Changes to Toyo University Students' Perceptions of Their Cultural Identities After the Great East Japan Earthquake

小 川 エリナ

（Erina Ogawa）

Changes to Toyo University Students' Perceptions of Their Cultural Identities After the Great East Japan Earthquake

Erina Ogawa

Abstract

All people have multiple identifications with different cultural groups (Sen, 2006). This research aims to provide insight into the cultural identities of Toyo University students, as well as into effects the Great East Japan Earthquake may have had on these identities.　Findings are compared with those of students from Surugadai University, who also took part in this research project.　The results indicate that, compared to before the earthquake, Toyo University students feel less affiliation to Toyo University after the disaster.　They also relate less to being from their particular faculty, their academic year, and their high school of graduation.　Meanwhile, Surugadai University students show the opposite trend, with the exception of their identification of being graduates from their respective high schools.　In contrast to students from Toyo University, Surugadai University students' bonds towards their faculties, academic year groups, and university have all strengthened after March 11, 2011.　It appears that the ties Toyo University students have to being students of Toyo University have weakened following the Great East Japan Earthquake, and that this phenomenon is not universal amongst all Japanese universities.

1. Introduction

　　What are the cultural identities of Toyo University students and how have these identities changed following the devastation of the events of March 11, 2011? To answer this question, we first must understand that every person has multiple cultural identities.　An example of how one individual has multiple cultural identities is provided by Economics Nobel Prize winner Amartya Sen　(2006) in his highly acclaimed book *Identity and Violence*:

　　There are a great variety of categories to which we simultaneously belong.　I can be, at the same time, an Asian, an Indian citizen, a Bengali with Bangladeshi ancestry, an American or British resident, an economist, a dabbler in philosophy, an author, a Sanskritist, a strong believer in secularism and democracy, a man, a feminist, a heterosexual, a defender of gay and lesbian rights, with a nonreligious lifestyle, from a Hindu background, a non-Brahmin, and a nonbeliever in an

afterlife (and also, in case the question is asked, a nonbeliever in a "before-life" as well). This is just a small sample of diverse categories to each of which I may simultaneously belong" (p. 19).

The need to recognize the fact that all individuals have multiple cultural identities is expressed by many scholars, including Omoniyi (2006, p. 30) and Valentine (2009, p.577). Further, it is now apparent that to be successful in today's global environment, an understanding of cultural identities is essential. Livermore (2011), in his book *The Cultural Intelligence Difference*, explains that Cultural Intelligence (or CQ) refers to the ability to function in a variety of contexts. In fact, he claims that "the number one predictor of your success in today's borderless world is not your IQ, not your resume, and not even your expertise. It's your CQ" (p. xiii).

Now that we have a basic understanding of what cultural identities are and an idea of their importance to our students, who will likely graduate into a global society and develop multiple cultural identities in this society, let us be aware of how an event such as the Great East Japan Earthquake could affect their cultural identities and change the identification they have with each of their cultural groups. Mark Warschauer provides an example of such a shift in a young person's cultural identification patterns when he writes of how his family's babysitter was stranded for six nights in his Tokyo apartment due to transportation disruptions after the earthquake. After spending the first night alone in a spare bedroom, the babysitter spent the remaining five nights huddled together in one room with everyone in the family (Sherriff, 2011, p. 66). Her change in mindset from wanting to sleep alone to wanting to sleep with her employer's family indicates that her cultural identifications with the family adjusted after the earthquake. Without interviewing her personally, it is difficult to ascertain how much of this change was temporary due to the state of emergency at the time and how much will be long-lasting. However, it is not hard to believe that her way of viewing and relating to this family has changed since the earthquake, and her bonds with them have strengthened. Likewise, it is predictable that our students have similarly experienced shifts in their cultural bearings.

The events of March 11, 2011, have probably influenced our students in a variety of ways. One such way is that they can no longer count on things they had previously taken for granted. For example, many will likely have experienced a disruption in essential goods and services, as illustrated in the following example from Yoko Kobayashi of Abiko in Chiba, "I'm experiencing for the first time empty shelves at supermarkets and gasoline stations with no gasoline … There is a lack of electricity …. I pray for a quick recovery as soon as possible, and that we never have a disaster as great as this again" (Sherriff, p. 72).

