



Exploring International Students' Perceptions of the Value of New Zealand Postgraduate Education

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Abstract

This study examines international students' perceptions of the value of postgraduate studies in New Zealand. Perceived values are evaluated from the following perspectives: motivational factors for coming to study in New Zealand, how students engage to achieve their goals, how they were supported by their institutions of learning, and their overall perceptions of the value of New Zealand postgraduate education. We evaluate both the personal and professional value that students receive from postgraduate institutions. Findings indicate that students' professional outcomes are relatively lower than their expected professional development goals. Though students' personal goal outcomes were relatively higher than they anticipated. Study identifies and discusses areas of institutional support needed for students to realize and achieve goals. Finding indicated that practical experience acquired by students were relatively lower than their expectation. However, international students require more assistance in the acquisition of practical experience. Suggestions were made to redeem this negative trend.

Subject Areas

Sociology

Keywords

Postgraduate, Education, International Students, Goal Engagement, Perceived Value of Education

1. Introduction

Most developed as well as some developing countries greatly benefit from inter-

national education not only financially, but economically, culturally, and socially. International education is often the sector yielding the highest revenue for the government (ICEF Monitor, 2018) [1]. In New Zealand, the international education industry is the fourth largest export sector, contributing \$5.1 billion to the economy in 2018 (Hipkins, 2018) [2]. Also, Australia, the United States and the United Kingdom are the largest providers of international education in the English-speaking world. As well as the revenue realised from international education, these students fill up employment shortages and help in economic growth and development (Kalafatelis, Bonnaire & Alliston, 2018) [3].

Contrary to these inputs from international students, Breuning (2007) [4] is of the opinion that the support given to these students is not enough or, in some cases inappropriate. International students are challenged from the perspective of language, culture, and social background. This often creates problems for them when navigating their academic career positively, especially at the beginning of their studies. At this stage they need a high level of personal relationship with both academic and non-academic staff; most especially, in improving their English language (if they are deficient in it) because it is the only medium of communication as far as their studies are concerned. However, overcoming cultural and language barriers may not be a problem of some international students' base on their country of origin or exposure. It will be easier for students coming from western world or having experienced western culture. This would contribute to their academic success and enable them to make quick social adjustment (Yeh & Inose, 2003) [5]. It may not be the same for students from other parts of the world with little or no interaction with western culture.

This study, with 163 participants, examines the motivation (goals) of international students coming to New Zealand to pursue postgraduate education; how they engage to reach their goals, how they perceive the institutional support given to them and their perceptions of the value of New Zealand postgraduate education. This study is structured into an introductory chapter followed by a literature review, research methods, results, discussion and conclusions and implications.

2. Literature Review

The process of acquiring international education commences when people and resources are moved across national boundaries for knowledge acquisition. This process includes foreign nationals moving for educational studies to another country (international students). It is also involved home countries delivering educational products and services overseas as well as domestic students travelling overseas, for educational purposes example New Zealanders studying in Canada.

According to New Zealand Government (2018) [6] international students constitute students from other countries coming to New Zealand to study among New Zealanders, it also includes New Zealanders travelling to other parts

of the globe to gain overseas experience. It could also be individuals or group anywhere engaged in learning via online through New Zealand products and approaches. According to William Paterson University (n.d) [7], international students are individuals enrolled for credit in an accredited higher education institution in the United State with a temporary visa (not an immigrant, permanent resident with an I-51 or Green Card, an undocumented immigrant, or a refugee). Similarly, Statistics Canada (2010) [8] defines international students as non-Canadian learners without “permanent resident” status but needing to obtain authority from the Canadian government to enter Canada for educational purposes. International students are those coming to Canada expressly to pursue their education. However, an international student in the context of this study is defined as an individual who comes to New Zealand having obtained the authority (Student visa) to pursue postgraduate education.

The international education industry in New Zealand is categorised the fourth largest export earner. It comprises six sectors (university, private training establishments [PTE]; institutes of technology and polytechnics; English language schools; schools and offshore education products and service sectors (ICEF Monitor, 2018) [9]. To bring coherence to these sectors the government established Education New Zealand (ENZ) in 2011 to provide insights and intelligence reports on the sector to government and industry practitioners, and to work closely with government agencies to create a conducive environment to grow international education as well as the members of international students (Think New, 2017) [10]. Since the inception of ENZ in 2011 the growth of international education has been on the positive as analysed below.

Kalafatelis, Bonnaire and Alliston (2018) [3] summarised and estimated the economic value of the New Zealand international education sector as follows: it generated \$4.5 billion in 2016 compared with \$4.3 billion in 2015; the sector supported more than 33,000 jobs in New Zealand in 2016; 132,000 international students enrolled in 2016 representing a 6% (7245) increase compared with 2015 (Education New Zealand, 2017). The same year 21% of international students studied at universities, followed by English language students [ELS] and unfunded PTEs with 19% respectively. Comparatively by value, universities account for 37% being the largest in tuition income from overseas students, ITPs 17%, secondary schools 14%, PTEs (funded) 12%, and PTEs (unfunded) 12%. In 2016, Chinese and Indian students made up 50% of international student enrolment in New Zealand (China 29% and Indian 21%). Also, 63% of international students who enrolled in 2016, studied in Auckland (Education New Zealand, 2016) [11].

3. Overview of New Zealand's International Student Enrolment 2013-2017

There has been progressive increase in the number of international students' enrolments from 2013 to 2016 in New Zealand schools (**Figure 1**). In 2017, in-

ternational enrolment amounted to just over 106,000 students representing a 7% decline compare to same period in 2016. The drop was mostly influenced by a 29% decrease in Indian student enrolments, and a 30% drop in registrations for unfunded private training centres because they did not receive government funding. There was also a noticeable decline in the registration of Indian and Philippine students at PTE schools. Though same year university enrolments rose by 7%, resulting from increased enrolment in number of post-secondary students from both China and India.

