



INVESTIGATING HOFSTEDE'S CULTURAL DIMENSIONS AND USE OF THE INTERNET AS A LANGUAGE LEARNING RESOURCE

メタデータ	言語: eng 出版者: 公開日: 2020-11-10 キーワード (Ja): キーワード (En): 作成者: Simon, Thomas メールアドレス: 所属:
URL	https://doi.org/10.24729/00017131

INVESTIGATING HOFSTEDE’S CULTURAL DIMENSIONS AND USE OF THE INTERNET AS A LANGUAGE LEARNING RESOURCE

Simon Thomas

Measuring cultural tendencies in a population, Hofstede’s Values Survey Module (VSM) has been described as “*probably the dominant explanation of behavioural differences between nations*” (Williamson, 2002, p. 1392). Originally derived from his work in organizational culture, Hofstede (1986) believed that expectations, assumptions, and behavior within a population were guided by deep-rooted cultural roles influenced by embedded and unconscious cultural and societal values. These roles define the four original VSM values of Power Distance, Individualism, Masculinity, and Uncertainty Avoidance. In furthering the implications of his 1986 VSM Hofstede suggested that cultural traits and characteristics were homogenous to a nation and therefore could also be applied to teachers, students, and classroom acts of teaching and learning. Literature will tell us that culture is an affective factor in the classroom, and Brown (2007) and DeCapua and Wintergerst (2004) assert that a nation’s cultural traits, that can draw strong comparisons with Hofstede’s four original cultural dimensions, similarly carry into English as a foreign language (EFL) teaching and learning and also into the use of Internet based language learning resources.

Japanese culture and learning traits

Broad characteristics of traditional Japanese national identification and foreign language learning attitudes were described by Renandya, Lim, Leong and Jacobs (1999) as focusing on the eight following traits:

1. focus on language form,
2. teacher-centeredness,
3. skills developed in isolation from each other,
4. focus on accuracy,
5. discrete point tests,

6. traditional tests,
7. emphasis on product, and
8. individual learning.

Matsuura, Chiba and Hilderbrandt (2001) and Tanaka and Ellis (2003) support these suggested characteristics and particularly emphasize the notion that Japanese university foreign language students prefer these traditional teaching methods that focus on teacher-centered approaches and accuracy. This complex collection of links between attitudes, experiences, expectations and learning strategies that Japanese university foreign language learners hold is developed through their formative years of education. These beliefs about the nature of language, tasks, likely outcomes, and personal language learning, also bring with them strengths and limitations specifically attributed to their national, cultural and societal values (Sakui & Gaies, 1999). These attitudes and beliefs have the potential to influence student's future actions in learning (Horwitz, 1999). Rivers (2010, 2011) and Sullivan and Schatz (2009) further support these beliefs and provide detailed illustrations and discussions of the historical and contemporary links between Japanese national identification and foreign language learning attitudes.

Internet and Web-based learning

The Internet has become increasingly recognized as a valuable language learning and practice resource and cultural traits are similarly acknowledged as having an influencing effect on its use.

Three taxonomies of Internet-based technologies (IBT) that can be integrated into language learning programs are described by Lui and Chen (2007) and Lui (2008) as:

1. Computer mediated communication tools,
2. Learning management systems, and
3. Computer assisted language learning, which is defined as online language-learning lessons and other IBT-supported language learning websites, tutorials, testing systems and games in which the user can complete tasks alone.

Studies, including those conducted in the Asian context, have demonstrated the usefulness and efficacy of English language learning and practice websites (Blake, 2008; Chang & Sun, 2009; Chen, 2008; Kern, 2006; Liaw, 2007; Liu & Chen, 2007). These studies have shown that language teachers are able to increase

learning efficiency in two ways. The first is by using websites to support face-to-face learning and teacher-guided activities (Liu, Liu, & Hwang, 2011). This creates potential for students to explore and discover learning paths for themselves while receiving contact and support from a teacher and peers in the classroom, ensuring the non-separation of language learning from social interaction during the initial learning process. The second is by providing an online database of resources for students to access outside of the classroom, providing them with opportunities for learner-initiated activities (Burston, 2003; Chapelle, 2009; Cotterall & Reinders, 2001; Levy & Stockwell, 2006; Ozkan & Koseler, 2009; Shee & Wang, 2008; Warschauer, 2007; Yang & Chan, 2008). With these resources available to them students can then make autonomous decisions about how to study and what to use outside the classroom (Son, 2007; Warschauer, 2001).

The in-classroom learning activities that allow co-construction of knowledge, which is facilitated by social participation with people and objects in the environment to enable future, independent, higher order functions and autonomy in learning, is what Vygotsky's (1986) Sociocultural Theory draws on. Morall (2010) provides one explanation/example of the end result of applied Sociocultural Theory and autonomy in the use of online language learning resources. He describes it as allowing learners to formulate hypothesis about grammar usage themselves before testing it by searching through an Internet grammar source or using search engines as concordances. This theory of hypothesis formulation and testing of learning processes with online resources can also be carried out in language skill development areas, such as vocabulary, listening comprehension of speech, pronunciation, and shadowing.

Using these approaches web-based instructional technologies are able to facilitate increased learning opportunities. However, in similar ways that culture can affect learning attitudes, experiences, expectations and learning strategies, it can also affect student's attitudes, perceptions and usage towards independent use of learning technologies (Olaniran, Rodriguez, & Williams, 2010; Rebolledo-Mendez, Orey, Alvarez-Rodriguez, & Martinez-Penalozza, 2011). Considering this, Marcus and Gould (2000) and Tylee (2001) propose that Hofstede's VSM and his work on cultural differences may be used to help to understand student's approaches, development, use and access of online technologies and environments.

Hofstede's Values Survey Module (VSM)

The VSM was developed to compare culturally determined values across countries based on data collected between 1967 and 1973 from worldwide branches of the multi-national technology and consulting corporation IBM.