In addition, there is the possible threat to their health of nuclear contamination. Approximately six months after the catastrophe, concerns over radiation reaching Tokyo have not relented. According to the Japan Times Special Report (2011), "the level of radioactive iodine detected in seawater near Fukushima No. 1 Nuclear Power Plant was 1,250 times above the maximum level allowable, the Nuclear and Industrial Safety Agency said on March 26, suggesting contamination from the reactors was spreading" (p. 33). Understandably, this reality created a sense of uncertainty amongst many people living in Tokyo: "I live in Tokyo. As of the morning of March 19th, the incessant aftershocks have abated somewhat, and the fear now is of course the still-burning power plants. In the past week, we have all scrambled to become nuclear radiation experts…. I have never felt so helpless about something that might have such a profound effect on the well being of my family, friends, my compatriots and myself. Of course I'm terrified" (Sherriff, p. 82).

Such traumatic memories, experienced by so many people around us, are also likely to affect the mindset of our students. This sense of uncertainty could have in part been alleviated by better communication to the public by TEPCO (the company in charge of the power plants in question) and the national government. Crisis Communications expert Peter Sandman wrote on his website on March 14th that the situation at Fukushima appeared to be getting worse and worse when a good communication strategy would have been to prepare the public for a certain level of environmental nuclear contamination and then assure the public that the development of the situation was no worse than that they had been prepared for. He also criticizes the communication before the disaster of an over-optimist nuclear industry, quoting from the World Nuclear Association website which was last updated in January 2011, "Even for a nuclear plant situated very close to sea level, the robust sealed containment structure around the reactor itself would prevent any damage to the nuclear part from a tsunami, though other parts of the plant might be damaged. No radiological hazard would be likely" (Sandman, 2011, website). Obviously, the nuclear experts were soon to be proved wrong. Such a serious mistake is likely to affect the way people in Japan view not only the nuclear industry, but also many other aspects of the world around us. In fact, it is likely to affect our very identities, and this includes those of our students.

It is useful to note that Japanese history has shown a pattern of major changes in society coinciding with major earthquakes (Funabashi, 2011, p.8): from the opening of Japan in 1854 and the Ansei Great Earthquakes of the same and the following years; the loss of the Anglo-Japanese Alliance in 1922 and the Great Kanto Earthquake of 1923; and the commonly referred to beginning of 'Japan's lost era' due to the dramatic economic changes after the 'Bubble Era' (Yamada, 2011, p.177) and the Great Hanshin Earthquake in 1995. As Reid (2011) puts it,

"What kind of a nation will emerge from this transformative event remains a matter of intense debate" (p.28).

A key to providing an answer to this question lies in the professional opinions of experts on Japan, such as Delvin Stewart [i] who emphasizes the important role that Japanese universities have to play in building tomorrow's Japanese society (Stewart, 2011, p.184).   Since it is our students and their contemporaries who will most likely play major roles in determining the future of Japanese society, they are a useful target group for research regarding cultural identity shifts after the traumatic events of March 11, 2011.   Therefore, this article aims to answer two main research questions: What cultural identifications do Toyo University students have as Toyo University students? and How have these identities been affected by the Great East Japan Earthquake?

2. Methods

2.1 Participants

The participants for this study are 941 university students from Toyo University in Tokyo and Surugadai University in Saitama. Six students were removed from the analysis of the Cultural Identification Questionnaire because they failed to complete it, leaving a total of 935 usable questionnaires.   Of this total, 75 were obtained from three faculties of Surugadai University in Saitama, with 26 from the Contemporary Cultures Faculty, 25 from the Media Faculty, and 24 from the Law Faculty.   The remaining participants are from three faculties at Toyo University, with 689 students from the Business Administration Faculty, 104 students from the Law Faculty, and 64 students from the Economics Faculty taking part in this research project.

2.2 Instrument

The Cultural Identification Questionnaire (see Appendix) is in Japanese and on a single A4 sheet of paper with a demographic section at the top, followed by two columns of lists of 10[ii] possible cultural identifications thought to be applicable to most of the respondents and useful for analysis for this research project.   The cultural identities were selected on the basis of being able to create a continuum that could be analyzed. In other words, the cultural identity of Japanese was thought to be the easiest to endorse and thus would define one end of the continuum, whereas, on the other end of the continuum, English speaker was thought to be the most difficult cultural identity to endorse for Japanese university students.   Students were required to rank these 10 possible cultural identifications before and after the Tohoku Kanto Earthquake[iii] on March 11, 2011. The column on the left was designated as being for cultural identification rankings before the earthquake, and the column on the right designated for ranking of the

same cultural identities after the disaster.

2.3 Procedures

Student responses were collected from these students with the cooperation of 14 university lecturers from the Business Administration, Law, and Economics faculties of Toyo University, as well as one lecturer from Surugadai University, all of who administered the questionnaires in their classes. The students were informed about the general purpose of the study and followed the written instructions in Japanese on the questionnaire form itself. The questionnaire took approximately ten to fifteen minutes to complete.