While there was a drop in Indian students' enrolment, New Zealand saw little increase in student enrolment from Colombia, Chile, Indonesia, and Vietnam except the US that was substantial. However, **Figure 2** indicated that as at 2017 China maintain the lead followed by India in the number of international students' enrolment in New Zealand educational institutions.

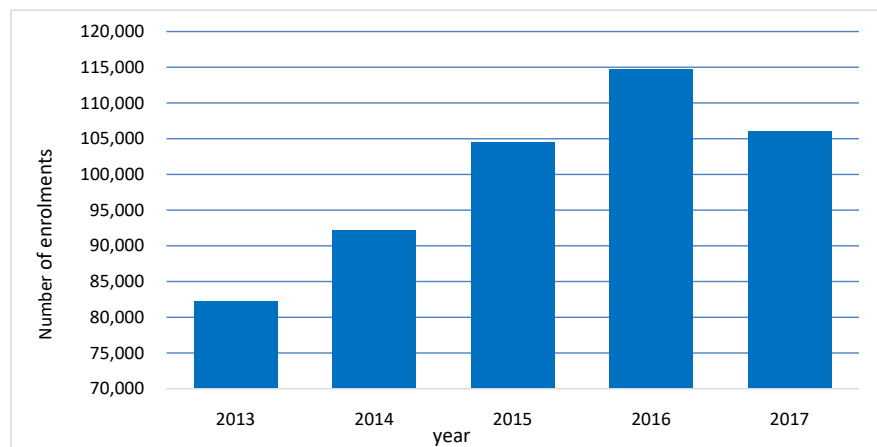


Figure 1. Total international enrolment in New Zealand, year-to-date August 2013-2017. Source: ICEF Monitor [9].

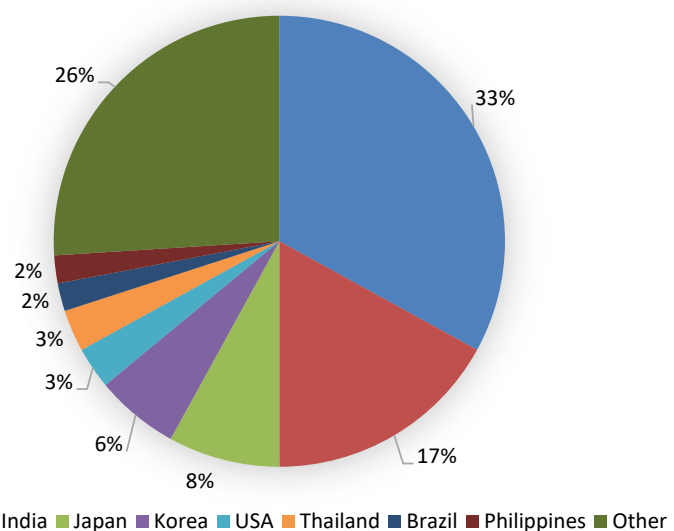


Figure 2. Top eight sending markets for New Zealand August 2013-2017. Source: ICEF Monitor [9].

The value of international education to New Zealand is visible in the following areas: in generating economic benefit to New Zealand as well as in the regions; supporting the tourism sector; contributing to the increase in international trade, creating links for investment; improving education in New Zealand; increasing skills and the productive capacity of the New Zealand workforce; creating cultural awareness, appreciation and diversity (Education New Zealand, 2018) [12]. Economic value is one main issue in terms of international education. However, the greatest long-term benefit of international education is sharing the culture.

Sharing New Zealand culture and understanding of other cultures are very important to promote global citizenship and strategies for achieving this includes shared meals, cultural events, academic and sports activities (Education New Zealand, 2018) [12]. International students bring cultural diversity, increasing research potential while encouraging Kiwis to understand foreign languages and cultures. This motivates New Zealand citizens to appreciate leadership role. According to Jacinda Arden, New Zealand Prime Minister “Global citizenship is the point at which we make sure citizens feel engaged in our position in the world.” (Education New Zealand, p. 24 2018) [12].

In view of the importance of international education to New Zealand economy and for this sector to continue flourishing, in 2018 the government adopted an international educational Strategy 2018-2030 for New Zealand. It aims to achieve the following:

1) excellent education and student experience, this will be done through provision of high-quality education and create an enabling environment that ensures foreign students feel welcome and safe.

2) sustainable growth, New Zealand government and its educational agencies will continue to provide high-quality international education by developing capabilities to international education service providers, by creating diverse education products and services that cater to variety of markets and ensure that every region of New Zealand benefit from international education.

3) global citizens, this will be done by ensuring all students are given the opportunity to develop their capabilities, Knowledge, and skills, enabling them to access global opportunities, through various networks and we will use this as platform for New Zealanders to recognise, embrace and realise the importance of education for international students at home and abroad (Education New Zealand, 2018) [12].

4. Comparative Analysis of the Value of International Education

According to Kalafatelis, Bonnaire and Alliston (2018) [3] international students in their host countries contribute greatly to job creation; filling workforce shortages; contribute to the development of a knowledge economy; provide a platform for acquisition of intercultural experiences and supporting host coun-

tries as much as they can.

The international education sector is one of Australia's largest export industries and it contributed AUD\$16.9 billion to the Australian economy in 2014-2015 (about 1% of Australian GDP) (Deloitte Access Economics, 2016) [13]. During the same period, international students at US colleges and universities contributed USD\$32.8 billion to the US economy (Institute of International Education, 2016) [14]. National Association for Foreign Student Affairs [NAFSA] (2017) [15] found that international students at US colleges and universities supported 400,812 jobs. International students in Canada contributed CAD\$9.3 billion to the Canadian GDP and their annual spending supported 122,700 jobs in 2014 (Roslyn Kunin and Associates, 2016) [16]. Similarly, in 2014-2015 international students contributed £13.8 billion to the UK's GDP with £10.8 billion as export earning to UK (Universities UK, 2017) [17]. Oxford Economics (2012) [18] found that international students made positive contributions to Exeter and London as 106,759 international students supported 37,000 jobs (London & Partners, 2015) [19]. Above information proved that fees paid by international students funds jobs at colleges and universities, as well as their living expenses create jobs and support the housing sector, their spending also support other sectors such as food and dining; entertainment, retail, travel; telecommunications; transportation; and health and insurance (Baumgartner, 2020) [20].