The original VSM comprised four cultural dimensions and it was in 1986, before the establishment of the fifth dimension, that Hofstede claimed his VSM could be applied to teaching and learning. Hofstede (1980, 1986, 2001, 2009a, b) provides lengthy, detailed descriptions of the four original cultural dimensions and scales that he related to teaching and learning. In short, they can be described as:

Power Distance Index

PDI - Dependence on Superiors - A high PDI indicates acceptance of unequal distribution of societal power and a dependence on managers. A low PDI means power is considered to be shared and members view themselves as equals.

Uncertainty Avoidance Index

UAI - Need for rules and predictability - A high UAI shows avoidance of uncertainty and ambiguous situations, and governance by rules, order and collective truth. Low UAI scores indicate society values differences, fewer rules and less rigid structure.

Individualism Vs. Collectivism

IDV - Balance between dependence on the group and individual goals

A high IDV indicates loose connections with people, lack of interpersonal connection, and little sharing of responsibility beyond family and development of individual identities. Low IDV scores indicate strong group cohesion and conformity.

Masculinity Vs. Femininity

MAS - Balance between social values (like cooperation and a good living environment) and ego values (like the need for money and careers)

High MAS scores indicate males are expected to be assertive, and the provider. Low MAS scores indicate male/female roles are blurred. Harmony and cooperation are preferred over conflict and competition.

Characteristics for each nation are compiled by using a 26-item, five-point,

closed response Likert Scale questionnaire. The 1994 version which was used in this study contains 20 questions that are used to determine the cultural values of the participants by attributing a score to each answer of each question. The six remaining questions assist in establishing demographic data. All the scores from one question are added together, divided by the number of cases to create the mean, which is then used in a formula to create the cultural value.

For example,

The formula to create the Power Distance Index is the following:

$$PDI = -35m(03) + 35m(06) + 25m(14) - 20m(17) - 20$$

In which m(03) is the mean score for question 03, m(06) is the mean score for question 6, etc.

Through similar formulas, homogenized national/cultural values on a high to low scale of 0-100 are provided to enable variations between cultures to be seen on mapped graphs, although Hofstede (1994) also concedes that values below zero and above 100 are technically possible. Although the VSM was developed to compare culturally determined values of two or more countries it may also provide an indication of values and dimensions of national/group culture within one country (Hofstede, 1994). It is with this purpose that the VSM is employed in this study.

Since 1991, and with the assistance of extended partnership studies, two further dimensions relating to long/short term time perspective and indulgence/restraint have been added to the VSM. However, this study utilizes only the original four dimensions that were in use in 1986 when Hofstede initially applied his module to teaching and learning situations.

Criticisms of the VSM

Despite its popularity of use in defining national characteristics, Hofstede's VSM has received intense criticisms (Bhimani, 1999; DeCapua & Wintergerst, 2004; Harrison & McKinnon, 1999; McSweeney, 2002; Redding, 1994; Signorini, Wiesemes & Murphy, 2009; Williamson, 2002). Much of this criticism falls into the following categories brought together utilizing ideas from McSweeney (2002) and Signorini et al. (2009):

- Surveys are not a suitable way of measuring cultural differences.

- Equating ‘culture’ to ‘nation’ is highly problematic.
- A study of subsidiaries of one company cannot provide information about entire national cultures.
- Hofstede’s module doesn’t take into account the flexible and changing nature of culture and is not able to reflect culture changes in the new global context of Higher Education.
- His concept of culture is static and simplistic.
- His comparisons of nations stress differences not commonalities.
- In relation to educational settings, Hofstede’s data are anecdotal and nonspecific regarding the level of education that he refers to.

Hofstede himself addresses a number of these criticisms in his website (Hofstede, n.d.a). While agreeing that factors other than culture are needed to be considered when applying his dimensions, he also concedes that his module allows better application and prediction as cases become more general and move away from the specific. Despite the criticisms however, Hofstede’s module continues to be cited in research on culture. As one of the first models in this field Hofstede identified that cultural differences matter in the workplace, and it provides a starting point from which people can understand the differences in cultural value and behavior. More importantly, it provides a base from which to begin further, more specific cultural and cross-cultural comparative studies.

Application of the VSM to students’ use of Internet language practice sites

After Hofstede applied his VSM to teaching and learning Tylee (2001) suggests that it is possible to surmise that Hofstede’s four original cultural dimensions of PDI, UAI, IDV, and MAS and their scales of 0-100 could be applied to teaching and learning in online environments.

Firstly, Tylee suggests that the Power Distance Index will influence perceptions about whether online technology is an appropriate method of learning and that the frequency of access to online learning will differ between cultures. She presents the idea that people in low PDI cultures will independently access online learning sites according to necessity and desire. This is compared to high PDI cultures, which are more dependent and will wait to receive direction from teachers about when to access and use online learning. Secondly, her interpretation suggests that low UAI values will indicate cultures that are less reliant on a teacher’s

knowledge about which online learning sites to use. These cultures are more likely to independently search out relevant sites to use to assist their own learning. On the other hand, people in high UAI value cultures will place more value on the sites recommended to them by a teacher. Thirdly, IDV influences the access of information and learning that will set individual motivations apart from the goals of the group. Tylee suggests that individuals in cultures with low IDV values will be more comfortable pursuing the goals of the group as opposed to individual learning goals that high IDV cultures will cling to. Finally, the masculine versus feminine MAS implies that high value, more masculine cultures will value independence and assert personal control over the pace at which to work. Whereas, low MAS value cultures will be more content at working at the pace of the group.

In previous studies applying Hofstede's VSM to online learning it has been recognized that PDI, UAI, and IDV are indicators of affect. For example, in high power-distance cultures Olaniran et al. (2010), Rebolledo-Mendez et al. (2011) and Wang (2007) acknowledge that despite web-based instructional technologies offering opportunities for increased participation, individuals tend to see them as threatening traditional learning methods, and their use of technologies reflects their apprehension. Olaniran (2010) recognizes this apprehension of use specifically in Japan. Rebolledo-Mendez et al. (2011) and Tapanes, Smith and White (2009) also suggest that students from collectivist, ambiguity-intolerant cultures would be less motivated to participate in online learning than their counterparts.

