhance communication.

Yet, it is important to notice that the relatively weak associations between certain TQM dimensions and development in culture dimension. That indicates government should understand and keep on eyes on preserving aboriginal heritage culture before making policies for the indigenous community.

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1. a SFL, standardized factor loading [↑](#footnote-ref-1)
2. b t-Value, critical ration [↑](#footnote-ref-2)
3. c α, Cronbach’s coefficient [↑](#footnote-ref-3)
4. d CR, composite reliability [↑](#footnote-ref-4)
5. e AVE, average variance extracted [↑](#footnote-ref-5)
6. f P, probability [↑](#footnote-ref-6)
7. g \*\*\*, p < 0.001; [↑](#footnote-ref-7)
8. a Diagonal element (bold) are the square root average extracted (AVE) between the constructs and their measures. Off-diagonal elements are correlations between the constructs. [↑](#footnote-ref-8)