According to Meur, Chong and Nisbet (2014) [21] it is obvious that New Zealand's universities, other higher institutions and government heavily rely on international students for revenue. They were able to realise this because teaching and learning is done in English language which is the most influential of academia and business globally (The Startup, Oct 5, 2018) [22]. However, Meur *et al.* (2014) [21] argues that international student market fluctuates due poor regulation and the strength of New Zealand dollar. Despite this most New Zealand institutions still cross their fingers and hoping the best will come leading most of them in precarious situation limiting their long run sustainability. Similarly, Australia government (2017) [23] agreed that international student enrolments and their engagement in educational training and research makes significant economic, social, and cultural contributions to individual communities and Australia as a whole. The government admits that international student education is highly competitive that for Australia to continue to maintain strong presence it must implement transformation of education in the context of digital revolution. The future depends on its capability to break down the traditional silos, diversify market and education offerings, collaboratively delivering educational services, training, and research beyond existing delivering modes. However, the researchers believe all higher institutions and countries involve in international education particularly enrolling international student should learn a great lesson from the current Covid-19 epidemic and its consequential effects on international education. It is obvious that when there is epidemic with high infection rate and death borders will be closed, revenue from this sector to higher

institution and government will drop with serious multiplier effect. Such is the case with education export countries like New Zealand, Australia, USA, Canada, and UK. We opine that nearest solution to this type of scenario is for school to build capacity (with government help where needed) to deliver online classes to international student wherever they are. This is the saving grace for most New Zealand top higher institutions.

We argue that delivering online classes to international student in their home countries will help these countries reduce their excessive reliance on face-to-face international student import. Though revenue may be very low initially but there is probability for revenue to increase in the long run if well manages. However, the multiplier effect of online international education on the economy will be low because the students will be limited to contribute to economic activities and inject new fund to the economy through spending.

From this brief analysis, we believe that this sector will continue to boom because: it is a policy in some countries for students to learn a second language, and English language is the most preferred (particularly in Argentina, China, and the Czech Republic). English has become a global language most used in international business (globalisation), thus it become a necessity (Manzo & Zehr, 2006) [24]. So, international student often uses one stone to kill two birds, by coming to study courses taught in English which will aid them to learn and speak English, while graduating from their choice of courses. It is obvious that the international education sector in these countries will continue to be revenue driven. There is likely to be an increasing demand for it. As a result, it is imperative for these countries to strategize ways to improve the sector.

Despite the objectives and efforts of international education, students often face a few challenges in their attempts to acquire it. According to Unruh (n.d) [25], international students face challenges of acculturation, poor English language competency, social and academic integration and sometimes discrimination. Similarly, Crockett and Hays (2011) [26] argue that international students face many challenges among which are cultural, linguistic, social, and educational differences between their home and host countries. Contrary to this, Urban and Palmer (2016) [27] conclude that international students' challenges are mostly personal, relative to their background and experiences. However, international students must be prepared to overcome these identified challenges if they are to make headway in their studies, especially when such challenges are personal. While the will and the wish must come from the concerned student, the institution of learning has a major role to ensure these problems are resolved. Institutions must provide appropriate support to help challenged students to integrate and acculturate and must protect them from discrimination. As well as academic support, these students also need non-academic support for example meeting immigration demands, counselling and how to access opportunities for positive social interaction (Rosser, Hermsen, Mamiseishvili, & Wood, 2007) [28].

Apart from supporting students in these processes, the institution concerned should devise means to understand students' personal and professional needs so that it can create the support needed for students to attain their desired goals. However, existing research has greatly contributed to international education in New Zealand (Kalafatelis, Bonnaire & Alliston, 2018 [3]; Butcher & Mcgrath, 2004 [29]; Hipkins, 2018; [2] Kalafatelis, Bonnaire & Alliston, 2018) [3]. These studies have neither highlighted not discussed international students' thoughts about New Zealand education. So, to bridge the gap in the literature and to add to existing knowledge, this study evaluates international students' perceptions of the value of New Zealand postgraduate education. In view of the above discussion, the following research questions have been formulated:

What value does New Zealand postgraduate education add to international students personally and professionally?

- 1) *what are international students' personal and professional goals when choosing to study in New Zealand?*
- 2) *how do international students engage in the achievement of their personal and professional goals?*
- 3) *how do international students perceive the support they receive from New Zealand higher education?*
- 4) *how do international students perceive the personal and professional value of their New Zealand postgraduate education experience?*

Source: Urban and Palmer (2016) [27].

5. Research Method

This study adopts a quantitative method in gathering information to answer the study's research questions. Omisakin (2016) [30] suggested a qualitative method (interpretive paradigm) as the best way to comprehend people's experiences and perceptions, because it enables participants to relay their experiences, perceptions, and stories on a face-to-face basis through interviews. However, the qualitative method is limited, as it does not allow access to a high number of expected participants. New Zealand is one of the hubs for international education, with many students coming to school from countries throughout the world. According to Education Counts (Feb 2019) [31] 118,300 international students were enrolled in New Zealand between 2003 and 2017. In the researcher's opinion, the best method for the study to gain the widest range of international students' perceptions of motivations for coming to New Zealand, how they engaged to achieve their goals; support given by institutions and the value of New Zealand postgraduate education, would be the quantitative method because of its numerical strength.

The study was carried out in Auckland, the most populated region with the highest number of colleges and universities in New Zealand. This is justified by the findings of Education New Zealand (2016) [11] that 63% of all international student enrolments occur in Auckland.

