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MANAGING CONSTRUCTION PROJECTS IN A MULTICULTURAL SOCIETY: PERSPECTIVE OF FILIPINO CANADIAN ENGINEERS

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Abstract

This research study was intended to examine the effect of national culture and leadership styles of Filipino- Canadian Engineers based on Hofstede's cultural dimensions. The purpose of this academic research is to find a leadership program that will bridge the gap of underrepresentation among the Filipino Canadian Engineers and Project Managers in Canada. The respondents of this research study are the internationally trained Filipino Engineers who are members of the Association of Filipino Canadian Engineers (AFCE). This researcher used a combination of selfmade and standardized Survey Ouestionnaires published on Google Forms, as well as face to face interviews where permitted. The questionnaires were sent via email or social media platforms such as Messenger and LinkedIn. The data collected were then tallied, analyzed, interpreted and summarized using statistical treatment such as Mean, Pearson r correlation, Standard Deviation and Frequency. The study revealed that Filipinos has assimilated well to the Canadian Society in terms of cultural dimensions with the exemption of Collectivism. This research study also found out that there are leadership traits or skills that need to be tweaked in order for the Filipino Canadian Engineers to be a productive part of Engineering and Construction industry. This researcher identified workshops including Assertiveness training, Critical and creative thinking, Emotional Intelligence, Intercultural and interpersonal communication, and public speaking shall be introduced.

Keywords: Business Leaders, Culture, Cultural Dimension, Filipino Canadian Engineers, Global Filipinos, Leadership Skills, Leadership Styles, Next Generation Leaders, OFW

INTRODUCTION

Overseas Filipino workers are everywhere in this world working as household workers, factory workers and professionals such as nurses and engineers. It is interesting to note that Filipinos are indeed highly adaptable to their host country's culture. This has been confirmed by this researcher's own experience with his personal interaction to many Filipino migrant workers in North America, Europe, the Middle East, and Asia. In this context, Filipinos are underrepresented in the Engineering and Construction Industry in Canada which also has significant impact on socio- financial status of every Filipino Canadian Engineers.

Among the visible minorities in Canada, Filipinos ranked fourth in terms of population after South Asian (including Indians), Chinese and Black. In the 2016 census, the Philippines ranked third among the immigrants who were born in the Philippines after India and China. The same census also showed that many Filipinos are well educated prior to coming to Canada with the Philippines being listed as one of the countries where immigrants gained their education (Statistics Canada, 2016). Although the Filipinos have the number, they do not assert themselves to be in the top managerial position.

In connection, Hofstede (2013) supplied diverse cultural dimensions between the Filipino, Indian, Chinese and the Canadian cultures which include Power Distance,



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Individualism, Masculinity, Uncertainty Avoidance, Long Term orientation and Indulgence. These cultural differences may affect the way Filipino immigrants lead their team, which may not be as effective as the way the Indian and Chinese immigrants and the locally trained Canadians work. Therefore, it is the primary reason of this academic research study to discover the many leadership skills by which Filipinos should learn and unlearn to be more competitive in an already competitive Canadian corporate world.

Conceptual Framework

This researcher follows the Input-Process-Output (IPO) Model. It is simply a diagram that shows the input and the output along with the processes including all the tasks that are required to transform input into an output. Inputs are external data that flows into the process. The process then requires all data transformation using a defined method. In the end, the input and the process produce an output which are the data that comes in from the transformation (Schembri, 2012).

Figure 1 below shows the research paradigm of the study which presents the input required, the processes, as well as the expected output of the study. The input required in this study presented in the 1st box determines the (1) Perceived cultural dimension with considerations to Power Distance, Uncertainty Avoidance, Collectivism (or individualism), Long term orientation, and Masculinity (or femininity); (2) Perceived leadership style in terms of: Authoritative, Democratic, Facilitative, and Situational; (3) perceived work- styles personality – Producer, Analyzer, Visionary or Friends; (4) relationship(s) between the perceived different cultural dimensions with the level of leadership style among Filipino-Canadian Engineers; and lastly, (5) Effectiveness of the current leadership skills of Filipino Canadian Engineers in the Canadian workplace, and the challenges of Filipino leadership skills, its strengths, and weaknesses.

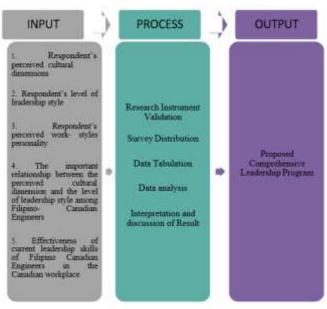


Figure 1. Research Paradigm



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The process of the study is presented in the second box which presents the instrument validation from expert, survey distribution to the participants of the study, data tabulation, and data analysis using the recommended statistical tools, and interpretation and discussion of result. This process will also include a town hall meeting and a face-to-face meeting to confirm the results.

The output of the study which is presented in the third box describes the recommended program/activities that are set up on the findings and results of the current study, and for training and development for leadership effectiveness. This output will provide guidance to Filipino professionals and prospective Filipino immigrants specifically the Filipino Canadian Engineers, to attain greater heights in their professional field.

