THE INFLUENCES OF CAPITAL DEVELOPMENT STRATEGIES CHOICE ON INTERNATIONAL MANAGEMENT STUDENTS' COLLABORATIVE KNOWLEDGE CREATION: TURKEY AND ECUADOR

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Abstract

The paper presents the first phase of international (four countries) study that explores the influence of social capital and personal learning networks (PLN) development approaches used by international management students in multicultural learning environments and the types of social and academic networks they develop on their collaborative knowledge and cross-cultural competence development, in particular, on their preparation for international careers. A comparative analysis is conducted within four international programs (in Turkey, Ecuador, UK and US) that offer international education in English language for local and international students. The paper presents the preliminary results of a comparison in two locations - Turkey and Ecuador. The study applies the concepts of collaborative knowledge development, social capital and social networks. The study uses constructivist grounded theory [1] to uncover the process of social capital and collaborative knowledge creation. Based on the data, collected through semi-structured interviews, and analyzed through dimensional analysis [2]; [3], the study develops a process model, which takes into account the core social identity of the learner, as well as the existing and emergent social personal learning ties, built on social capital. An additional goal of the study is to uncover the overlapping social and personal learning networks international and local students participate in and develop, to trace the knowledge sharing routes and to pinpoint knowledge creation hubs in these networks. As the result of the study, recommendations are developed for higher educational institutions (HEIs) and multinational enterprises (MNEs) regarding the steps they can take to promote collaborative and cross-cultural knowledge creation among their members. The connectivism theory of social learning [4] suggests loose and pragmatic ties appropriate to knowledge sharing and creation in the interconnected networked social reality of the 21st century as they combine social and informational resources that operate in a chaotic environment and recognize rather than create patterns of meaning. While we are not proposing any final theoretical models at this point, it is likely that the learners who are engaged in multi-dimensional and loosely connected PLNs characterized by multiple networks consisted of weak ties and who utilize problem solving models of knowledge creation are more likely to become cross/interculturally competent and are more likely to be prepared for global careers. However, the preliminary findings show that international students lack the skills and desire to create functional PLNs and tend to engage in multiple binding networks characterized by strong emotional bonds but limited knowledge creation. While is it premature at this stage to suggest any specific steps that IHEIs and other multicultural learning environments might take to encourage social and technological networking among international students and other members of academic environment, some tentative recommendations are presented.

Keywords: social capital, PLN, collaborative learning, networking development, knowledge development, international students, higher education

1 INTRODUCTION

The paper presents the first phase of international (four countries) study that explores the influence of social capital and personal learning networks (PLN) [5] development approaches used by international management students in multicultural learning environments and the types of social and academic networks they participate in, on their collaborative knowledge and cross-cultural competence development, in particular, on their preparation for international careers [6]. A comparative analysis is conducted within four international programs (in Turkey, Ecuador, UK and US) that offer international education in English language for local and international students. The paper

presents the preliminary results of a comparison in two locations – Turkey and Ecuador, The study applies the concepts of collaborative knowledge development, social capital and social networks. The study uses constructivist grounded theory [1], in particular, dimensional analysis [2]; [3] to uncover the process of social capital and collaborative knowledge creation. Based on the data, collected through semi-structured interviews, and analyzed through dimensional analysis [2]; [3], the study has developed a process model, which takes into account the core social identity of the learner, as well as the existing and emergent social personal learning ties, built on social capital. An additional goal of the study is to uncover the overlapping social and personal learning networks international and local students participate in and develop, to trace the knowledge sharing routes and to pinpoint knowledge creation hubs in these networks. As the result of the study, recommendations are developed for higher educational institutions (HEIs) and multinational enterprises (MNEs) regarding the steps they can take to promote collaborative and cross-cultural knowledge creation among their members.

It is recognized that adults, including college students, learn in different ways than children and adolescents; specifically, their learning is problem solving rather than context oriented [7]. In particular, in cultural learning and knowledge creation, learners are likely to build personal learning networks to utilize social capital [8], or 'resources embedded in one's social networks, resources that can be accessed or mobilized through ties in the network' [9]. Several theories of learning address knowledge created and shared in social interactions, for example, situated learning which views learning as social construction occurring in communities ([10], social learning theory [11] and knowledge created in networks [12].