The study used convenience sampling technique to collect information from postgraduate students from three universities, three polytechnics and five colleges running postgraduate courses for international students in Auckland. Although it may be argued that the convenience sample is not a good representation of the research population (Creswell 2008) [32] the researcher adopted it because of easy availability of data, time and cost saving and above all provision of a study platform to valuable information to answer the research questions.

Potential participants were invited through email, messages, international students' network, and other lecturers' contacts. These same channels were used to facilitate a quick return of the completed survey. Participation was made voluntary, and the study adopted a 5 Likert scale as the survey instrument to access needed information from participants. Participants were asked to answer 51 questions categorised into the following: motivation to come and study in New Zealand; engagement to attain planned educational goal; perceived support by the institution; students' perception of the value of New Zealand postgraduate education. However, research and survey questions were adapted from Urban and Palmer (2016) [27] but modified to suit the objective of the research. Descriptive statistics using frequencies, means and standard deviations were used to analyse data collected from participants.

6. Results

Information was obtained from 163 postgraduate students from 11 tertiary institutions running postgraduate courses for international students. The demographic details of participants are summarised and given in **Table 1**.

6.1. Respondents

The participants' ages range from 20 to 50 years; 81 participants between the ages of 20 - 29 represented 49.69% of the total respondents; 76 participants were in the age bracket of 30 - 39 amounting to 46.6% of participants, while 6 (3.68%) participants were aged between 40 - 49. 59 (36.2%) participants were male while, 104 participants were female representing 63.8%.

6.2. Analysis and Findings on International Students' Decision to Study in New Zealand

Table 2 highlights order of ranks based on means of reasons (motivations) of international students coming to pursue their postgraduate education in New Zealand. The four highest reasons (motivators) for international students coming to New Zealand were related to getting practical experience ($M = 4.06$, $SD = 0.904$); learning new ways of thinking and acting in their field ($M = 3.98$, $SD = 0.949$); learning to work in a cross-cultural environment ($M = 3.96$, $SD = 0.881$); acquiring good quality education ($M = 3.87$, $SD = 1.057$). The least motivational factors for international students coming to New Zealand was keeping his or her family happy ($M = 2.46$, $SD = 1.292$).

Table 1. Participants' demography.

	Male	Female	Total
Frequency	59	104	163
Percent	36.2	63.8	100
Age distribution	20 - 29 years	30 - 39 years	40 - 49 years
Percentage in total population	49.69%	46.6%	3.68%

Table 2. Reasons for studying in the New Zealand.

Reason to study in New Zealand to:	Mean	SD
Acquire good quality education	3.87	1.057
Learn new ways of thinking and acting in my field	3.98	0.949
Get practical experience	4.06	0.904
Learn to work in a cross-cultural environment	3.96	0.881
Meet professionals in my field	3.48	1.068
Become more independent	3.56	1.248
Improve my oral and spoken English	3.19	1.372
Learn about different cultural viewpoints	3.70	0.963
Build intercultural friendships	3.39	1.156
Learn to adjust to new social and cultural customs	3.58	1.116
Understand myself better	3.03	1.363
Keep my family happy	2.46	1.292

Likert scale: 1 = Not important at all, 2 = Not very important, 3 = somewhat important, 4 = Very important and 5 = Extremely important. SD = Standard Deviation. Source questions in **Table 2**: Urban and Palmer (2016) [27].

6.3. Percentage Distributions of Participants' Responses to Survey Question on Reasons for Coming to Study in New Zealand

This section presents a brief percentage analysis on how research participants responded to the survey questions on reasons for coming to New Zealand for further studies. The intention here was to identify how they responded in order of importance.

Figure 3 indicates that 1.8% of all the participants' responses point to coming to New Zealand to acquire quality education is not very important to them, while 38.7% responses show that acquiring good quality education was the most important reason for their coming to New Zealand to pursue their post-secondary education. The difference between 1.8% and 38.7% is shared between scales 2 to 4. The percentage response of coming to New Zealand for learning modern thinking when working in their field indicated 0.6% while 41.7% indicated this as very important reason for their coming to New Zealand to study.

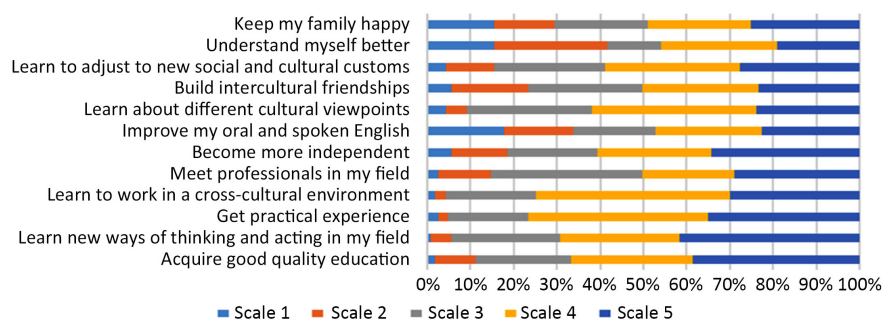


Figure 3. Percentage distributions of participants' responses to survey question on reasons for coming to study in New Zealand.

On the other hand, the percentage responses to the survey item “keep my family happy” indicate 15.3% felt it is not at all a reason for coming to New Zealand while 25.2% conclude that it was extremely important reason for their coming to New Zealand. To understand myself better had a fair spread in terms of percentage of participants' responses: 15.3% indicating not at all a reason and 19% point to it as a very important reason.

6.4. Analysis and Findings on Students' Engagement to Achieve Goals

Information collected from participants indicated that they frequently engaged in the following four activities to achieve their proposed goals for coming to school in New Zealand: asking questions and classroom discussions (Mean = 3.79, SD = 1.074); asking lecturers/advisors about their challenges in academic or language (Mean = 3.58, SD = 1.127); talking about career plans with lecturers/advisor (Mean = 3.55, SD = 1.203); making friends with other int'l students in and out of the class (Mean = 3.43, SD = 0.949).