Objectives of the Study

This research will involve a systematic review of all the relevant materials available in the library – both online and in print. The author will examine the diverse cultural dimensions as presented by Hofstede to find how well Filipinos assimilated in the host country's national culture. Hofstede (2013) developed a general understanding of the Filipino culture and the Canadian culture, but there is no study that would reveal the dimensions of a Filipino-Canadian culture. This study would like to understand the cultural dimensions of Filipinos who are considered newcomers and those who have fully integrated in a Canadian society.

This researcher would like to explore the prevailing leadership styles using a published questionnaire to assess the effectiveness in the Canadian context.

In addition, the researcher would like to figure out the leadership skills of Filipino Canadian Engineers using the PAVF work-styles assessment. A follow up, either virtual or face to face interview would verify their responses in the PAVF assessment. Although leadership skills are different between individuals, it is the hope of this research study to recognize a singular denominator why Filipinos are finding it challenging to find a job related to their education and at the same time, explore why Filipinos who find a job related to their field, remain in the middle management.

Having said that, the researcher would like to explore whether the Filipino culture has a direct effect on leadership skills of a Filipino Canadian engineer and the way they are wired in the workplace. The focus of this study is to assess how well Filipino Canadian Engineers have assimilated in the Canadian society by examining cultural dimensions set up by Hofstede. As well, to scrutinize the effectiveness of the Filipino leadership skills in the Canadian context. Particularly, it aims to provide an answer to the following:

- 1) What is the group's perceived cultural dimension compared to the Philippines and Canadian Cultural Dimensions based on Hofstede's Insights in terms of Power Distance cultural dimension; Individualism (or collectivism); Uncertainty Avoidance; Long term orientation; and Masculinity (or femininity).
- 2) What is the respondent's level of leadership style in terms of Authoritative; Democratic; Facilitative; and, Situational



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- 3) What is the respondent's perceived work-styles personality?
- 4) Is there significant relationship between the perceived cultural dimension and the level of leadership style among Filipino- Canadian Engineers?
- 5) What domain of the perceived cultural dimension significantly influence leadership style among Filipino- Canadian Engineers?
- 6) What are the recommended leadership skills should a Filipino learn and unlearn for them to rise to the challenge?

Hypotheses

The hypotheses below are evaluated at 0.05 degree of significance:

- 1. Null Hypothesis 01: There is no significant relation between the perceived cultural dimension and the level of leadership style among Filipino-Canadian Engineers
- 2. Null Hypothesis 02: There is no considerable influence of cultural dimension on leadership style amongst the Filipino- Canadian Engineers

Scope and Delimitation of the Study

The focus of this academic research will be the members of the Association of Filipino Canadian Engineers (AFCE) including its affiliate organizations like the Filipino Construction Professionals of Ontario (FilConPro), Filipino Engineers in British Columbia, Association of Filipino Contractors in Alberta (AFCA) and the Filipino Members Chapter Engineers and Geoscientists Manitoba where majority of its members, if not all, are internationally educated Filipino Engineers. The data will be gathered between July 15th and October 15th, 2022. The questionnaires will be conducted via online while the interviews will be performed through virtual meetings and face to face at different time and place.

LITERATURE REVIEW

Engineers are drivers of change (Zuwairiyah, 2019). They bring about innovation making our world a better place to live in. Having said that, Engineers have a solution to any of the world's problems. As such, Engineers are the drivers of innovation.

Based on Canadian Construction Association (2021) and Randstad (2020), Architecture, Engineering and Construction (AEC) is one of the biggest contributors to the Canadian Economy. It employs about 1.4 million people and remits about \$141 Billion of the Canadian Economy. Even with the pandemic, construction remained one of the top industries that contributes to the Canadian economy. Truly, Engineers and Construction workers were considered as essential services workers during the pandemic. It employs about 1.4 million people nationwide and accounts for about 7.5% overall of Gross Domestic Product (GDP) of the Canadian economy (Statistics Canada, 2020). Therefore, it is important that we place the importance of Engineers and Construction Professionals in nation building. It is equally important that the Canadian government put emphasis on developing the talents of Filipino Canadian Engineers and all the other immigrant groups to sustain our efforts in creating wealth.



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The 2012 economic crisis and the pandemic proved that Keynesian Economics is truly working. The increased spending on Construction projects created a vibrant Canadian economy. The multiplier effect of the Keynesian model proved that the resulting economy is far greater than the spending (Jahan, Mahmud, and Papageorgiou, 2014). As Engineering is tied to any construction activity, it is also considered as a driver to Canadian economy. Members of the Association of Filipino-Canadian Engineers (AFCE) some of whom are also members of the Filipino Construction Professionals of Ontario (FilConPro) would attest that only a handful of Filipino immigrants are in fact, Professional Engineers. They also lament that many of the Filipino Professionals who work in their field remain as middle managers. This can be attributed to the Filipino culture and their brand of leadership.

Many of the immigrants in Ontario secured part time jobs that are not relevant to their education or experience prior to coming to Canada (Dean and Wilson, 2009). However, Ramos-Reid (2019) revealed that Filipinos in Canada fare better than the other immigrant groups. Thus, the contribution of Filipinos in the Canadian economy is undeniable (Vahabi and Wong, 2017).