Research questions

1. Do the Japanese university students taking part in this study conform to Hofstede's cultural assumptions as he predicted they would, or not?
2. Considering Tylee's (2001) suggestion that the VSM dimensions can be applied to online learning, what do the VSM values generated by the participants of this study predict about their online learning use?
3. When Tylee's (2001) suggested application of the VSM is operationalized into four direct questions reflecting these dimensions, how do the values differ from the original VSM values, and what can they tell us about these student participant's online learning use?

Participants

Two classes of second-year, 20 to 21-year-old, university, non-English language major students (n=57 (32 males and 25 females)) of mixed language ability

participated in this study. These two classes have been banded together recognizing Hofstede's assertions that all Japanese students have homogenized cultural attitudes.

Methodology

In order to explore students' cultural traits as gathered and described by Hofstede (1986) and as applied by Tylee (2001), and to understand their attitudes to the use of online language resources this study adopts a mixed methods case study methodology (Creswell, 2007; Gray, 2009; Nunan & Bailey, 2009; Robson, 2002; Yin, 2009). This accepts that a contemporary phenomenon can be examined while embedded within its real-life context. The student's attitudes towards using online resources were examined from within the classroom context using qualitative and quantitative methods over the restricted time frame of this study. This took place over a 15-week semester with students meeting once a week for 90 minutes to complete English language projects. Although case studies traditionally rely on lengthy periods in the field, Simons (2009) describes the strengths of a case study as flexible and not constrained by time or method and as a "*process of conducting systematic, critical inquiry into a phenomenon of choice and generating understanding to contribute to cumulative public knowledge of the topic*" (Simons, 2009:18).

Data collection and analysis procedure

The 1994 VSM survey and user manual (Hofstede, 1994), available in Japanese from Hofstede's own website (Hofstede, n.d.a) was back translated to English by an independent translator to verify its consistency with the English version. The version previous to 1994 was from 1982. This 1982 version of the VSM was not used as Hofstede's comments relating the dimensions to teaching and learning were made in 1986. Updated versions of the VSM subsequent to 1994 including the values added after this time are available on Hofstede's website (Hofstede, n.d.a). At the start of the semester this Japanese language VSM was distributed to students via an online survey tool. As Hofstede (1994) suggests, the values for each question were fed into an Excel worksheet and used along with the formulas available (Hofstede, 1994) to calculate each dimension. These values were independently checked and verified. The values created in this replicated VSM will be used to compare cultural dimensions of this group of student participants against the original values collected from IBM employees, which Hofstede identified as determining cultural traits and characteristics.

As Tylee (2001) suggested that the VSM could be also be applied to the use of online learning sites, the VSM values gathered from the participants of this study will be then be compared to the four cultural dimensions described by Tylee.

During the semester, students were introduced to Internet sites featuring language-learning and practice resources that enable them to practice the skills of listening, pronunciation, shadowing, grammar, vocabulary, and reading for comprehension. These resources had been selected by this teacher/researcher for their suitability in supporting classroom activities and assisting students to complete semester projects, which included aspects of the four language skills. Links to these resources were made permanently available to students through a class Wiki that they were able to access at any time. After the web-based resources were introduced and demonstrated students were given time in class to make individual choices about which sites and resources to use, to become familiar with them and to receive in-class support. Students were also shown how to independently search for language learning and practice websites using key words and Google's advanced search feature. Following this, students took part in weekly in-class activities to work towards the completion of projects and semester goals. Time was made available in class each week for students to independently access web-based resources in order to practice and develop the English language skills and abilities that the classroom projects focused on. Students were also encouraged to use resources outside of class in order to further practice, develop, and reinforce these skills and abilities. Assessment of the projects took place upon their completion. Students were not assessed on their use of the Internet based language learning resources. This was due to the inability to monitor students in the unrestricted freedom they had to choose which resources to use in their practice.

At the end of the semester students completed a second online survey containing both quantitative and qualitative question. Four quantitative questions, one each operationalizing Tylee's (2001) interpretation of the PDI, UAI, IDV, and MAS dimensions asked students to indicate their preference towards a degree of dependence on, a balance of, or independence from a teacher/group when using English online learning resources. Similar to Hofstede's (1994) VSM, response choices were based on a five-point Likert scale placing preferences at 20 percent intervals. The results from these questions will be compared to the participants' values created by Hofstede's VSM. Any differences found between these values

will assist in establishing whether these tools do generate similar values for the four cultural dimensions as Tylee (2001) suggests.

The four qualitative questions asked students for their attitudes on the advantages and disadvantages of using English online resources to support classroom activities, in what situations they would use English language practice Internet resources, and the reasons that they would not use them. Questions were translated from English by one native Japanese English-speaking teacher and back translated by another to confirm authenticity of meaning to reduce any misunderstanding when students answered. Students were asked to respond to qualitative questions in English where possible. Any Japanese responses were translated then verified by the same Japanese English teachers. Qualitative responses to open-ended questions will be used to identify and add participant's voices to their opinions about the use of learning in online environments. Appendix 1 shows the English language version of this survey.