2.4 Analysis

The design of the questionnaire was such that it provided rank-order data. Rank-order data, however, cannot be used to specify the true differences between students (Hays, 1988) because the distances between students on a continuum of cultural identification cannot be assumed to be interval. In order to achieve an interval level of measurement, rank-order data must be first transformed into interval data using a statistical procedure such as a Rasch analysis (Wright & Stone, 1979).

The students' responses to the Cultural Identification Questionnaire were analyzed using the Rasch partial credit model (Andrich, 1978) implemented by Winsteps (Linacre, 2004b). The Rasch partial credit model estimates each cultural identity separately and thus creates individual ranking scales for each cultural identity. The students' responses to the Cultural Identification Questionnaire are reported in logits, which in the context of this study measures the degree of difficulty students' experienced in identifying with each of the cultural identities pre- and post-March 11, 2011, according to how they ranked them in each column of the questionnaire. The norm referenced choice of 0 logits represents the average level of difficulty that the students experienced ranking the different cultural identities. In other words, a cultural identity with a logit score below 0 logits means that students experienced little difficulty identifying themselves with that cultural identity. Conversely, cultural identities with a logit score above 0 logits means that students experienced more difficulty identifying themselves with that particular cultural identity.

3. Results
3.1 Overall differences pre- and post-March 11, 2011

First, the total data set was analyzed to discover the overall results. Table 1 shows the average level of difficulty all students surveyed had in identifying with being a student of their faculty, being a student in their academic year of study,

being a student of their university, and being a graduate of their high school. Please note that high identification is shown in negative figures, whereas low identification is shown in positive figures.

Table 1. Overall Differences Pre- and Post-March 11, 2011

	Pre	Post
XX Faculty	0.05	0.10
XX Year	0.08	0.12
XX University	-0.17	-0.11
XX High School Graduate	0.07	0.17

Students' cultural identification with their faculty went from being a slightly minor identification of 0.05 to a moderately minor identification of 0.10.   Likewise, their identification with being a student in their academic year and a graduate from their high school went from minor identifications of 0.08 and 0.07 respectively to moderately minor identifications of 0.12 and 0.17 respectively.

Conversely, identification with being a student from their university is strong both before and after the earthquake, as indicated by the negative figures. However, this identification weakened after the earthquake, from -0.17 to -0.11. Overall, students' identification in all four of these areas has decreased after the Great East Japan Earthquake, evident in the increase of all four numbers.

3.2 Overall differences pre- and post-March 11, 2011 by academic year

Next, the data was analyzed according to academic year of study.   Table 2 shows the average level of difficulty students in each academic year had in identifying with each cultural identity.   These levels are shown both before and after the Great East Japan Earthquake, for each academic year group.

Table 2. Overall Differences Pre- and Post-March 11, 2011 by Academic Year

	First Year		Second Year		Third Year		Fourth Year	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
XX Faculty	**0.06**	0.10	0.04	0.10	**-0.07**	0.10	**0.18**	0.06
XX Year	0.08	0.13	0.12	0.20	0.08	0.17	0.14	0.06
XX University	-0.17	-0.14	-0.17	-0.11	-0.17	-0.04	-0.03	-0.09
XX High School Graduate	**0.06**	0.16	**0.12**	0.16	**0.12**	0.20	**-0.16**	0.04

Bold font indicates a significant difference ($p < 0.01$) between the cultural identities between students of different years.

Generally, faculty identification is not particularly strong either before or after 3/11.   However, before the earthquake third year students had strong faculty identification, which disappeared after the disaster.   Fourth year students

showed particularly weak faculty identification before the earthquake, which changed to similar levels as students from other academic years afterwards.

Regarding the cultural identification with academic year of study, these indicators have gone from low identification to even lower. An exception to this trend is the 4th year student group, who identified more with being fourth year students after 3/11 than before. A possible explanation of this is provided in the Discussion section.

Pre-disaster, students demonstrated a strong identification with their university. This weakened post-disaster. Again, the exception to this is the fourth year student group, which did not have a particularly strong level of identification to start off with.

Identification with being a graduate of their particular high school has consistently dropped over all four groups. All bar one of the figures indicate weak alliances. The exception is a strong connection fourth year students felt to their high schools prior to the earthquake.

3.3 Overall differences pre- and post-March 11, 2011 by faculty

Finally, differences in responses were analyzed according to the three participating faculties of Toyo University and the three participating faculties of Surugadai University (grouped together for this analysis). Table 3 shows the average level of difficulty students had in identifying with each cultural identity, according to faculty[iv]. Three Toyo University students did not indicate their faculty on the questionnaire form and have been excluded from this analysis.