Putnam [13] suggests that social capital and thus networks can be binding – characterized by close ties of friends and family members - or bridging, with more loose and weak ties of casual acquaintances. While binding networks are used mostly for emotional support, bridging ones are more likely to promote knowledge sharing and development that could result in tangible benefits [14]. The connectivism theory of social learning [4] suggests even looser and more pragmatic ties than the ones that were addressed, for example, by Granovetter [14], and more appropriate to knowledge sharing and creation in the interconnected networked social reality of the 21st century, as they combine social and informational resources that operate in a chaotic environment and recognize, rather than create, patterns of meaning.

2 METHODOLODY

The grounded theory is based on constructed data; therefore, we have not proposed any hypotheses. The broad research question is based on emergent theoretical themes:

How the network development strategy choice influences collaborative knowledge and cross-cultural competence development?

The first part of the research was conducted in Turkey and Ecuador in the summer and fall of 2015. The second part is scheduled for the spring of 2016 to take part in USA and UK. Data are collected through semi-structured in-depth interviews, conducted in person and through Skype. The participants are volunteer students, both local and international, enrolled in undergraduate programs in the participating HEIs. The students are invited to participate by the researchers. As the study is using Grounded Theory Method (GTM), the sampling of the interview participants is driven by theoretical developments. The study is grounded in data, and the first round of data collection took part simultaneously with the analysis and the first round of the general literature review. The data were coded and analysed as they were collected, to allow the development of the emerging theoretical themes through memo-writing and further theoretical sampling - all of these actions occur simultaneously and throughout the research process, which permits the preliminary results to be shared.

2.1 Data Collection

2.1.1 Participants

The data were saturated (no new information and insights were being added) much sooner in Ecuador than in Turkey. Therefore, fewer participants were interviewed in Ecuador (nine) than in Turkey (38). The main reason for that was that in Turkey, four different groups of participants divided by gender and origin exhibited different patterns of socialization and social capital development – local females,

local males, international females and international males. In Ecuador, all student participants, regardless of the country of origin and gender, followed basically the same social capital development model. The summary of the participants' demographic characteristics is presented below in Tab 1.

Table 1. Summary of the participants' demographic characteristics

Countries	Number of participants	Gender M/F	Age	International /Local	Number of Countries of Origin	Countries
Turkey	38	20/18	18-25	17/21	15	Afghanistan, Indonesia, Israel, Kazakhstan, Kyrgyzstan, Mali, Mauritania, Moldova, Mongolia Nigeria, Philippines, Senegal, Tanzania, Togo, Turkey
Ecuador	8	3/5	20-23	5/3	2	Ecuador, US
Total	46	23/23	18-25	22/24	17	Africa, Asia, Europe, North America and South America

2.1.2 Settings - Learning Environments

One of the reasons for the difference in social capital creation strategies might be the influence of learning environments. Ecuadorian school (E-Uni) is a large non-for-profit private university in a suburb of Guayaquil, Ecuador. The university enrols a large number of bi-cultural (i.e., Ecuadorian/U.S.) students with an increasing number of international student enrollment. Moreover, nearly half of the faculty members in the international business program are foreign-born, and most are foreign-educated. In contrast, although T-Uni has a large number of international students, almost all of them are graduates of international Turkish high schools, and there are very few international faculty members, although some of the local faculty members were educated abroad. In addition, E-Uni is significantly larger than the Turkish university (T-Uni) - currently there are slightly less than 10,000 students enrolled in all academic programs of E-Uni, while T-Uni has slightly more than 2000 enrolled students. In addition, E-Uni, although still a new university, has graduated the first group of students almost 20 years ago, and in T-Uni the first graduation is expected only this academic year. While both universities are promoting themselves as bilingual institutions of higher education, which is not common either in Turkey or in Ecuador, the level of English skills is much higher among Ecuadorian students than among Turkish ones, probably due to the large number of bi-lingual and bicultural students in E-Uni.