In the globalization processes over the years, culture changes people's perception of the world. Based on numerous studies of (Hofstede, 1980) on cultural differences, many cultural studies from various research had tried to bridge culture and leadership. There is a huge cultural difference between Canada and the Philippines. This researcher will try to explore those differences and find ways to bridge the gap for the Filipino Canadian Engineers to find their place in the Canadian workplace.

It has become an axiom among thousand international researchers that effective leadership processes must reflect the culture which they had been discovered (Hanges et al. 2006). As defined, culture is learned collectively and disseminated by its membership; provides guidelines of conduct among organizations (Yang, 2007). We know that leadership can be learned, culture can be formed. Hence, this researcher is interested on what is the sub-culture of the Filipino Canadians as a group within the Canadian culture.

The cultural definition of an organization is a concept that can lead employees in knowing what they should and should not do, including means and methods, values, and the expectations about their work (Staniland, 1985). The fundamental principles of a business begin with its very own leadership, which will then grow into a leadership style. The workers will be guided by these values and the conduct of the leaders, so that the conduct of both parties must be closely aligned. When strong values are integrated, values and beliefs are developed, a strong organizational culture appears. Leaders should enjoy their work in keeping the culture of the organization. This will ensure consistent behavior among members, reduce conflicts, and create a conducive working environment for everyone in the organization (Urrabazu, 2006). Hence, a good leadership style suitable in a workplace is an ingredient to the success of any organization. The leadership style of Filipino Canadian Engineers should be such that it is compatible with whatever the workplace he is connected. In case of a workplace in Canada, Filipinos should adapt to the prevailing leadership style for them to prosper as a member of the Canadian work force.



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Vandayani, Kartini, Hilmiana and Azis (2015) all agreed that national culture have a considerable impact on the effectiveness of a leader. Krasulja, Radojevic and Cvetanovic (2011) echoed their sentiments and stressed that national culture influences leadership and leadership styles. Alexis-Schulz (2018) on the other hand thought that national culture and emotional intelligence both affect the leader's leadership style. Filipino Canadian Engineers need to focus on perception and emotions to be an effective leader in the workplace. They need to examine their own culture and find the differences with others.

Tutar, Altinoz and Cakiroglu (2014) suggested that managers in any multi- national companies are all aware of cultural differences and should know exactly how to navigate the advantages and disadvantages. Solina (2021) place the emphasis on this critical role of understanding the diversity of the workplace. Hence, this researcher fully understands the importance of being aware of the cultural differences. It is in the acceptance of our differences that we thrive as a person and the key to doing that is managing conflicts and criticisms.

In a comprehensive review of many studies, it has been concluded that the culture dimension will determine the acceptable leadership profile in that nation. Thus, the findings of Tkeshelashvili (2009) suggest that collective interests are better even if the individual's intentions suffer, while the evidence found in Georgia emphasizes collective leadership. In addition, Roberts et al. (2003) studies support the existence of a cohesive leadership in New Zealand leadership, with effective leadership emphasizing motivation and inspiration. However, in Egypt as a cohesive society, Elsaid, and Elsaid (2012) shows that evidence leaders emphasize informal communication with colleagues. There is little information about the culture and practice of leadership in Italy from Kirkman et al. (2006) studies, found in solidarity and self-sacrifice are important aspects of high collective bargaining. Irawanto et al. (2011) take a slightly different approach to this, by defining extent of collectivism, employees may strive to sacrifice their happiness for the benefit of the group. However, it was interesting to note that Africa, in Kuada's (2010) view describes a collectivism that reflects prominent levels of reliability. The main purpose is to function as a barrier to management. He says that if a mistake is made, the person with the lowest honesty will regret it and others. To evaluate this assumption, Elsaid nd Elsaid (2012) applied these two levels and found that the feedback was critical for collectivists while independence was highly valued on the other hand. The same study should be conducted in Canada in the context of multiculturalism and specifically to the Filipino Canadian Engineers. This researcher believe that this is important for Filipinos to fully understand what needs to be done to bridge the gap in their leadership style.

From the study of Hawamdeh and Qatamin (2021), results revealed that cultural dimensions influence knowledge sharing in many ways, some of which have a positive impact, but others have no consequence at all. Furthermore, the results are in line with the study conducted by Kucharska and Bedford (2019) that reveals organizational culture influences the knowledge sharing, which presumes that organizational culture dimensions proposed by Hofstede (2001) have an impact on knowledge sharing. Additionally, İlknur et



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al. (2017) conducted a study asserting that organizational culture types have a significant influence on implied and obvious sharing of knowledge. Therefore, this study will exactly reflect the concept that the knowledge of our cultural differences has a significant effect in managing or learning new leadership style.

We also take into consideration the findings from Hofstede's study on cultural Dimensions about Power Distance, Individualism (or collectivism), Masculinity (or femininity), Uncertainty Avoidance, Long Term orientation and Indulgence. It shows that the power distance in the three immigrant groups is higher than Canada. It also shows that Philippines is the highest index among the three-immigrant group. Individualism is high in Canada and India has the highest individualism index among the immigrant groups. On the long-term orientation, the Philippines has the lowest index among the immigrant groups, even lower than Canada (www.hofstede-insights.com).