Students' identification with being students in their respective faculties varied across faculties. For Business Administration and Economics students, their slightly low identifications dropped to moderately low after the calamities. Law students, however, identified highly with being law students before the disaster and dropped down to the same moderately low score of 0.10 as both the Business Administration and Economics students. Conversely, Surugadai

Table 3. Overall Differences Pre- and Post-March 11, 2011 by Faculty
(Surugadai University Students by University)

	Business Administration		Economics		Law		Surugadai	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
XX Faculty	0.05	0.10	0.07	0.10	-0.06	0.10	0.18	0.06
XX Year	0.08	0.12	0.08	0.17	0.08	0.17	0.13	0.05
XX University	-0.17	-0.14	-0.15	-0.08	-0.17	-0.03	-0.03	-0.11
XX High School Graduate	0.07	0.17	0.12	0.17	0.13	0.21	-0.12	0.03

University students actually strengthened their identification from a rather low identification score of 0.18 before the earthquake to 0.06 after.

Toyo University students from all three faculties surveyed had the same low identification with their academic year – a score of 0.08. This identification weakened for all faculties to range between 0.12 and 0.17. Surugadai University students again showed the opposite trend of strengthening from a moderately weak identification of 0.13 to a slightly weak identification of 0.05.

Regarding university identification, Toyo University students demonstrated a high identification with being Toyo University students before the earthquake (ranging from -0.15 to -0.17). Although this identification has weakened, it has remained a strong identification at -0.08 for Economics, -0.03 for Law students, and especially for Business Administration students at -0.14. Again, Surugadai University students show the opposite trend as their identification with being Surugadai University students has strengthened after the disaster, from -0.03 to -0.13.

Before the earthquake, Toyo University students had moderately low identification with being graduates of the various high schools they graduated from. These identification figures dropped even further after the earthquake. Yet again, students from Surugadai University figures were very different to those of Toyo University students. However, this time the direction of the trend is the same but the range is different, from a moderately high identification score of -0.12 before the earthquake to a slightly low score of 0.03 after.

4. Discussion

Overall, students demonstrate a strong cultural identification with their university both before and after the Great East Japan Earthquake; whereas they have weak identifications with being from their faculty, academic year, and high school they graduated from, both before and after the disaster. However, identification weakened after the earthquake regarding all four student identifications surveyed, namely: faculty, academic year, university, and high school. This signifies that students identify less with being students now after the earthquake, than before it. A possible explanation of this is found in currently unpublished research data (Ogawa, 2011) which shows that these students now identify more with being from their Japanese region of origin, particularly those students from the Tohoku region.

Dividing these figures according to academic year reveals a number of abnormalities. Most of these relate to figures before 3/11, such as third year students showing strong faculty identification, and fourth year students having weak faculty identification yet strong high school ties. As for the reasons for these strong faculty identifications of third year students and weak ones of fourth

year students, and particularly why fourth year students identified strongly with their high schools of graduation before the earthquake, this researcher is at a loss for explanation.   Whatever the reasons for the discrepancies between the academic years regarding high school and faculty identifications before the earthquake, they no longer exist after the earthquake.   In fact, there appears to have been a balancing effect after 3/11.   One abnormality, however, relates to after the earthquake.   The fourth year students were the only group to show a stronger identification with their academic year after the earthquake.   This is possibly due to the reality of being a fourth year student having set in, which most likely would have happened irrespective of the disaster.

Clear trends become evident when dividing the data between faculty groups, or more tellingly, universities.   Apart from Law faculty students' high identification with their faculty before the disaster, and Business Administration students' still moderately high identification with the university after the earthquake, generally Toyo University students' cultural identities moved in one direction and Surugadai University students' in the other.   The exception to this is students' ties to the high schools they graduated from.   Although high school ties of students from both universities weakened after the earthquake, Surugadai University students started off with strong ties before the disaster.   High school connections aside, Toyo University students have consistently weakened their bonds to their faculties, academic years, and university.   Conversely, Surugadai University students display stronger identifications in all of these areas after the Great East Japan Earthquake.

5. Conclusion

As indicated above, Toyo University students identify less with being students of Toyo University after the earthquake; whereas Surugadai University students display stronger identification with their university after the disaster.   One possible explanation for this contrast between the universities would be if the responses to the disaster by Surugadai and Toyo universities were very different and if they have affected the tendencies of their students to feel stronger or weaker ties to their universities.   Whether this is a good or a bad shift in cultural identification patterns depends on your point of view.   Is it important for Toyo University students to feel strongly identified with being Toyo University students?   If so, what these results mean for Toyo University and what can or should be done about it is an area of research requiring urgent attention.   Or, is it more important that our students' cultural identities - while maintaining a certain level of positive identification with Toyo University - are grounded in more diverse areas, such as the various regions of Japan and the global community?   It is this second question which spurs this researcher on to further study.