2.2 Data Analysis

In addition to the continuous three-level coding, the dimensional analysis method, recommended by Schatzman (1991[2]) and Kools et al. (1996 [3]), was used to provide better understanding of the process of social capital and collaborative knowledge creation; a process model based on the core social identity of a leaner has been developed. We have considered the emergent theoretical themes as data dimensions and the most salient ones were used as dimensions in the explanatory matrix (Fig. 1), which is presented below.

The in-vivo code of 'building networks', the dimension of the students' most functional approach to the development of long-term career and social capital, in contrast to maintaining existing binding and emotionally bonding social networks, has emerged in both locations. Thus, the explanatory matrix (Fig. 1) was constructed from that perspective to address the collaborative learning process taking place in functional social networks.

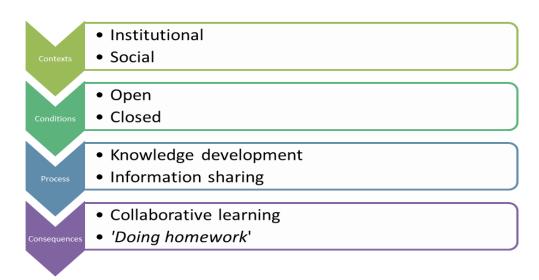


Figure 1. Explanatory matrix from the perspective of the 'network building'

As the current findings can be considered to be only preliminary ones, it is possible that eventually, when new data are added from two other locations, the perspective might change. However, the dimensions of open and closed social environments, and different patterns of knowledge flow (creation of knowledge vs. information sharing) have also emerged strongly in both location and are expected to be present in the other two as well. The specific dimensions of the matrix are addressed below in the section on the findings.

3. FINDINGS

2.3 Contexts: Institutional and Social

The process of collaborative knowledge creation takes place in several interconnected contexts: local social environment, institutional learning environment, created by the researched HEIs, and online, in virtual learning and sharing environments. As it was noted above in the description of the settings, institutional learning environments of two HEIs. E-Uni and T-Uni, are significantly different. It should be also noted that while E-Uni creates collaborative learning and social spaces for its students, for example, study rooms in the library, café and open outside spaces, free standing computer stations, couches and desks for individual and group work, and encourages socialization and social network building among students and faculty thought academic, business, social and entertainment on-campus activities and projects shared with local business and cultural communities, T-Uni lacks social and learning spaces and discourages social networking among students, faculty and local communities. The library at T-Uni has only three computers designated for database searches, café is located in the lobby, which lacks privacy, and there are neither group nor individual study spaces, nor social spaces where students can interact and work on their projects. There are virtually no social events, with a noted exception of national holidays' celebrations, organized by the International Student Union, and extra-curriculum academic activities are limited to open lectures and research seminars rarely attended by students.

In general, T-Uni represents closely supported and monitored family-like educational and learning environment 'Happy Family' [16], while E-Uni is more consistent with a laissez-faire supportive 'Country Club' environment [16].

Although national cultural differences, which obviously influence educational environments and models, might be offered as an explanation for the differences in the researched contexts, we would like to point out that, while a significant geographical distance exist between these two locations, the cultural distance between them is surprisingly small, as almost all of their cultural dimensions scores are similar – the only dissimilar dimension score is the individualism, which is slightly higher in Turkey than in Ecuador (Hofstede, 1991[15]). However, this different cannot attribute to the difference in the educational environments and therefore, this difference cannot be attributed to the national cultures.

An alternative explanation might be religious affiliations. While neither university is explicitly associated with any religious organization, they both are located in conservative and religious communities (Roman Catholic in Ecuador and Sunni Muslim in Turkey). However, T-Uni is affiliated with and is partially funded by a dissident religious community that is promoting more conservative Muslim values that Turkish society in general (Turkey is a secular constitutional republic) and therefore, while certain rules are not formalized, they are nevertheless enforced. Almost all of the female faculty and staff, as well as the majority of female students, are 'veiled' - they wear hijab and clothes that completely cover their bodies. T-Uni provides gender segregated group housing for international and local students: in these university apartments both TV and internet are prohibited and students of different genders are not allowed to socialize unsupervised. However, students can also live in dormitories, where the rules are more relaxed, or in unsupervised privately rented apartments, as well as at home with their families.