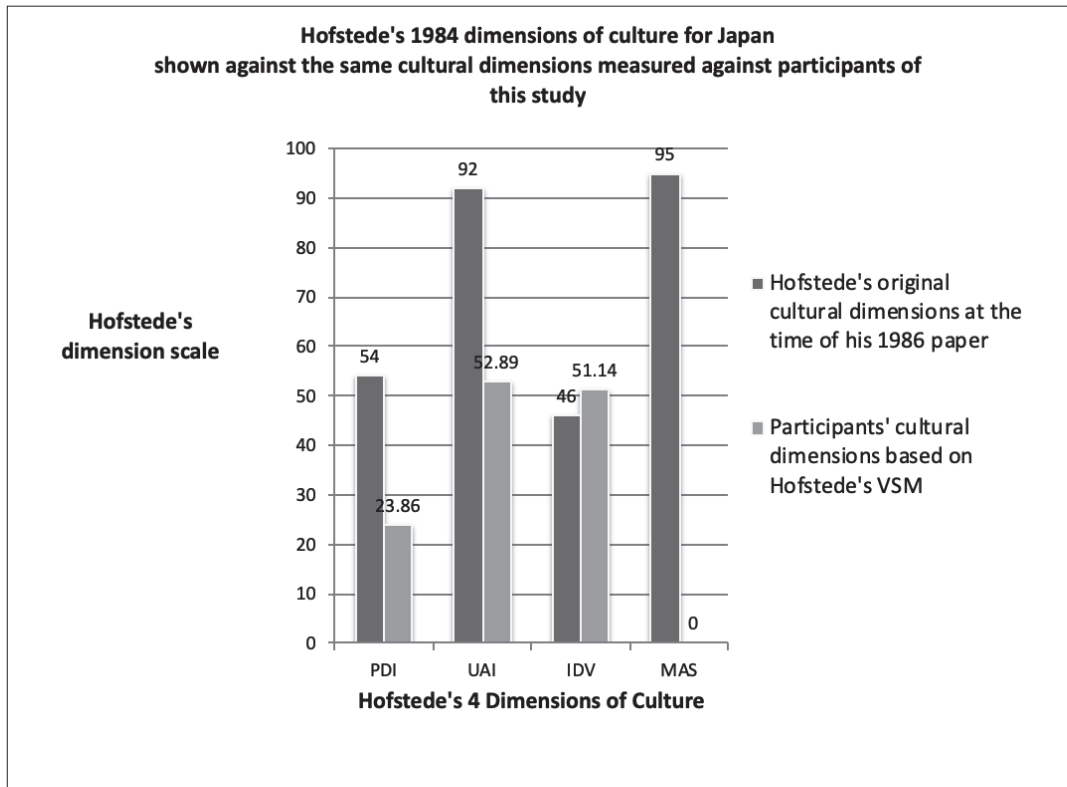
Data Analysis Question 1

Do the Japanese university students taking part in this study conform to Hofstede's cultural assumptions as he predicted they should, or not?

As Figure 1 illustrates, despite determining that his VSM values were homogenous to a nation, the participants of this study identify as having different cultural dimensions compared to the values created by Hofstede's Japanese IBM employees. The Japanese student participants define themselves in the following way:

- having a more equal distribution of societal power, and so less dependence on people in managing roles (participants' PDI of 23.86 vs. Hofstede's 54),
- being more acceptable of uncertainty and less governed by rules and order, although still placing slightly more value on rules than on complete freedom (participants' UAI of 52.89 vs. Hofstede's 92),
- having greater development of individual personalities, less sharing of responsibility beyond the family, and less interpersonal connections (participants' IDV 51.14 vs. Hofstede's 46), and,
- in almost complete contrast with Hofstede's value, with a greater emphasis on relationships, harmony, cooperation and quality of life over individual assertiveness (participants' MAS 0 vs. Hofstede's 95).

Figure 1.



Data Analysis Question 2

Considering Tylee's (2001) suggestion that the VSM dimensions can be applied to online learning, what do the VSM values generated by the participants of this study predict about their online learning use?

Tylee's suggested application of Hofstede's VSM proposes that the Power Distance Index can be used to indicate when students are likely to use online learning resources. While a value of zero would indicate students making independent choices, a value of 100 would show that students are more likely to wait to receive directions from a teacher. The value of 23.86 implies that students lean heavily towards valuing independence in this choice.

The UAI dimension proposes that at a value close to zero students will search independently to find online learning resources to use, or that at 100 they will only use resources that have been recommended to them by a teacher. The VSM value of 52.89 applied to Tylee's idea indicates that students place importance on both options, but identify slightly more importance on being able to use the online

learning sites that have been recommended to them by a teacher.

This almost shared emphasis is similarly seen by the value of 51.14 created in the IDV, which identifies who to use online learning resources with. This infers that students lean slightly towards pursuing individual goals (value of 0) rather than their group goals (value of 100), although this near 50/50 split indicates that both the group and the individual independence are regarded as important.

The MAS dimension illustrates the pace at which students prefer to work. While a value of 100 indicates that students prefer to work at their own pace, the opposite end of the spectrum indicates that student will work at the pace of the group. These students generated a value of zero, which, in Tylee's interpretation of the VSM, definitively indicates that they prefer to work together at the pace of the group, rejecting individual assertiveness.