The least four frequent activities were asking peer students for help on academic and or challenges related to English language (Mean = 2.99, SD = 1.097); making friends with domestic students outside the class (Mean = 2.93, SD = 1.179); using student success/affairs or help for academic and or language difficulties (Mean = 2.91, SD = 1.146); involved with local students' organisations (Mean = 1.48, SD = 0.670). **Table 3** highlights means for items relating to international students' engagement goals towards achieving their intending goals of education in New Zealand.

6.5. Percentage Distributions of Participants' Responses to Survey Question “Students' Engagement on Goal Achievement”

To understand further how participants reacted to the survey questions administered on how they engaged to achieve their goals and to know which item was of most important to them, we ran a percentage analysis response (to all items).

Figure 4 shows that to engage in goal achievement, participants' responses to making friends indicated that 5.5% were never involved; 6.1% were rarely in-

involved; 39.3% were occasionally involved; 29.4% were frequently engaged; and 19.6% very frequently engaged. Another survey item asked participant's if they both engaged in asking questions and or contributing to class discussion as part of their goal achievement. Response percentages were 3.7% never; 6.1% rarely; 28.2% occasionally; 26.4% frequently; 35.6% very frequently. Enquiring of participants if they were involved in domestic students' organisations as part of their goal engagement process, response percentages were 19.6% never; 20.9% rarely; 30.1% occasionally; 20.9% frequently; 8.6% very frequently. Participants were also questioned if they asked help of peer students for on academic and or language challenges. Participant's responses in percentages were 3.7% never; 18.4% rarely; 29.4% occasionally; 27% frequently; 21.5% frequently.

Table 3. Engagement in achieving goals.

How often in your institution you?	Mean	SD
Made friends with other int'l students in and out of my class	3.43	0.949
Asked questions in class or contributed to discussions	3.79	1.074
Made friends with domestic students outside your class	2.93	1.179
Had serious conversations with students different from you	3.33	1.099
Talked about career plans with lecturers/advisor	3.55	1.203
Developed relationships with people in the industry	3.10	1.115
Asked profs/advisors about your challenges in academic or language	3.58	1.127
Got involved int'l students' organisation	3.05	1.059
Used school career services	3.05	1.076
Used student success for help on academic and or language difficulties	2.91	1.146
Asked peer students for help on academic and or language difficulties	2.99	1.097
Got involved in domestic students' organisation	1.48	0.670

Likert scale: Never = 1, Rarely = 2, Occasionally = 3, Frequently = 4, Very frequently = 5. SD = Standard Deviation. Source questions in **Table 3**: Urban and Palmer (2016) [27].

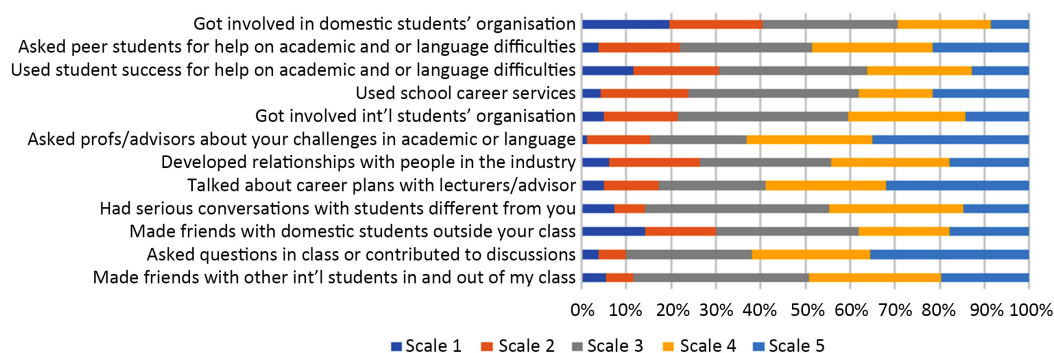


Figure 4. Percentage distributions of participants' responses to survey question students' engagement on goal achievement.

6.6. Analysis and Findings on International Students' Perception of Support by the School

Participants largely agreed on the following four levels of institutional and environmental support towards achieving their goals: academic members are available to resolve academic difficulties (Mean = 4.72, SD = 0.989); international students were taught skills needed for global employment (Mean = 4.37, SD = 1.16); academic and non-academic staff encourage contacts engagements among students from different backgrounds (Mean = 4.29, SD = 1.164); easy to make friends (Mean = 4.27, SD = 1.16).

Participants agreed on the following four as the least institutional and environmental support factors towards their goals: academic and non-academic staff members understanding on international students' needs (Mean = 4.03, SD = 1.269); school provides platform and opportunities to practically apply knowledge gained (Mean = 3.83, SD = 1.368); domestic students willingly help int'l students in their areas of challenge (Mean = 3.33, SD = 1.427); establishing friendships with New Zealand domestic students (Mean = 3.21, SD = 1.364). **Table 4** shows means for international students' perceptions of institutional and environmental assistance towards achieving their goals.

Table 4. Students' perception of institutional support.

At this institution:	Mean	SD
It is easy to make friends with other international students.	4.27	1.16
Lecturers and staff are available to help int'l students with academic difficulties.	4.72	0.989
I am taught skills needed to be employed globally.	4.37	1.16
Easy to develop relationships with academic and non-academic staff.	4.25	1.16
The academic and non-academic staff help int'l students with cross-cultural communication.	4.14	1.227
School provides platform and opportunities to apply knowledge gained.	3.83	1.368
Academic and non-academic staff encourage contacts engagements among students from different backgrounds.	4.29	1.164
Domestic students willingly help int'l students in their challenging areas.	3.33	1.427
It is easy to make friends with New Zealand domestic students.	3.21	1.364
Academic and non-academic staff understand the needs of int'l students.	4.03	1.269
I am encouraged to participate in curricular activities.	4.06	1.172

Likert scale: Strongly Disagree = 1, Disagree = 2, Moderately disagree = 3, Moderately agree = 4, Agree = 5, Strongly agree = 6. SD = Standard Deviation. Source questions in **Table 4**: Urban and Palmer (2016) [27].