In general, it can be noted that while in Ecuador both international and local students tend to socialize freely in the university and outside it, T-Uni students exhibit a marked difference in socialization and communication patterns – while local female students rarely have friends of different gender and do not socialize outside their families or the religious community, international students and local male students are more likely to meet people outside the university and families. Nevertheless, all groups tend to prefer socializing with the same gender and local students rarely socialize with international ones.

2.4 Conditions: Open or Closed

As it was stated in the contexts (above), there is a significant difference in the learning environment between two researched universities, and the most salient dimension of this difference is either open or closed conditions of these contexts. The network building conditions that are present in E-Uni are characterized by the open network structure, where social capital can be shared and developed. The participants in E-Uni report meeting friends of their own friends at social and business events and building networks through shared hobbies and interests. They also repost the flow of information from one network to another. They participate in multiple bridging networks that are characterized by weak ties, and they are engaged, to some degree, in social network-based collaborative knowledge creation [17] based on shared trust [18].

In T-Uni, although social capital creation patterns differ based on the demographic characteristics of the participants, students tend to belong to binding networks that were created based on the situational proximity – the family, elementary school friends, roommates, and classmates from the same country or region. Many of the participants, mostly local male students, admitted a lack of trust in any of their connections, including those, whom they consider to be their closest friends, and even in their family members. This is consistent with the recent findings on extremely low social trust in Turkey [18]. While in Ecuador the participants could name several sources of useful information, advice and help, and consistently stated that they would be using different aspects of their social capital, depending on the situation, local Turkish participants often stated that they do not know whom they could ask for information and help, and that they would not ask anyone's advice or search for information themselves. In contrast, the international participants in Turkey could name various family members or students from the same country as their most likely information and advice sources to be used in an emergency, despite the fact that neither a family member nor another student from the same country is likely to have superior knowledge of local conditions or an access to the local social resources.

One of the somewhat unexpected findings was that virtual communities and online resources are not likely to be used instead, but only in addition, to social networks. Very few participants in T-Uni reported being engaged in any online community, except for Instagram and other picture sharing applications. Local students are even less likely to use any information sharing resources, to participate in online communities, or to use academic and professional resources, even when specific sites and blogs were recommended by their instructors. They use instant messaging applications, such as WhatsApp, to communicate with classmates regarding home assignments, to share celebrity and personal gossip, as well as to make logistic arrangements. Their preferred way of finding information, including professional advice and academic sources, is 'Google Search' – or, as it is called in Turkey, 'asking uncle Google'. The reference to an authority figure, such as an uncle, seems to preclude students from critically assessing the quality of information, comparing different sources, and from evaluation of trustworthiness and competence of authors.

On the other hand, the participants in E-Uni report routinely combining in-person search for information with online sources, comparing different sources, evaluating sites and authors, and referring a member from one network to another network to access information and resources available there.

2.5 Process: Knowledge Creation or Information Sharing

As we have expected to find, the students who are most likely to engage in knowledge creation process tend to create multiple interconnected networks, which are characterized by weak ties, pragmatic reasons to connect and a flow of knowledge and social capital from one network to another. Fig 2 presents an example of such network.

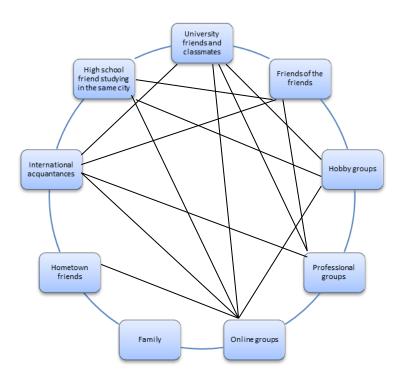


Figure 2. A sample of the knowledge-creation and sharing network

On the other hand, an example of a closed, binding, emotionally bonding and situational based network, in which specifically local female participants in T-Uni are engaged, is presented in Fig. 3 below. In this situation, a student is engaged only in the family, childhood friends' and situational same gender classmates' networks. These networks do not connect with each other and the memberships in them are based on the circumstantial characteristics: one's family of birth, the location of one's childhood home, the fact of being enrolled in a specific course.