Santos, et. al. (2022) encourages all the leaders of today to adopt and build new skills. Schwartz (2012) showed us the power of managing our thoughts to be successful in whatever we do. If we only put our efforts to learn and unlearn new skills, Filipino Canadian Engineers will be on its way to being accepted as a world class leader.

METHODS

In this study, mixed methods research design was employed, and the sampling method used was purposive sampling in which pertinent participants were chosen. The researcher focused on the Association of Filipino Canadian Engineers (AFCE) and its affiliates members from the Filipino Construction Professionals of Ontario, Filipino Engineers in British Columbia, Association of Filipino Contractors in Alberta and the Filipino Members Chapter Engineers and Geoscientists Manitoba - 90 members in Ontario, twenty-five in British Columbia, forty in Alberta and thirty in Manitoba. In here, using Raosoft calculator, 141 samples from total population of 220 were obtained with 5% margin of error, 95% confidence interval with 50% response distribution.

The inclusion criteria of the respondents includes internationally trained Filipino Engineers and construction professionals from across Canada with concentration in the cities of Toronto, Edmonton, Calgary, Winnipeg, and Vancouver areas who are currently working as Consultants, Project Directors, Project Managers, Project Coordinators, Estimators, Quantity Surveyors.

In gathering data, researcher employed the use of survey questionnaire and interview questions in a form of informative interview. The survey questionnaire was used for the examination of culture and leadership styles of the Filipino Canadian Engineer. Self- made questions were utilized for the demographic profile, while other questions were used for the cultural dimension adopted from the Values Survey Module 2013 (VSM2013), leadership skills and leadership styles, both adopted from the Introduction to Leadership Concepts and Practice (Northouse, 2022) and lastly the PAVF (Producer, Analyzer, Visionary, Friends) Workstyle Survey adopted from the Career Constructors. In informative interview, researcher conducted interviews face to face and online to confirm and explore the responses



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of the respondents. Research instrument also were tested for validity from experts and reliability from Statistician which yielded reliable results of Cronbach's alpha of 0.98 which means the instrument obtained extremely high validity and reliability index confirming the effectiveness of the questionnaire as an evaluation.

Further, this research used statistical treatment of data such as frequency distribution, mean, Pearson r correlation and Standard deviation. With the help of SPSS software, the data were tabulated and used the rating system for the data tabulated. Cultural dimension used 5 point likert scale from 5 which is strongly agree down to 1 which is strongly disagree. For leadership skills, the instrument used 5 point liker scale in which 5 is very true down to 1 which is verbally described as not true. And fro leadership style, instrument used 4 point likert scale (0-3) in which 3 is described as exactly like me, down to 0 which is verbally described as not me at all.

RESULTS AND DISCUSSION

Results

Table 1.1 Frequency and Distribution of Respondents Profile in terms of which province they reside

		f	%
Province	Alberta	20	14.1
	British Columbia	6	4.2
	Manitoba	8	5.6
	Ontario	98	69.0
	Other provinces not mentioned	10	7.1
	Total	142	100.0

Table 1.2 Frequency and Distribution of Respondents Profile in terms of Highest Educational Attainment

		f	%
Highest Educational Attainment	Doctorate Degree	1	0.7
	Masteral Degree	16	11.3
	University/College	125	88.0
	Graduate		
	Total	134	100.0

Table 1.3 Frequency and Distribution of Respondents Profile in terms of Current Position in the Company

	f	%
First line Managers	11	7.7
Middle Managers	27	19.0



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Position	Team Leaders	97	68.3
	Top Level Managers	7	5.0
	Total	142	100.0

Table 1.4 Frequency and Distribution of Respondents Profile in terms of Professional Designation in Canada

Professional Designation	N	f	%
Professional Engineer (P. Eng)	142	40	28.2
Int PE, APEC Engr	142	1	0.7
Certified Engineering Technician (CET)	142	27	19.0
Engineer in training (EIT)	142	23	16.2
P.Eng., CET and EIT	142	91	64.1
Professional Quantity surveyor (PQS)	142	7	4.9
Construction Estimator Certified (CEC)	142	3	2.1
PQS, CEC	142	10	7.0
Project Management Professional (PMP)	142	12	8.5
None	142	21	14.8
Other designations	142	26	18.3

Table 1.5 Frequency and Distribution of Respondents Perception towards Under-Representation of Filipinos in Engineering and Construction Industry

		f	%
Do you think Filipinos are under-	No	25	17.6
represented in the Engineering and	Yes	117	82.4
Construction Industry?			
	Total	142	100.0

Table 1.6. Frequency and Distribution of Respondents level of Satisfaction in their Current Employment

		f	%
	I am satisfied with my work		
If you are gainfully employed	even if my boss does not	44	31.
in the Engineering and	promote me		0
Construction Industry, how do	I am satisfied with my work		
you feel with your current	and feel I am greatly		
employment?	appreciated at work and	49	34.
	expecting a promotion		5