Data Analysis Question 3

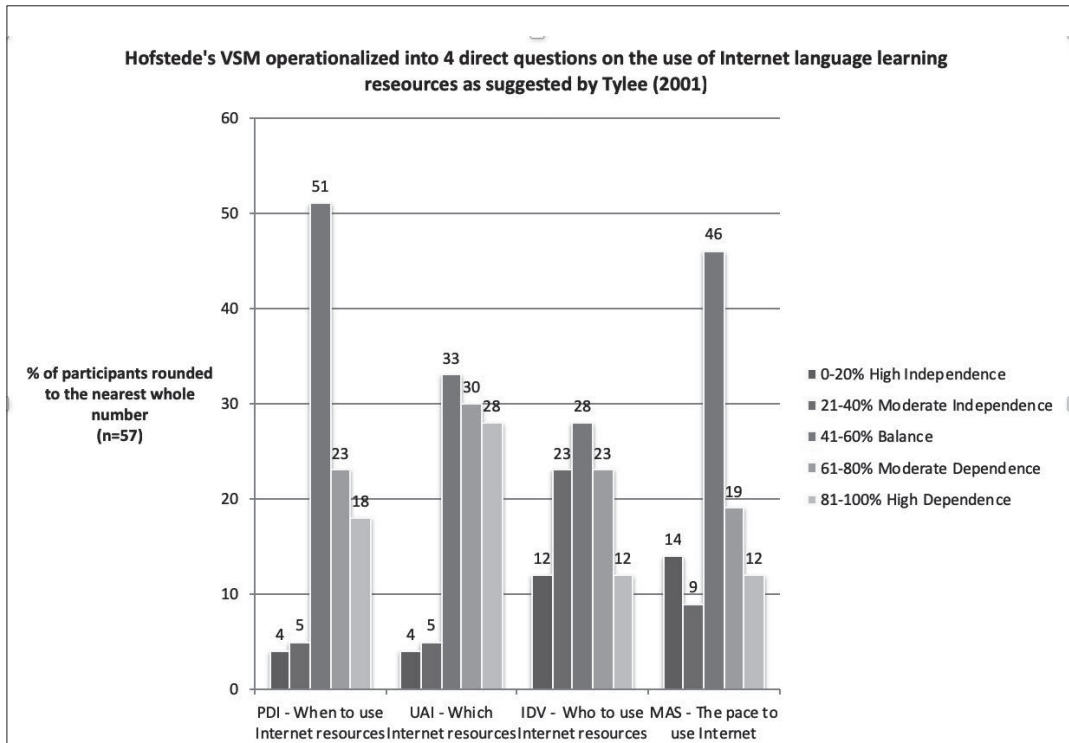
When Tylee's (2001) suggested application of the VSM is operationalized into four direct questions reflecting these dimensions, how do the values differ from the original VSM values, and what can they tell us about these student participant's online learning use?

The results of four questions (Appendix 1) suggested by Tylee's (2001) application of Hofstede's VSM to the use of Internet language learning resources lead to the values found in Figure 2 for these Japanese student participants.

As Tylee (2001) suggests, these students' PDI value of 23.86 on the 0-100 scale applied to learning in online environments predicts that these students are more inclined to make choices about when to use Internet resources themselves and rely less on a teacher's instructions. However, direct questioning on this topic revealed that only nine percent of participants (5 students) want more independence. The largest single figure (51% or 29 students) preferred a balance of being told by a teacher when to use online resources. Forty percent of students (23 individuals) specifically indicated that they desire more teacher direction and so less independence.

Student comments referring to this independence directly relates to personal levels of motivation. As the following comments identify, students will use the sites "...

Figure 2.



when I care about my English ability and want to improve it”, “I use it when I want to skill up for English” and “When you need English in the future, you will use it”. These comments all refer to a resource to be utilized in the future rather than at the time that the students are studying now. The comments also recognized that the Internet provided learning resources that were not delivered in textbooks. “Using websites for learning is very useful because we can study in many ways and use many tools.” Examples of these tools enable students to “... do many things which are listening English, typing, learn vocabulary, shadowing and so on.” Factoring in the use of the Internet also meant that the expense of textbooks was saved and students had easy access to learning resources. “We often buy some textbooks ... but if we use like this site we can save money. And we can always use when we want to use.” Motivation was a factor for some students using the Internet for learning and comments such as “At English class I use Internet studying. But at home I don’t think use Internet for studying. I use the Internet for game and seeing a blog,” “I know I should use it and study English, but I’m lazy” and “We can’t motivate ourselves” reflected this.

Tylee’s application of the UAI forecasts that the students’ VSM value of 52.89

indicates a slight lean towards valuing a teacher's recommendations of which online resources to use. This is similarly reflected in the results of the direct questioning which gave the result of a combined total of 33 students (58%) leaning towards reliance on a teacher's recommendation of online resources. Teacher recommendations can provide a means to reduce concerns that the following comment illustrates: *"Sometimes there are too many contents and much information so it is difficult to choice the best contents ourselves"* and *"I don't know what site should I use without an advice of my teacher"*. The greatest single number of students however (33% or 19 participants), showed a preference for a balance between being able to choose themselves which resources to use and being directed to specific resources by a teacher. The benefits of this balance are that *"We can pick the best way to study"* and *"There is so many kinds of materials so I choose the one it suits me."*

Similar to the UAI value, these students' IDV value of 51.14 applied to Tylee's suggestion predicts that students illustrate a near balance towards using Internet learning resources for class topics and goals and their own individual goals. In fact, there is an identical division in these student participants between those who want to follow class topics and those that prefer to aim towards individual topics (20 students – 36% each). The remaining 16 students (28%) opted for a balance of the two. The following comments reflect the students' ability to pursue individual learning goals using online resources. *"It is useful to use to respect the individual level"* and *"The lesson suitable for each level can be performed."* Improving individual listening abilities was a key theme of the comments received, indicating student's high level of use of listening practice websites. Comments highlighting this included *"I think the Internet is very good for listening and pronunciation. I could understand my weak points of pronunciation, which is discrimination between "L" and "R."*, *"If I continue this website's questions, I think I can improve my listening ability."* On the class dependent side of the scale it was seen that *"We can study the same thing with our classmates at the same time."* This was especially important for supporting use of Internet resources with spoken practice with a partner, *"I want to know how to speak, but we can only listen round and round."* *"It is not useful to train English speaking."* Having used the online listening practice sites with group goals students were then able to come off the Internet and practice and discuss their learning with their peers.