6.7. Percentage Distributions of Participants' Responses Relating to Survey Question of Students' Perception of Institutional Support

To understand further how participants reacted to the survey, students were questioned on how they engaged to achieve their goals and to which item was of most importance to them. We ran a percentage response analysis on all items.

There were 11 items for the participants to respond to relative to their perceptions of institutional support. To ascertain the weight of each of the items the participants responded to brelative to institutional support, we ran a percentage analysis.

Figure 5 shows the results when participants were asked to indicate their perception of the institutional support provided for achieving their goals. Response percentages to the institution encouraging them to participate in curricular activities were: 0.0% strongly disagreed; 10.4% disagreed; 13.5% moderately disagreed; 31.9% moderately agreed; 34.4% agreed; and 9.8 strongly agreed. Asking participants if academic and non-academic staff understood their needs, the responses in percentages were 0.6% strongly disagreed; 8% disagreed; 16% moderately disagreed; 30.1% moderately agreed; 24.5% agreed; and 20.9% agreed.

The perception of the participants on the ease of making friends with other international students showed the following response percentages: 0.6% strongly disagree; 8.6% disagree; 12.9% moderately disagree; 27.6% moderately agree; 33.7% agree; and 16.6% strongly agree. The question on availability of lecturers and staff to help international students with academic difficulties showed the following percentage responses: 0% strongly disagreed; 0% disagreed; 7.4% moderately disagreed; 22.1% moderately agreed; 41.7% agreed; and 28.8% strongly agreed.

6.8. Analysis and Findings on International Students' Perception of New Zealand Postgraduate Education Value

Regarding international students' perceived benefit from New Zealand postgraduate education, highly perceived benefits included thinking critically and analytically (Mean = 4.06, SD = 0.783); working in a cross-cultural environment (Mean = 4.06, SD = 0.833); for learning modern thinking when working in their field (Mean = 3.97, SD = 0.812); become more independent (Mean = 3.95, SD = 0.901); learn about multi-cultural viewpoints (Mean = 3.91, SD = 0.842); write clearly and effectively (Mean = 3.85, SD = 0.893); get good quality education (Mean = 3.77, SD = 0.996).

The lowest perceived benefits were improving my proficiency in English (Mean = 3.58, SD = 1.217); meet professionals in my field (Mean = 3.39, SD = 1.085); understand myself better (Mean = 3.37, SD = 1.018); acquire practical experience (Mean = 2.40, SD = 1.189). **Table 5** identifies the rank ordering of students' perceptions of the value received from New Zealand postgraduate education.

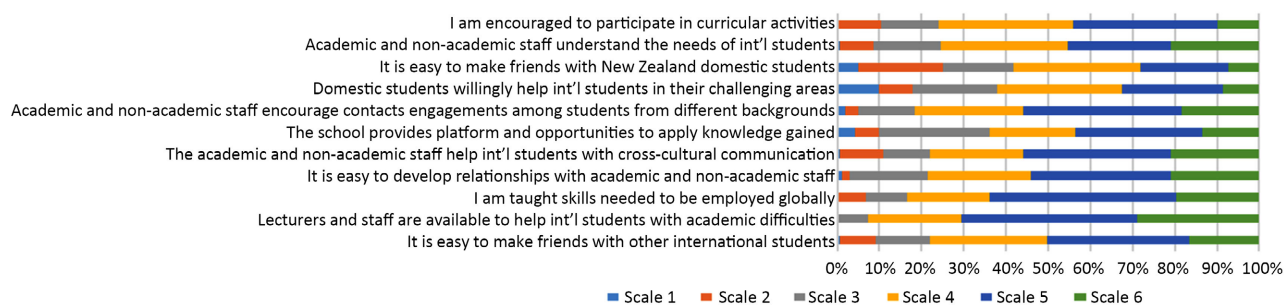


Figure 5. Percentage distributions of participants' responses to survey question students' perception of institutional support.

Table 5. Rank ordering of students' perceptions of New Zealand postgraduate education value (n = 163).

To what extent have you been able to:	Mean	SD
Get good quality education	3.77	0.996
Become more independent	3.95	0.901
Learn new ways of thinking & acting in your field	3.97	0.812
Think critically and analytically	4.06	0.783
Learn to work in a cross-cultural environment	4.06	0.833
Build intercultural friendships	3.83	0.843
Get practice-oriented education	3.69	0.958
Improve your proficiency in English	3.58	1.217
Learn about multi-cultural viewpoints	3.91	0.842
Develop work-related knowledge and skills	3.61	0.971
Speak clearly, effectively, and boldly	3.72	0.964
Adjust to new social-cultural environment and customs	3.72	0.860
Meet professionals in your field	3.39	1.085
Write clearly and effectively	3.85	0.893
Understand yourself better	3.37	1.018
Acquire practical experience	2.40	1.189

Likert scale: Not at all = 1, to a little extent = 2, to a moderate Extent = 3, to a great extent = 4, and to a very great extent = 5. SD = Standard Deviation. Source questions in **Table 5**: Urban and Palmer (2016) [27].

6.9. Percentage Distributions of Participants' Responses to Survey Question on Students' Perception on Value of New Zealand Postgraduate Education

This section discusses the percentage analysis of participants' responses to the survey questions on their perception of the value of New Zealand postgraduate education. The intention here was to find out which of the 16 items were highly responded to in percentages.

Figure 6 below shows the percentage distribution from participants' responses on their perception of value of New Zealand postgraduate education on

how far postgraduate education has helped them in achieving their goals. Percentage distributions of responses were: 06% not at all helped; 12.9% helped to a little extent; 21.5% helped to a moderate extent; 28.8% helped to a great extent; 36.2% helped to a very great extent. Responses from participants on whether New Zealand postgraduate education had helped them to become more independent showed 06% not at all; 4.3% to a little extent; 18.4% to a moderate extent; 38.7% to a great extent; 38% to a very great extent.