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I feel there is a glass ceiling - I		
feel I am underappreciated at	49	34.
work		5
Total	142	100
		.0

 Table 1.7. Respondents Perceived Cultural Dimension in terms of Power Distance

Power Distance	Mean	Std.	Descriptive
		Deviation	Level
1. People in higher positions should make most decisions without consulting people in lower positions.	2.25	1.01631	disagree
2. People in higher positions should not ask the opinions of people in lower positions too frequently.	2.43	1.05807	disagree
3. People in higher positions should avoid social interaction with people in lower positions.	1.54	0.62064	strongly disagree
4. People in lower positions should not disagree with decisions by people in higher positions.	2.13	0.96463	disagree
5. People in higher positions should not delegate important tasks to people in lower positions.	2.18	0.89988	disagree
Overall Mean	2.11		disagree

Table 1.8 Respondents Perceived Cultural Dimension in terms of Uncertainty Avoidance

Uncertainty Avoidance	Mean	Std. Deviation	Descriptive Level
1. It is important to have instructions spelled out in detail so that I always know what I am expected to do.	4.04	0.87063	agree
2. It is important to closely follow instructions and procedures.	4.37	0.64507	strongly agree
3. Rules and regulations are important because they inform me of what is expected of me.	4.49	0.58471	strongly agree
4. Standardized work procedures are helpful.	4.47	0.61025	strongly agree
5. Instructions for operations	4.56		strongly



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are important.		0.51277	agree
	4.39		strongly
Overall Mean	7.59		agree

 Table 1.9 Respondents Perceived Cultural Dimension in terms of Collectivism

Collectivism	Mean	Std. Deviation	Descriptive Level
1. Individuals should sacrifice self-interest for the group.	3.44	0.94599	agree
2. Individuals should stick with the group even through difficulties.	3.75	0.88161	agree
3. Group welfare is more important than individual rewards.	3.89	0.87595	agree
4. Group success is more important than individual success.	4.06	0.89408	agree
5. Individuals should only pursue their goals after considering the welfare of the group.	3.28	1.05424	neutral
6. Group loyalty should be encouraged even if individual goals suffer.	2.86	0.97113	neutral
Overall Mean	3.55		agree

Table 1.10 Respondents Perceived Cultural Dimension in terms of long-term orientation

Long term orientation	Mean	Std. Deviation	Descriptive Level
1. For me, careful management of	4.29	0.64880	very
money (Thrift) is			important
2. For me, going on resolutely in	3.92	0.71822	important
spite of opposition (Persistence) is			
3. For me, personal steadiness and	4.33	0.61202	very
stability is			important
4. For me, long-term planning is	4.61	0.53420	very
			important
5. For me, giving up today's fun for	3.75	0.83231	important
success in the future is			
6. For me, working hard	4.35	0.60547	very
for success in the future is			important
Overall Mean	4.21		very
			important



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 Table 1.11 Respondents Perceived Cultural Dimension in terms of Masculinity

Masculinity	Mean	Std. Deviation	Descriptive Level
1. It is more important for men to have a professional career than it is for women.	1.99	1.03350	disagree
2. Men usually solve problems with logical analysis; women usually solve problems with intuition.	2.46	1.01444	disagree
3. Solving difficult problems usually requires an active, forcible approach, which is typical of men.	2.51	1.03005	disagree
4. There are some jobs that a man can always do better than a woman.	3.26	1.17354	neutral
Overall Mean	2.56		disagree

Table 1.12 Respondents level of Leadership in terms of Authoritative Style

Authoritative	Mean	Std. Deviation	Descriptive Level
I am happy to act as the spokesperson for our group	2.43	0.87287	a bit like me
I am determined to push projects	3.50		exactly like
forward and get results.	3.30	0.63513	me
I am good at organizing other people.	2.77	0.78709	much like
	2.77 0.78709		me
I set myself high standards and expect	2.93		much like
others to do the same for themselves.	2.93	0.77063	me
Overall Mean 2.91			much like
	2.91		me

Table 1.13 Respondents level of Leadership in terms of Democratic Style

Democratic	Mean	Std.	Verbal
		Deviation	Description
I believe teams work best when everyone	3.32		exactly like
is involved in taking decisions		0.68034	me
I enjoy working on committees.	2.78	0.81033	much like me
I don't mind how long discussions last, so	2.93		much like me
long as we consider every angle.		0.75071	



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I think all group members should abide by formal decisions, so long as we follow	3.14	0.66450	much like me
proper procedures.			
Overall Mean	3.05		much like me

Table 1.14 Respondents level of Leadership in terms of Facilitative Style

Facilitative	Mean	Std.	Descriptive
		Deviation	Level
I am good at bringing out the best in other people.	3.01	0.77653	much like me
I think people should be allowed to make mistakes in order to learn.	3.18	0.76707	much like me
I think the most important thing for a group is the well-being of its members.	3.41	0.64005	exactly like me
I love helping other people to develop.	3.39	0.63784	exactly like me
Overall Mean	3.25		much like me