In an intriguing twist, some participants reported what can be called 'imaginary' social groups, which apparently do not exist. For example, a participant might state that she and her friends enjoy going out for meals and to the movies, yet she would not be able to name her favorite restaurant or cuisine, and she would not be able to recall the last movie they have seen, or the names of the leading actors. Obviously, as the intention of the researcher was not to check the trustworthiness of each participant, these follow-up questions were asked only for the purpose of creating rapport and more natural dialogue, and therefore, not all participants were expected to 'prove' that they indeed have engaged in the actives they reported. However, it is worthwhile to point out that mostly local female participants appeared to exaggerate the extent of their social life and the variety of activities they claim to be involved in with their friends. Similarly, they often stated that they have many friends, including international ones, but them could recalled only the activities in which they participated only with their childhood friends, or the best (female) friend they have in the university.

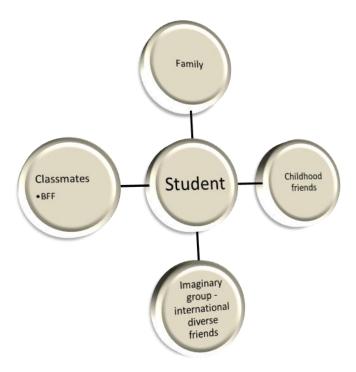


Figure 3. A sample of the social network based on circumstantial proximity

Similarly an imaginary network, there seem to be 'shadow' networks and social groups, to which mostly male participants in T-Uni belong. As with the imaginary groups, a participant could not provide any additional information about the activity, which he claimed to enjoy and practice with his friends – an extreme example is an 'opera lover' who could not name not only his favorite, but any composer. However, in contrast to the 'imaginary' social group, other members of the same social group would state that they all are involved in a different activity, which, while not illegal or even deviant based on the wider Turkish social norms, for example, socializing in a mixed gender setting, or patronizing pubs and restaurants that serve alcohol, are, nevertheless, discouraged by the religious community. Therefore, it appears, that, while a participant might accurately describe his social group, the amount of time they normally spend together, the means and the frequency of communication and other specific characteristics of their social network, he would change the purpose of the socializing and the reason for the connection.

It should be noted that all participants were given a detailed explanation of the confidentiality of the findings and their exact answers, and the researcher who was interviewing Turkish participants is not a member of any religious community, therefore, there could not be any, not even concealed, negative consequences, judgements or censure. It appears that instead of explicitly hiding their activities and social networks, some participants actually believe in the reality they constructed for the researcher and do not admit even to themselves that they are actually engaged in a different activity and social network that they have reported.

2.6 Consequences: Collaborative Learning or Doing Homework

Based on multiple strategic choices the participants made in their social capital development and network building approaches, the knowledge creation process could result in collaborative learning that takes place in social networks. On the other hand, if different choices as made, no knowledge creation or learning would occur. It appears that in the latter situation, the participants frequently describe their academic activities as 'doing homework', which falls short of an adult approach to learning as problem solving [7] or professional expertise development [20]. Most of the participants in both locations reported spending the majority of their social time communicating with their peers about personal issues, sharing sport news and celebrity gossip and discussing theirs and their friends' romantic and personal relationships. While few of the participants reported engaging in purposeful and

practical knowledge sharing and creation, all of those who reported it had also stated that they had prior cross-cultural and professional experience, as well as explicit global career goals.

The strategic choices that a learner could make are presented in Fig. 4 below. The choices most conductive to collaborative learning outcomes are presented in **bold**, while the choices that are unlikely to lead to such outcomes are presented in *italic*. However, we would like to stress that there are multiple combinations of functional choices and the most important factor is the variety of groups and networks, as well the variety and quality of information and knowledge shared in them.