These participants' MAS value of 0 indicates that that they prefer shared values of

harmony and cooperation to the wholly male values of individual assertiveness. However, a direct question asking about this theme reveals that the majority of students (46% or 26 participants) prefer a balance of working at their own pace, and working together. Thirteen students, or 23% showed a desire for a group pace, which has the following advantages: *“It was difficult for me to solve quizzes but interesting ... so it’s fun if you do this with your friends”*, *“Doing this with classmate, we can improve our English ability interestingly.”* The presence of a teacher was also recognized as an assisting factor when using Internet resources at a group pace. *“I enjoyed this system very much. But when I made a mistake I didn’t know where is wrong but I could ask my teacher.”* However, 31% of students (18 participants) indicated a lean towards being able to work at a pace independent of others. Comments that illustrate this attitude include, *“I can do it on my speed so I don’t make anyone wait for me nor I don’t waste my time”*, *“We can use our free time for learning English. It’s very handy”*, and *“I think this is interesting and we can do my pace”*. It was also noted by participants that working individually could create a divide between students with different abilities and interests, *“For people who cannot use pc well and type well it is difficult and not interesting and the gap can occur.”*

Discussion

Replication of Hofstede’s VSM

In replicating the original VSM survey, the results identified that only within the IDV dimension were the original participants and these university students anyway similar. Three of the four VSM dimensions (PDI, UAI, MAS) produced markedly different results illustrating the cultural differences between the two groups.

These biggest indicator to the cause of the difference in values is that the study participants are university students, and that they have not become company employees ingrained into the traditional Japanese workplace culture and influenced by the company and its employees as Hofstede’s IMB participants were. It is possible that these students may adjust their cultural values if they become imbedded within a traditional Japanese corporation, and if this were to happen, they may show similarities to Hofstede’s original values. A long-term case study following this group of participants may have been able to ascertain this.

Participants were only required to complete Hofstede’s VSM survey once at the beginning of the semester. Hofstede originally validated his ideas with on-

going follow-up studies and asserts that relative scores have been stable over time (Hofstede, n.d.c). To add authenticity and validity to the results that were collected in this study it would have been more preferable to have repeated the VSM survey again at the end of the semester, and to have compared the two sets of results to determine an average. However, this was not possible due to the time restrictions with the classes and the workload that the students were under to complete their English language projects.

Despite this, the differences in the values between Hofstede's IBM participants and the students taking part in this study have moved toward firstly, indicating the differing cultural values, and secondly, reinforcing a criticism of the VSM that was highlighted earlier by McSweeney (2002) and Signorini et al. (2009). This is that employees within a subsidiary of a multi-national technology and consulting corporation cannot provide accurate information about entire national cultures and subsections of these cultures, such as students in higher education, over time.

Application of Tylee's suggestion that the VSM can predict use of online learning

Regardless of the data that has been produced in this study, it is inherently difficult to carry over Hofstede's VSM values and apply them to the four specific aspects of online learning that Tylee suggests. Firstly, the original 20 questions Hofstede used to create the values are too culturally specific to be accurately recreated to illustrate the factors of online learning that Tylee identified. Secondly, the relationship between the four questions that are utilized to create each of the formula used to calculate dimension's values also cannot be accurately reproduced by this researcher, and so cannot be appropriately represented by a singular question, as has been done in this study. Thirdly, as the criticisms noted, the VSM is not able to reflect culture changes within education, or how these changes would affect student's view of culture, or indeed learning. In 1986, when Hofstede made his comments that his VSM could be applied to teaching and learning, the use of technology in the classroom was in its infancy. At that time, it would not have been possible to predict the technological advancements and the increase in Internet use for online learning that was made up to 2001 when Tylee made his assertion, and then again to this time of this study.

However, as was illustrated in the results for research question three, the values that were created through the use of the four questions created through

operationalizing Tylee's suggestions are able to provide a general participant profile for the students in these classes. What is more, upon closer inspection, these values do bear some similarities to Hofstede's original VSM values for Japan.

Hofstede's original PDI value of 54 suggested that Japanese leaned toward a dependence on authority, but still regarded equality as important. This study similarly identified that 41% of students would depend on a teacher to tell them when to use online learning resources, with 51% of the remaining students choosing the halfway option, identifying authority as important.

Hofstede's UAI value of 92 indicated that Japanese relied heavily on rules, order and directives. Similarly, a majority of 58% of these participants showed reliance on using resources that were recommended to them by a teacher, rather than independently searching themselves, with a further 33% indicating the 50/50 split in opinion.

Hofstede's IDV value of 46 illustrated that Japanese show a near divided opinion towards individualism versus the collective, with a slight lean towards the connections, cohesion and shared responsibility. The student participants indicated a preference for this balance between dependence on the group and individualism with a majority of 28% on the 50/50 split, and the remaining students equally divided on both sides of this.

Finally, Hofstede's original MAS of 95 indicates that Japan values individual assertiveness. When asked to choose, 31% showed preference towards this individual assertiveness, while the majority of 46% indicated a balance between that and group harmony and cooperation. This illustrates that similarly to the original VSM, amongst these students there is a lean towards the male values.

Conclusion

This study has concluded that when replicating the VSM module three cultural traits indicated by the university student participants strongly differ to those traits that were identified by Hofstede. This adds strength to the criticisms that using surveys to equate culture to a nation without considering the flexible changing nature of global and educational contexts over time can be problematic.

Further to this, the suggestion by Tylee (2001) that the VSM values can be applied

to aspects of online learning use is not similarly reflected in the values created by direct questions relating to these dimensions. However, these percentage values have enabled a profile of these student participants to be made. This profile assists in establishing parameters on which the use of online learning resources can be made, and as was illustrated, they do coincidentally share similarities with Hofstede's original VSM values for Japan.

In conclusion, while the VSM module is not able to provide an accurate illustration of participant's use and access of online learning resources, it was a valuable starting point from which to gain a cultural understanding and picture of potential classroom practices.

References

Bhimani, A. (1999). Mapping methodological frontiers in cross-national management control research. *Accounting, Organizations and Society*, 24, 413–440.

Blake, R. J. (2008). *Brave new digital classroom: Technology and foreign language learning*. Washington, D.C.: Georgetown University Press.

Brown, H. D. (2000). *Teaching by principles*. 2nd Edition. Englewood Cliffs, New Jersey: Longman.