Table 1.15 Respondents level of Leadership in terms of Situational Style

Situational	Mean	Std. Deviation	Descriptive level
I can take on a leadership role when needed, but do not consider myself a leader	2.70	0.96297	much like me
I am good at adapting to different situations	3.35	0.66338	exactly like me
I can see situations from many different perspectives.	3.23	0.66158	much like me
I enjoy role-playing exercises.	2.52	0.87777	much like me
Overall mean	2.95		much like me

Table 1.16 Frequency and Percentage Distribution of the PAVF Workstyle (Total Sample)

		f	%
	P - Producer	23	25.8
PAVF Work	V – Visionary	25	28.1
style	A – Analyzer	14	15.7
	F - Friends	27	30.4
	Total	89	100.0



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Table 1.17 Frequency and Percentage Distribution of the PAVF Workstyle (Professional Engineers, P. Eng)

		f	%
	P - Producer	14	42.4
	V – Visionary	11	33.3
PAVF	A – Analyzer	3	9.1
Workstyle	F - Friends	5	15.2
	Total	33	100.0

Table 1.18 Relation between the Perceived Cultural Dimension and Leadership Style in terms of Authoritative

		horitative		
Cultural Dimension	r coefficient	P value	Decision on Null hypothesis	conclusion
Power distance	-0.075	0.389	Failed to reject	Not significant
Uncertainty avoidance	0.198	0.022	reject	significant
collectivism	0.204	0.019	reject	significant
Long term orientation	0.260	0.003	reject	significant
masculinity	0.034	0.696	Failed to reject	Not significant

Table 1.19 Relation between the Perceived Cultural Dimension and Leadership Style in terms of Democratic

	democratic			
Cultural			Decision on Null	
Dimension	r coefficient	P value	hypothesis	conclusion
Power distance	-0.150	0.084	Failed to reject	Not significant
Uncertainty avoidance	0.313	0.000	reject	significant
collectivism	0.224	0.010	reject	significant
Long term orientation	0.308	0.000	reject	significant
masculinity	-0.065	0.454	Failed to reject	Not significant



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Table 1.20 Relation between the Perceived Cultural Dimension and Leadership Style in terms of Facilitative

	facilitative			
Cultural			Decision on Null	
Dimension	r coefficient	P value	hypothesis	conclusion
Power distance	-0.219	0.011	reject	significant
Uncertainty avoidance	0.188	0.031	reject	significant
collectivism	0.140	0.109	Failed to reject	Not significant
Long term orientation	0.309	0.000	reject	significant
masculinity	-0.141	0.106	Failed to reject	Not significant

Table 1.21 Relation between the Perceived Cultural Dimension and Leadership Style in terms of Situational

	situational			
Cultural			Decision on Null	
Dimension	r coefficient	P value	hypothesis	conclusion
Power distance	-0.075	0.394	Failed to reject	Not significant
Uncertainty avoidance	0.219	0.011	reject	significant
collectivism	0.135	0.121	Failed to reject	Not significant
Long term orientation	0.243	0.005	reject	significant
masculinity	0.013	0.881	Failed to reject	Not significant

Table 1.22 Test of Influence between perceived cultural dimension on leadership style

A. Model Summary					
Model	R	D Cayona	Adjusted R Square	Std. Error of the	
Model	K	R Square	Aujusteu K Square	Estimate	
1	.337ª	.114	.079	.50158	
a. Predictors: (Constant), masculinity, long term orientation, power distance,					
collectivism, uncertainty avoidance					

B. ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.



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1	Regression	4.095	5	.819	3.255	.008 ^b
	Residual	31.950	127	.252		
	Total	36.045	132			

a. Dependent Variable: Leadership Style

b. Predictors: (Constant), masculinity, long term orientation, power distance, collectivism, uncertainty avoidance

		C.	Coefficients	a		
		Unstandardized		Standardized		
	Model	Coefficients		Coefficients		C: ~
	Model	В	Std.	Beta	t	Sig.
			Error			
1	(Constant)	2.163	.551		3.924	.000
	Power distance	.019	.082	.021	.229	.819
	Uncertainty	062	115	057	552	501
	avoidance	.063	.115	.057	.553	.581
	collectivism	.002	.073	.002	.022	.983
	Long term	275	110	200	2 1 4 1	002
	orientation	.375	.119	.308	3.141	.002
	masculinity	.007	.055	.012	.129	.898
	a. Dependent Variable: Leadership Style					

Interviews

- **Q1.** How effective are the current leadership skills of Filipino Canadian Engineers in the Canadian workplace?
- Filipinos are recognized in the workplace as being honest, effort driven workers with technical expertise.
- Filipinos are viewed as great workers, but not as a leader or some- one in the management position.
- Filipinos face a hindrance their leadership skills
- There is still a lot of room for improvement
- **Q2.** What are the challenges of Filipino leadership skills, its strengths, and weaknesses?