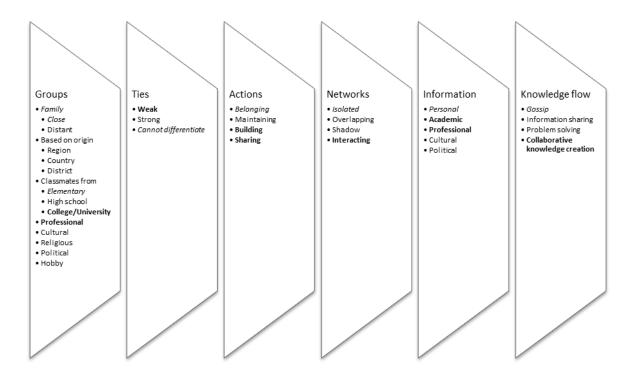


Figure 4. Social capital development strategic choices

As indicated above, it appears that building interactive academic and professional networks based on weak ties in universities and professional environment is the most conductive approach to collaborative learning, while belonging to isolated family and childhood friendship groups based on the ties, which strength cannot be differentiated by a learner, and where personal information is merely shared, can result in gossip, limited personal problem solving and 'doing homework' approach to academic learning.

4. CONCLUSIONS

While we are not proposing any final theoretical models at this point, it is likely that the learners, who are participate in multi-dimensional and loosely connected PLN characterized by multiple networks consisted of weak ties and who utilize problem solving models of knowledge creation, are more likely to engage in collaborative knowledge sharing and are more likely to prepare for global careers. However, the preliminary findings show that international students in general lack skills and a desire to create functional PLN – they tend to engage in multiple binding networks characterized by strong emotional bonds but limited knowledge creation. Although the participants in E-Uni were more likely than the participants in T-Uni to be involved in professional and academic social groups and to build networks based on practical and future oriented goals, in both locations the participants were more likely to belong to emotional bonding networks and were more likely to share personal information about their friends, and solve personal relationship problems than to gain and create professional and academic knowledge.

The participants in both locations repeatedly expressed an opinion that social networking and developing social capital is an innate characteristic, which they either naturally possess or do not possess. In the latter case, they said that they were shy, and so could not make friends; in the former

case they said that they were naturally friendly and so could make friends easily. None of the participants expressed an understanding of social networking as an expertise that could be developed over time with practice, constructive feedback and mentoring, as suggested in expertise development approach to learning [20].

In addition, few participants, in particularly in T-Uni, displayed an adult learning orientation and those few who did, have a prior cross-cultural experience. Therefore, the questions of whether more the mature learners are more likely to engage in cross-cultural experience, to have a cosmopolitan outlook and are more likely to develop global mindset than the less mature learners have been raised. We hope to answer them when we construct and analyse data from the other two locations.

While at this stage it is premature to suggest any specific steps that IHEIs and other multicultural learning environments might take to encourage social and technological networking and PLN building among international students and other members of learning communities, some tentative recommendations are presented in the following section.

5. RECOMMENDATIONS

This paper presents partial findings of an ongoing four-country based study; therefore, any definitely recommendations might be inappropriate. Nevertheless, even now, there are clear indications that HEIs can take certain steps to help students create social capital and engage in collaborative knowledge creation.

First, despite a wide-spread belief that the members of the millennium generation were born as digital natives, students appear to lack academic research and information evaluation skills. Academic learning and research skills, including the online presence, portfolio building, social and professional networking, can be taught and practiced in HEIs and this would also improve students' digital research and networking skills.

Second, in personal social networking and social media driven one do not substitute, but complement each other, HEIs should create and maintain physical social spaced on campus and organize not only academic and professional, but also social and entertainment events to encourage social and professional networking. To maximize the effectiveness of such events, a special effort must be made to include the whole academic community.

Finally, as networking is a valuable professional skill which many students lack, HEIs should prepare students for future academic and professional careers by providing training in networking, both in real life and on social media.

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