Notes

i   Delvin Stewart is a senior director at the Japan Society in New York City and a Lecturer on Asia at New York University.

ii   Four of those ten cultural identifications were analyzed for this discussion.

iii The Great East Japan Earthquake has commonly been referred to as the Tohoku Kanto Earthquake.

iv Please note that Surugadai University students are grouped into one group due to a low number of participants from each faculty.

References

Andrich, D. (1978). A rating formulation for ordered response categories. *Psychometrika, 43*, 561-573.

Funabashi, Y. 2011. March 11 – Japan's Zero Hour. In McKinsey & Company *Reimagining Japan: The quest for a future that works.* VIZ Media: San Francisco

Hays, W. (1988). *Statistics* (4th ed.). Fort Worth, TX: Holt Rinehart and Winston.

Linacre, J. (2004). WINSTEPS Rasch measurement computer program (Version 3.51). Chicago: Winsteps.com.

Livermore, D. (2011). The Cultural Intelligence Difference. Amacom: New York

Ogawa, E. (unpublished). Shifts in Japanese University Students' Perceptions of Their Cultural Identities Following the Great East Japan Earthquake.

Omoniyi, T. (2006). 'Hierarchy of identities' in T. Omoniyi and G. White (eds.).   *The Sociolinguistics of Identity.* London: Continuum

Reid, T. (2011). The Power of Gaman. In McKinsey & Company *Reimagining Japan: The quest for a future that works.* VIZ Media: San Francisco

Sandman, P. (March 14, 2011). Unempathic over-reassurance re Japan's nuclear power plants. www.psandman.com/gst2011.htm

Sen, A. (2006). Identity and Violence. Norton: New York

Sherriff, P. (2011). 2:46 Aftershocks: Stories from the Japan Earthquake

Stewart, D. (2011). Is Japan a Vampire Finch? In McKinsey & Company *Reimagining*

Japan: The quest for a future that works. VIZ Media: San Francisco

The Japan Times. (2011). 3.11: A chronicle of events following the Great East Japan Earthquake. The Japan Times: Tokyo

Valentine, T. (2009). World Englishes and Gender Identities in B. Kachru, Y. Kachru, and C. Nelson. (ed.s) *The Handbook of World Englishes.* Blackwell: West Sussex

Wright, B., & Stone, M. (1979). *Best test design: Rasch measurement.* Chicago: Mesa Press.

Yamada, M. 2011. The Young and the Hopeless. In McKinsey & Company *Reimagining Japan: The quest for a future that works.* VIZ Media: San Francisco

Appendix: Questionnaire

東北関東大震災：大学生の文化的アイデンティティーへの影響

学部: _____ 学年: 1ˢᵗ / 2ⁿᵈ / 3ʳᵈ / 4ᵗʰ 性別: **男性 / 女性**

出身地方: **北海道 東北 関東 中部 近畿 中国 四国 九州と沖縄 日本以外**

東北関東大震災が大学生の文化的アイデンティティーへどのような影響を与えたかについて調べるアンケートです。下記の文化的アイデンティティーを今年の３月１１日の前の自分と後の自分に分けて、「自分が○○であること」に重要性を感じる順に１から１０の番号を記入して下さい。すべての文化的アイデンティティーに順をつけてください。

<u>２０１１年３月１１日以前</u>　　　　　　<u>２０１１年３月１１日以後</u>

_____ ○○学部の学生　　　　　_____ ○○学部の学生

_____ ○○年生（学年）　　　　_____ ○○年生（学年）

_____ ○○大学の学生　　　　　_____ ○○大学の学生

_____ ○○高校の卒業生　　　　_____ ○○高校の卒業生

_____ ○○地方出身　　　　　　_____ ○○地方出身

_____ 男性／女性　　　　　　　_____ 男性／女性

_____ 日本人　　　　　　　　　_____ 日本人

_____ 国際人　　　　　　　　　_____ 国際人

_____ 日本語を話す人　　　　　_____ 日本語を話す人

_____ 英語を話す人　　　　　　_____ 英語を話す人

このデータが研究の目的に使われるのを認めます。

サイン: _____　　　２０１１年____月____日

ご協力、ありがとうございました。東洋大学　経営学部　教師　小川エリナ erina@toyo.jp

（2011年９月12日受理）