Burns, A. (2009). *Doing action research in English language teaching: A guide for practitioners*. New York: Routledge.

Burston, J. (2003). Software selection: a primer on sources and evaluation. *CALICO Journal*, 21(1), 29–40.

Chang, W. L., & Sun, Y. C. (2009). Scaffolding and web concordancer as support for language learning. *Computer Assisted Language Learning*, 22(4), 283–302.

Chapelle, C. A. (2009). The relationship between second language acquisition theory and computer-assisted language learning. *The Modern Language Journal*, 93, 731–753.

Chen, Y. L. (2008). Modeling the determinants of Internet use. *Computers & Education*, 51(2), 545–558.

Cotterall, S., & Reinders, H. (2001). Fortress of bridge? Learners' perceptions and practice in self access language learning. *Tesolanz* 8, 23-38. Retrieved from <http://www.hayo.nl/tesolanz.html>

Creswell, J. W., (2007). *Qualitative inquiry & research design*. Choosing among

five approaches. California: Sage Publications.

DeCapua, A., & Wintergerst, A. (2004). *Crossing cultures in the language classroom*. Ann Arbor: The University of Michigan Press.

Gray, D. E., (2009). *Doing Research in the Real World, Second Edition*. London: Sage Publications Ltd.

Harrison, G., & McKinnon, J. (1999). Cross-cultural research in management control systems design: a review of the current state. *Accounting, Organizations and Society*, 24, 483–506.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, California: Sage.

Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations*, 10, 301-320.

Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. Maidenhead: McGraw-Hill.

Hofstede, G. (1994). *Values Survey Model 1994 Manual*. Retrieved from <http://www.geerthofstede.nl/research--vsm.aspx>

Hofstede, G. (2002). Dimensions do not exist: A reply to Brendan McSweeney. *Human Relations*, 55, 1355-1361.

Hofstede, G. (2009a). *Dimensionalizing Cultures: The Hofstede Model in Context*. Online Readings in Psychology and Culture (Unit 17, Chapter 14). ©International Association for Cross-Cultural Psychology. Retrieved from http://orpc.iaccp.org/index.php?option=com_content&view=article&id=53%3Ageert-hofstede&catid=3%3Achapter&Itemid=2

Hofstede, G. (2009b). *Cultural Dimensions*. Retrieved from <http://www.geert-hofstede.com/>

Hofstede, G. (n.d.a). *Research and VSM*. Retrieved from <http://www.geerthofstede.nl/research--vsm.aspx>

Hofstede, G. (n.d.b). *Geert Hofstede*. Retrieved from <http://geert-hofstede.com/japan.html>

Hofstede, G. (n.d.c). *National Culture*. Retrieved from <https://geert-hofstede.com/national-culture.html>

Hofstede, G., & Bond, M. H. (1984). Hofstede's culture dimensions: an independent validation using Rokeach's Value Survey. *Journal of Cross Cultural Psychology*, 15, 417-433.

Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *The Modern Language Journal*, 72, 283- 294.

Kern, R. (2006). *Perspectives on technology in learning and teaching languages*.

TESOL Quarterly, 40(1), 183–210.

Levy, M., & Stockwell, G. (2006). CALL dimensions: Options and issues in computer assisted language learning. Mahwah, NJ: Lawrence Erlbaum Associates.

Liaw, M. L. (2007). Constructing a ‘third space’ for EFL learners: where language and cultures meet. *ReCALL*, 19(2), 224–241.

Liu, G. Z. (2008). Innovating research topics in learning technology: where are the new blue oceans? *British Journal of Educational Technology*, 39(4), 738–747.

Liu, G. Z., & Chen, S. W. (2007). A taxonomy of Internet-based technologies integrated in language curricula. *British Journal of Educational Technology*, 38(5), 934–938.

Liu, G-Z., Liu, Z-H, & Hwang, G-J. (2011). Developing multi-dimensional evaluation criteria for English learning websites with university students and professors. *Computers & Education*, 56, 65-79.

Marcus, A., & Gould, E. (2000). Cultural dimensions and global web user-interface design: What? So what? Now what? Retrieved from http://www.amanda.com/.../AMA_CulturalDimensionsGlobalWebDesign.pdf

Matsuura, H., Chiba, R. & Hilderbrandt, P. (2001). Beliefs about learning and teaching communicative English in Japan. *JALT Journal*, 23(1), 69-89

McSweeney, B. (2002). Hofstede’s model of national cultural differences and the consequences: a triumph of faith – a failure of analysis. *Human Relations*, 55, 89–118.

Morall, D. (2010). Centre for Independent Language Learning. Retrieved from <http://www2.elc.polyu.edu.hk/CILL/theory.htm#Introduction>

Nunan, D., & Bailey, K. M. (2009). Exploring second language classroom research. Boston, MA: Heinle Cengage Learning.

Olaniran, B. A., Rodriguez, N. B. & Williams, I.M. (2010). Cross-cultural challenges in web-based instruction. *Knowledge Management & E-Learning: An International Journal*, 2(4), 448-465.

O’Leary, Z. (2010). The essential guide to doing your research project. London: Sage.

Ozkan, S., & Koseler, R. (2009). Multi-dimensional students’ evaluation of e-learning systems in the higher education context: an empirical investigation. *Computers & Education*, 53(4), 1285–1296.

Rebolledo-Mendez, G., Orey, M., Alvarez-Rodriguez, F.J., & Martinez-Penalosa, G. (2011). Towards intelligent cultural adaptation of educational technology: An exploratory study. Retrieved from [http://www.informatics.sussex.ac.uk/users/gr20/SymposiumOER\(2011\)%20.pdf](http://www.informatics.sussex.ac.uk/users/gr20/SymposiumOER(2011)%20.pdf).

Redding, S. G. (1994). Comparative management theory: jungle, zoo or fossil bed? *Organization Studies*, 15, 323–359.