Participants were also asked about their perception of how New Zealand postgraduate education has helped them understand themselves better. Percentage distribution of responses was 3.1% not at all; 3.1% to a little extent; 23.3% to a moderate extent; 38% to a great extent; 32.5% to a very great extent. The research also asked participants about their perception of whether New Zealand postgraduate education helped them to acquire practical education. Percentage distributions of responses were 14.7% not at all; 2.5% to a little extent; 20.9% to a moderate extent; 31.3 to a great extent; 30.7 to a very great extent.

This study argues that international students' perception of value from New Zealand postgraduate education has influenced on how far they can achieve their intended goals; whether they were well supported by the institution towards achieving either their personal or professional goals, or whether their engagement in studies is actualised in goal achievement. To measure how far these had been achieved, we created five collapsed variables items on participants' professional goals and outcomes based on goal mean and outcome mean. We did the same for the personal goal and outcome.

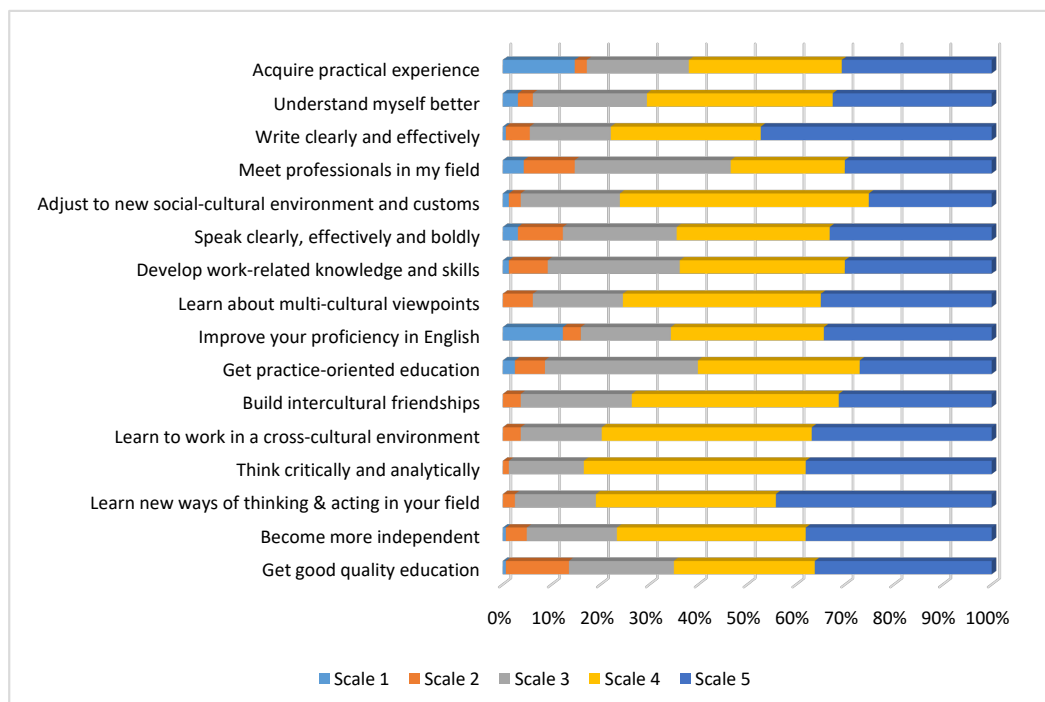


Figure 6. Percentage distributions of participants' responses to survey question on students' perception of value of New Zealand postgraduate education.

From the computed **Table 6** above we gained the following findings from the relationship between participants' professional goals and outcome perspective: getting practical experience goal mean was 4.06 while 2.40 was the outcome mean, leaving a difference of -1.66 meaning that participants could not achieve their mean goal as planned. Participants' goal mean on learning new ways of thinking in their field was 3.98 while the outcome mean was 3.97 indicating mean outcome is slightly lower by -1.01 . However, goal mean of participants' goal of coming to New Zealand to learn working in a cross-cultural environment was 3.96 while their outcome mean was 4.06, demonstrating that participants really achieved more than planned. Goal mean on acquisition of quality education as a reason for coming to New Zealand for education measured 3.87 while outcome mean was 3.77 meaning that goal mean was insignificantly lower by -0.01 . Meeting professionals in their field was another reason why participants are in New Zealand for their education. The relationship between this goal mean and outcome mean indicated 3.48 goal mean and outcome mean as 3.39 resulting to -0.09 difference.

The research also compared the relationship between participants' personal goals and outcomes based on the collapsed six variable items. Participants' personal goal mean of coming to learn about different cultural viewpoints was 3.70 while the outcome mean was 3.91 with a mean difference of 0.21.

Table 6. Goals and outcomes.

Goals and Outcomes	Goal Mean	Outcome Mean	Mean Difference
Get practical experience	4.06	2.40	-1.66
Learn new ways of thinking and acting in my field	3.98	3.97	-0.01
Learn to work in a cross-cultural environment	3.96	4.06	0.1
Acquire good quality education	3.87	3.77	-0.1
Meet professionals in my field	3.48	3.39	-0.09
Personal Goals and Outcomes	Goal Mean	Outcome Mean	Mean Difference
Learn about different cultural viewpoints	3.70	3.91	0.21
Learn to adjust to new social and cultural customs	3.58	3.72	0.14
Become more independent	3.56	3.95	0.39
Build intercultural friendships	3.39	3.83	0.44
Improve my English	3.19	3.58	0.39
Understand myself better	3.03	3.37	0.34

Mean Difference = Outcome Mean – Goal Mean.