Strengths – technical knowledge, relationship-building, emphatic, resourceful, resiliency, work ethic, flexible, adaptable

Weaknesses – Communication skills, foresight, innovation, conflict management, critical thinking, inferiority complex

Similarly, the following leadership skills came out in the discussions: relationship building (But too subservient); Technical knowledge; Resourcefulness; Resilience; Conflict management – non confrontational /too emotional – avoid conflict; Negotiation; Aggressive;



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Management; Soft skills; Competitiveness; Critical thinking; Leadership; Excellence; Innovation; Delegate and follow up; Work Ethic; Integrity; Discipline; Empathy; Humility; Curiosity; Passion; Servant Leadership; Rational; Excellent foresight; and, Nurturing, when we discussed the challenges of Filipino leadership, its strengths and weaknesses.

Table 1.23 SWOT Analysis – Leadership Skills

Strength	Weakness	
Relationship building (but too		
subservient)	Conflict management	
Technical knowledge	Negotiation	
Resourcefulness	Aggressiveness	
Resilience	Management	
Work ethic	Soft Skills	
Integrity	Critical thinking	
Discipline	Innovation	
Empathy	Delegate and follow up	
Passion	Foresight	
Servant leadership		
Nurturing		
Opportunities	Threats	
Competitiveness	Rational	
Leadership		
Excellence		
Humility		

Q3. What are the recommended leadership skills should a Filipino learn and unlearn in order for them to rise to the challenge?

Leadership skills that Filipino Canadian Engineers need to learn

- 1) Be assertive
- 2) Conflict management
- 3) Personal branding
- 4) Improve communication skills (thought process)
- 5) Critical thinking
- 6) Assertiveness
- 7) Managing cultural differences



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Leadership skills that Filipino Canadian Engineers need to unlearn

- 1) Fear of asking question
- 2) Ningas cogon

Discussion

As expected, many of the respondents or 68.7% of the respondents are from Ontario. As said in the previous chapter and according to the Philippine Embassy website, majority of the Filipinos prefer to live in Toronto, followed by Vancouver and Manitoba. However, the oil and gas industry in Canada are in Alberta which employs many Filipino Engineers with specialization in oil and gas. Hence, the second many of the respondents or 14.9% of the respondents came from the province of Alberta. Only 11.9% or 16 out of the 134 Filipinos completed Masteral or Doctoral degrees. Not too many Filipinos pursued post graduate education unlike the Indian and Chinese counterparts. The personal experience of this researcher would confirm this as he experienced being the only Filipino in his masteral class in University of Ottawa and in the University of Bath. This certainly explains why more Indian and Chinese immigrants are in the management positions as compared to Filipinos. This research confirms that majority of the Filipinos at 67.9% are team leaders while only 5.2% consider themselves as top level managers.

Surprisingly, 28% of the respondents are Professional Engineers, 19% are Certified Engineering Technicians and 17% are Engineers in Training (EIT). Collectively, many of the Filipino Canadians are pursuing certifications in Engineering and Technology sector. Only 16% of the respondents do not possess any designation. This is a sign that Filipino Canadian Engineers are now pursuing to be recognized in their fields unlike the experience of many Filipinos in their generation as told by many older Filipino Canadians.

Perceived Cultural Dimensions in relation to the Philippines and Canadian Cultural Dimensions

The group's perceived cultural dimension in relation to the Philippines and Canadian Cultural Dimensions based on Hofstede's Insights in terms of power distance was low, certainty avoidance was very high, collectivism was high, lone term orientation was very high, and masculinity was high.

Specifically, this research reveals that in terms of the power distance cultural dimension, the weighted mean is 2.11 which verbally means disagree. In the Philippines, bureaucracy or hierarchies are still dominant in many private and public offices. There is a large gap in authority as well as respect for the ones in the hierarchy. On the other hand, Filipino Canadians feel that they can approach their superiors easily and vice versa. This is evident in many workplaces where anyone can approach the Directors or Presidents and even the owners of the company as equals.

In terms of uncertainty avoidance, the weighted mean of 4.39 which verbally means strongly agree. This explains why many Filipinos do not take as much risk as they should or a more conservative approach in everything, translating in their underperformance at work.



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Filipinos are good workers but failed to get the promotion enjoyed by the Indian and Chinese immigrants.

For collectivism, the weighted mean of 3.55 which verbally mean agree shows that the "bayanihan" culture is still alive in the Filipino Canadian culture. This is shown by the many Filipino Canadian professional organizations including the Association of Filipino Canadian Engineers, oftentimes, keeping harmony among the members of the community. We place emphasis on building skills. In terms of long-term orientation, the weighted mean of 4.21 which verbally mean very important. This researcher's observation is that Filipinos are not in wealth creation, but more on building retirement fund through financial instruments approved by the government. Many Filipinos do not rely on their children for financial support when they retire, unlike in the real Filipino culture. Filipinos practice thrift and modesty. Lastly, in the masculinity, the weighted mean is 2.56 or verbally disagree. The Filipino cultural dimension is shifting to femininity. This shows that Filipinos do not work as hard as ordinary Filipino to accumulate wealth. The Filipino Canadians highly value the work-life balance placing importance on their time with the family. The Filipino Canadians are more focused on building the quality of life and relationships than building more wealth. Overall, we can see that the Filipino Canadian cultural dimensions are changing and are gravitating towards the Canadian culture except for individualism. This prove another point that the Filipinos are easily adaptable to any culture or situation.