Renandya, W. A., Lim, W. L., Leong, K. W., & Jacobs, G. M. (1999). A survey of English language teaching trends and practices in Southeast Asia. *Asian Englishes*, 2, 37-65.

Rivers, D. J. (2010). National identification and intercultural relations in foreign language learning. *Language and Intercultural Communication*, 10(4), 318-336.

Rivers, D. (2011). Japanese national identification and English language learning processes. *International Journal of Intercultural Relations*. 35, 111-123.

Robson, C. (2002). *Real world research*. Second edition. Oxford, UK: Blackwell Publishing Ltd.

Sakui, K., & Gaies, S. J. (1999). Investigating Japanese learners' beliefs about language learning. *System*, 27, 473-492.

Shee, Y., & Wang, Y. S. (2008). Multi-criteria evaluation of the web-based e-learning system: a methodology based on learner satisfaction and its applications. *Computers & Education*, 50(3), 894–905.

Signorini, P., Wiesemes, R., & Murphy, R. (2009). Developing alternative frameworks for exploring intercultural learning: a critique of Hofstede's cultural difference model. *Teaching in Higher Education*, 14(3), 253–264.

Simons, H. (2009). *Case Study Research in Practice*. London: Sage Publications Ltd.

Son, J.-B. (2007). Learner experiences in Web-based language learning. *Computer Assisted Language Learning*, 20(1), 21-36.

Stavredes, T. (2011). *Effective Online Teaching*. San Fransisco, C.A.: John Wiley & Sons.

Strother, J. (2003). Cross-Cultural Issues for Asian e-Learners: An Analysis Based on Hofstede's Cultural Dimensions. In A. Rossett (Ed.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2003* (pp. 1978-1984). Chesapeake, VA: AACE. Retrieved from <http://www.editlib.org/p/12263>.

Sullivan, N., & Schatz, R. T. (2009). Effects of Japanese national identification on attitudes toward learning English and self-assessed English proficiency. *International Journal of Intercultural Relations*, 33, 486-497.

Tapanes, M. A., Smith, G. G., & White, J. A. (2009). Cultural diversity in online learning: A study of the perceived effects of dissonance in levels of individualism/collectivism and tolerance of ambiguity. *The Internet and Higher Education*, 12, 26-34

- Tylee, J. (2001). Cultural issues relating to access perceptions and learning styles in the online environment. Retrieved from <http://www.education4skills.com/jtylee/culture.html>
- Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: The MIT Press.
- Wang, M. (2007). Designing online courses that effectively engage learners from diverse cultural backgrounds. *British Journal of Educational Technology*, 38 (2), 294–311.
- Warschauer, M. (2001). Online communication. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 207-212). Cambridge: Cambridge University Press.
- Williamson, D. (2002). Forward from a critique of Hofstede's model of national culture. *Human Relations*, 55(11).
- Yang, Y. T., & Chan, C. Y. (2008). Comprehensive evaluation criteria for English learning websites using expert validity surveys. *Computers & Education*, 51(1), 403–422.
- Yin, R. K. (2009). *Case study research design and methods*, Fourth edition. California, Sage Publications, Inc.

Appendices

Appendix 1.

English translation of the online survey of qualitative and quantitative questions based on the operationalized measurements of Hofstede's 1986 four dimensions of culture to the use of online learning resources

Instructions				
The following 4 topics relate to using English learning resources on the Internet. Read the topic and check the box that best reflects your opinion.				
Topic 1: Choosing when to use English learning and practice Internet sites				
I should use English learning Internet resources when I want to.			I should use English learning Internet resources only when my teacher tells me to.	
0-20% High independence from teacher	21-40% Moderate Independence	41-60% Balance	61-80% Moderate Dependence	81-100% High Dependence on teacher
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Topic 2: Choosing which English learning and practice Internet sites to use.				
I should find English learning Internet resources that I want to use.			I should only use the English learning Internet resources that my teacher recommends.	
0-20% High independence from teacher	21-40% Moderate Independence	41-60% Balance	61-80% Moderate Dependence	81-100% High Dependence on teacher
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Topic 3: Choosing who to use English learning and practice sites with				
I should use English learning Internet resources by myself to improve my own strengths and weaknesses.			I should use English learning Internet resources together with my class so we can help each other.	
0-20% High independence from class	21-40% Moderate Independence	41-60% Balance	61-80% Moderate Dependence	81-100% High Dependence on class
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Topic 4: Choosing the pace to use English learning and practice sites at.				
I should use English learning Internet resources in class time so we can work together at the same pace.			I should use English learning Internet resources in my own time so I can work at my own pace.	
0-20% High independence from class	21-40% Moderate Independence	41-60% Balance	61-80% Moderate Dependence	81-100% High Dependence on class
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please answer the following 4 questions with your own words.				
1. What are the advantages of using English practice sites on the internet by yourself for supporting class activities and projects?				
2. What are the disadvantages of using English practice sites on the internet by yourself for supporting class activities and projects?				
3. In what situation (when) would you use English practice sites on the internet by yourself to learn and practice English?				
4. For what reasons would you not use English practice sites on the Internet by yourself to learn and practice English?				

Abstract

Hofstede's 1986 Value Survey Module (VSM) determines nations' cultural characteristics and has also been applied to teaching and learning. This study utilizes Hofstede's VSM to establish and compare the dimensions of a group of Japanese university English language students against the values originally created and broadly attributed to Japanese culture. Recognizing that cultural attributes and learning styles might also affect student's use of online learning resources this study continues by utilizing a suggestion that the VSM can be applied to when, and which online resources to use, who they will be used with, and at what pace. The results and values created by these participants illustrate that generalizations made about cultural traits cannot be applied to sub-groups within a population, and that it is equally difficult to equate models of culture to learning in online environments. However, parallels can be made between the results of this investigation and the original VSM.

Keywords: cultural dimensions, Hofstede, Internet, language learning, Japan