Although small, this can be considered encouraging. Also, participants adjusted to new socio-cultural environment, realizing a goal mean of 3.58 with an outcome mean of 3.72 leading to a mean difference of 0.14. Becoming more independent was another goal for coming to New Zealand. The goal mean realised from this is 3.56 while outcome mean is 3.95 with mean difference of 0.39, translating to their being able to build some level of independence. The relationship between participants' goal of building intercultural friendships and its outcome indicated a goal mean of 3.39 and an outcome mean of 3.83 with a mean difference of 0.44, indicating that participants were able to build intercultural friendships. Another personal goal compared with the outcome was improvement in English. The goal mean was 3.19 and the outcome mean was 3.58 having difference of 0.39. This can be interpreted as the participants' ability to acquire some improvement in their English. Participants also came with the aim of understanding themselves better, and this resulted in a goal mean of 3.03 and outcome mean of 3.37 with a mean difference of 0.34.

6.10. Limitations of the Study

Limitations are factoring that researcher may not be able to control which may influence the outcome of the study. Ross and Bibler Zaidi (2019) [33] suggested that researchers should discuss or highlight their research limitations that could influence their research result. One of the limitations of the study was participants were mostly from Auckland. This could limit the research being generalizable to New Zealand as a whole. Another limitation was that data were collected close to semester exam of most student, this limited some of them to participate.

7. Discussion and Conclusions

We are of the opinion that this study contributes to the existing related literature on international students' perceptions and experiences of their motivational goals and outcomes, professional goals and outcomes, cultural and social engagement, and their thoughts on what institutional supports they received. The research found that international students (participants) are personally motivated to attain good academic careers, corroborating the findings of Urban and Palmer, (2016 [27]; and Obst and Forster, 2007) [34]. While we found that participants were academically, professionally, socially, and culturally engaged, corroborating the findings of Grayson (2008) [35], but contrary to the findings of Breuning (2007) [4], some participants were not involved in domestic students' activities. They seldom used student success or affairs (Services Department or Division of support for student success at institutions of higher education) to resolve their academic difficulties, corroborating the findings of Singaravelu, White, and Bringaze, (2005) [36]. Participants found it pleasant to make friends with their peers and other international students. This is borne out by the fact that they all identified themselves as migrants studying for same purpose. Aside from this, they mostly share similar or common cultural affinities

and were faced with the same challenges. Therefore, they felt their friendship would enable a sense of belonging and this would provide a platform for them to resolve their problems collectively, create a supportive academic network and build positive experiences. This corroborates findings in similar research by Urban *et al.*, (2010) [37]. While it was indicated by Urban *et al.*, that international students have relationships with domestic students, this study found the instances of domestic students helping international students in their challenging areas and the ease of making friends with New Zealand domestic students were low. However, it was good to find that participants received adequate and quality academic support from lecturers. Other staff were available to help sort out their difficulties. Participants learned skills to enable them to be employable globally, and generally found easy to make relationships with academic and non-academic staff who were supportive, but they face challenges in cross-cultural communication. Contrary to Galloway and Jenkins (2005) [38], we found that academic and non-academic staff understood the needs of international students and provided help to sort them out when they needed it. However, respondents felt that institutions did not provide them with a platform and opportunities to apply their knowledge practically.

We found that participants' professional outcomes from the perspectives of getting practical experience (putting into practice what they learned); learning new ways of thinking and acting in their fields (practice based); learning to work in a cross-cultural environment (office environment); acquiring good quality education (required to succeed in the outside world) and meeting professionals in their field were lower than their expectations relative to professional development. On the other hand, we found participants' personal outcomes higher than their intended personal goals in all results. Findings on the inability of institutions in this study to provide adequate practical experience corroborate the findings of Urban and Palmer (2016) [27] in the research carried out on international students' perception of the Value of U.S. Higher Education. Similarly, on the same subject title Singaravelu *et al.*, (2005) [36]; Galloway and Jenkins (2005) [38] found that international students mostly complained of lack of or insufficient acquisition of work experience during their studies.

However, participants realised gains in the following areas: learning about different cultural viewpoints, adjusting to new Socio-cultural environment, becoming independent, building intercultural friendships, improvement in written and spoken English and understanding themselves better. It is worthy to note that this study has contributed to the literature through its findings and analysis in the areas that international students gained and lost in their journey to enrich their knowledge in a foreign land. This study successfully provided information on personal and professional expectations of international students and the final outcomes attained using examples of the parts most and least beneficial to participants. We are of the opinion that irrespective of the motivational factors for students embarking on international studies, it is obvious that they are mostly concerned about career-related challenges after graduation.

This study considers that international students' perceived value of New Zealand postgraduate education is linked to the students' goals for coming to study in New Zealand, support given them by their institutions and students' engagement towards goals achievement. Relative to student objectives, there is a relationship among the six motives for studying in New Zealand (understanding different cultural viewpoints, adjusting to social and cultural environment, less dependent, building intercultural friendships, improving in English language and understanding self-better) and students perceived New Zealand postgraduate education to be of value. From the perspective of institutional support, there was a relationship between (creating environment for friendship among international students, availability of lecturers to support in academic related issues, supportive to improve skills that are needed to be employable globally, creating an environment for students to relate with both academic and non-academic staff and with students from different backgrounds) and students' perceived value of New Zealand postgraduate education.

The results of this research show that there is a relationship between international students' engagement in goal achievement and their value of postgraduate education in New Zealand. However, we find that one of the achievements of New Zealand postgraduate education is its ability to create and prepare individuals with international skills, knowledge, cross-culture, and the necessary attitudes to engage effectively in the international work environment.

8. Implication

Table 6 of this study observes that participants' professional goals outcomes are relatively lower than goals mean, especially from the perspective of attaining practical experience. This indicates participants have challenges obtaining practical experience. We felt that one of the most needed prerequisites for international students' needs to succeed career wise is acquisition of needed practical experience. It is obvious that they cannot buy this experience in the market, they just must acquire it through experience. Higher education institutions in New Zealand do provide this, but as far as this research is concerned it is not enough. However, concerned institutions can improve this situation by providing access to students to participate in institution employment (part-time while studying), assisting them securing related volunteering jobs, engaging, and motivating them to carry out either or both academic and industry applied research, attending professional conferences, reaching agreement with industry for students' internship and other related hands-on projects.

Conflicts of Interest

The authors declare no conflicts of interest.

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