Filipino Canadian Leadership Style

The findings revealed that Filipino Canadian leadership style shows that in terms of authoritative, democratic, facilitative, and situational they all obtained result from survey, "much like me" which means that Filipino Canadian leadership style in terms of authoritative, democratic, facilitative, and situational are very evident, or is manifested at all times.

Filipino Canadian perceived work- styles personality

The findings revealed that for the total sample, primary PAVF style resulted to friends. And the secondary PAVF style resulted to visionary. However, when Engineers only was considered as respondents, primary PAVF style resulted to producer, and secondary PAVF style resulted to visionary.

It is quite interesting to note that the primary work style of Professional Engineers are Producers who value results whereas the overall work style of Filipino Canadian Engineers is Friend who value people or relationships. There seems to have a big shift amongst the groupings. However, the results show that overall, the secondary workstyle of Filipino Canadian Engineers is Analyze who value the detail. The results clearly show that Filipino Canadian Engineers lack in vision or ideas. This could be the reason Filipino Canadian Engineers are shy in meetings or presentations.



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Relationship between Cultural Dimension and Leadership Style

The findings revealed that authoritative and democratic leadership style are significantly correlated to cultural dimension in terms of collectivism, uncertainty avoidance, and long term orientation. Likewise, facilitative is significantly correlated to power distance, uncertainty avoidance, and long term orientation. Further, situational leadership style is significantly correlated to uncertainty avoidance, and long term orientation.

Influence of Cultural dimension on Leadership style among Filipino- Canadian Engineers

The test of influence using regression analysis revealed that among the predictors such as masculinity, long term orientation, power distance, collectivism, and uncertainty avoidance, only one factor is significant predictor. Based on the findings, long term orientation significantly influence leadership style among Filipino- Canadian Engineers. Further, the model summary also indicates that only 11.4% of total variation of leadership style can only be explain by the regression model which is very small.

Recommendations

Based on the findings, many leadership skills that the Filipino Canadian Engineers should work on. The list includes assertiveness, interpersonal and intercultural skills and being vulnerable. To ensure success for Filipino Canadian Engineers in their new home country, the following training are therefore recommended:

Table 1.24 Proposed Leadership					
	Program				
Program Description					
Assertiveness Training	Assertiveness Training will focus on how to manage criticism and manipulation as well as managing difficult feelings and disagreements so that Filipino Canadian Engineers can value who they are.				
Critical and Creative Thinking	Critical and creative thinking will focus on basic concepts of argument evaluation, relevance, sufficiency, and acceptability. It will also reinforce the skills needed to create strong and persuasive arguments.				
Emotional Intelligence	Emotional intelligence training will focus on perception and managing emotions to be more productive at workplace. This will make participants aware of their own values, beliefs, behavior, and emotions.				



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Intercultural and Interpersonal Communication	Intercultural and Interpersonal communications will explore the barriers to communication involving cultural and personal differences.
Public Speaking	Public speaking will give participants a platform to practice without being judged, communicating effectively.

Assertiveness Training

Assertiveness Training will focus on how to manage criticism and manipulation as well as managing difficult feelings and disagreements so that Filipino Canadian Engineers can value who they are.

Critical and Creative Thinking

Critical and creative thinking will focus on basic concepts of argument evaluation, relevance, sufficiency, and acceptability. It will also reinforce the skills needed to create strong and persuasive arguments.

Emotional Intelligence

Emotional intelligence training will focus on perception and managing emotions to be more productive at workplace. This will make participants aware of their own values, beliefs, behavior, and emotions.

Intercultural and Inter- personal Communication

Intercultural and Interpersonal communications will explore the barriers to communication involving cultural and personal differences.

Public Speaking

Public speaking will give participants a platform to practice without being judged, communicating effectively.

Assertiveness Training will focus on how to handle criticism and manipulation as well as managing difficult feelings and disagreements so that Filipino Canadian Engineers can value who they are. Critical and creative thinking will focus on basic concepts of argument evaluation, relevance, sufficiency, and acceptability. It will also reinforce the skills needed to create strong and persuasive arguments.

Emotional intelligence training will focus on perception and managing emotions to be more productive at workplace. This will make participants aware of their own values, beliefs, behavior, and emotions.

Intercultural and Interpersonal communications will explore the barriers to communication involving cultural and personal differences. Lastly, public speaking will give participants a platform to practice without being judged, communicating effectively.



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Recommendations for Future Research

Based on the findings of this academic research, the following items are suggested for future study:

- 1. Future research to include other professional groups. Although it is clear, based on interviews with presidents of other professional organizations, that Filipinos are underrepresented with the exemption of accountants.
- 2. Future research to include other races as compared to Canadian born and raised professionals. Although Canada is a multicultural country where everyone regardless of race, sexual orientations, and religion, are given a fair opportunity, there may still be some threats on equality, equity, and inclusion.
- 3. Future research to study the effect of new K-12 program in the Philippines in the integration of newly arrived Filipino Engineers. K-12 education started in the school year 2017-2018 to align its basic education to the international standards which was the battle cry of many Filipino Canadian Engineers as being looked at as a deficiency in the Engineering Education in Canada. By this time, the Philippines must have produced the new engineers under this program.

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