

Focusing on the Development of the Whole Student: An International Comparative Study of the Perceived Benefits of Peer Leadership in Higher Education

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Abstract

Student engagement in leadership activities in higher education is becoming increasingly popular and is considered to contribute to the development of the “whole student”. To compare and contrast the ways student peer leaders/educators experience the benefits across different countries, and how this can be useful in cross-cultural/national interpretation and adaptation of lessons learned, a survey was conducted in six different English-speaking countries in the world. This paper presents some of the findings related to the combined dataset of all countries, as well as a comparison between the different countries. The findings overall did provide reasonably similar results across countries as well as some minor differences. Overall, the survey respondents did report increased benefits in various realms including a range of academic and employability skills, interaction with peers, desire to persist and graduate and some other outcomes. Considering the increase in interest related to students’ wellbeing, we also explored the potential impact on aspects related to wellbeing. The findings suggest that participation in leadership activities seems to benefit various aspects of students’ wellbeing.

Keywords

Student Leadership, Higher Education, Wellbeing, Whole Student Development

1. Introduction

Conceptualisation of student leadership in the literature, and the development of

peer leadership-related programmes are very diverse. A recent publication of a framework for the development and evaluation of peer leadership programmes (Skalicky et al., 2018) demonstrate the many aspects that need to be considered when institutions want to be intentionally concerned with the role of peer leadership programmes in their organisations. One aspect that is highlighted is the importance of the use of data. Given institutional investment in extra- and co-curricular programs and opportunities, there is a greater imperative for providing evidence-based data to demonstrate the benefits of students' participation in these programmes.

Students' involvement in extra-curricular activities as part of the broader student experience is one important aspect of students' personal and professional development.

There is an increased demand for graduates to be capable across a range of skills and be able to be flexible and use skills in different contexts. The diverse range of benefits of student engagement includes a greater sense of social connectedness, civic mindedness and employability skills. Employers are increasingly asking for these enhanced capabilities and looking for potential future leaders who can function in a globally fast-changing world. Students' involvement in extra-curricular activities including peer learning, peer support and peer leadership have contributed positively in many domains deemed important in the workplace (Brack, Millard, & Shah, 2008; Good, Halpin, & Halpin, 2000; Young & Keup, 2018). For instance, students who serve as peer leaders demonstrate improved interpersonal communication (Kenedy et al., 2012; Wawrzynski & Beverly, 2012; Heys & Wawrzynski, 2013; Russel & Skinkle, 1990). The leadership skills that students gain during these experiences engender development in leading and managing groups, decision-making, working under pressure, and teamwork (Badura et al., 2003; Russel & Skinkle, 1990; Stout & McDaniel, 2006; Bos, 1998). Further, as students develop the metacognition required to serve as peer mentors, tutors, and advisors, they increase their capacity in setting appropriate boundaries, self-appraisal, prioritization, time management, and self-confidence (Bidgood, 2004; Bos, 1998; Bunting et al., 2012; Lockie & Van Lanen, 2008; Stout & McDaniel, 2006).

In addition, engagement as a peer educator, mentor, or leader has been shown to improve students' academic outcomes (Colvin & Ashman, 2010; Lockie & Van Lanen, 2008; Stout & McDaniel, 2006; Wong, Waldrep, & Smith, 2007; Young et al., 2019; Young & Keup, 2018). Specifically, studies point to enhancements in factual knowledge, academic skills, teaching skills, increased connection to and awareness of opportunities on campus (Badura et al., 2003; Benjamin, 2004; Bunting et al., 2012; Lockie & Van Lanen, 2008; Wilcox, 1993) for student peer leaders. Peer leadership also leads to increases in cognitive development in both academic and co-curricular settings. For example, peer educators in both settings experienced an increase in critical thinking and higher-order thinking (Heys & Wawrzynski, 2013; Bos, 1998; Wawrzynski & Beverly, 2012).

Notwithstanding, Haber-Curran & Owen (2013: p. 47) remind educators that

...student affairs educators must never lose sight of the preeminent goal to educate the whole student. Students come to leadership with a variety of preconceptions, and it is the job of the educator to create safe and optimally challenging spaces where students are encouraged to evolve more complex ways of thinking and being. It must be remembered that the effects of leadership are both individual and collective.

The relevance of the focus of this study relates to the development of the “whole student”. It could be argued that studying students’ development with just a focus on students’ academic knowledge is not sufficient. Most students enter universities at a critical age when they are transitioning from adolescence to emerging adulthood (Arnett, 2000; Brooks et al., 2019) and are developing their sense of identity, sense of meaning and purpose in their lives and a range of new knowledges and skills. A focus on the “whole student” therefore is important. As Braskamp (2009: p. 29) articulated: “The focus on creating a viable environment for students to develop holistically can be summed up by the phrase, “It takes a whole campus of whole persons to develop whole students.”

Participation in peer leadership opportunities seems ripe for the development of the whole student. Service as a peer leader allows students to consider and express their values in positive ways. While not all peer educators exhibit model behavior all the time, research has found they self-report lower instances of unhealthy behavior such as tobacco or nicotine use and binge drinking (Brack et al., 2008). Many student peer educators report being motivated by altruism and “essentially want to pay it forward by helping new students in the ways someone else helped them...these students want to assist new students in order to prevent them from feeling lost, as they did” (Latino & Ashcraft, 2012: p. 7). Therefore, when students engage their peers as tutors, advisors, or residential assistants, they reflect and internalize the lessons they are learning which lead to personal growth and changes in value systems (Badura et al., 2003). This encourages student peer leaders to develop self-confidence and self-efficacy (Lockie & Van Lannen, 2008; Wilcox, 1993; Benjamin, 2004; Young & Keup, 2018) and develop improved capacity for positive personal and interpersonal relationships.

With an increasing concern across the higher education sectors in the world about the wellbeing of students, one of the benefits of participation in leadership programmes to explore more in-depth are the aspects that contribute to student wellbeing. Scholars have connected the role of peer learning to student psychological wellbeing (Hanson et al., 2016; Johnson & Johnson, 2009; Topping, 2005). In addition, Astin, Astin and Lindholm (2010) in their analysis of the extensive UCLA Higher Education Research Institute study on students’ spirituality found a positive relationship between leadership and equanimity. Respondents who participated in leadership activities reported higher levels of equanimity. Equanimity relates to students’ sense of centeredness, connectedness and peace within themselves, which is highly related to wellbeing.

Given our interest in the wellbeing of university student peer leaders, we have

chosen to adopt the definition of psychological wellbeing offered by Johnson and Johnson (2004) as “the ability to develop, maintain, and appropriately modify interdependent relationships with others to succeed in achieving goals” (p. 792). Ryff (1995) offers a conceptual model of psychological wellbeing that contains six central dimensions: 1) self-acceptance, 2) positive relations with other people, 3) autonomy, 4) environmental mastery, 5) purpose in life, and 6) personal growth. Individuals who exhibit high levels of self-acceptance hold a positive attitude towards themselves, accept multiple aspects of self, and feel positive about their past life. People who have strong positive relations with others have warm, trusting relationships with others, are concerned about their welfare, and understand the give-and-take of human relationships. Autonomy is associated with being self-determining and independent, and does not conform to social pressures or rely on the judgements of others to make decisions. When individuals hold high levels of environmental mastery, they demonstrate a sense of competence in controlling a complex array of external activities, make effective use of surrounding opportunities, and are able to choose or create contexts suitable to personal needs and values. Purpose in life is evident when people have goals and a sense of directedness, feel that there is meaning to present and past life, have hope, and manifest in goals for the future. Finally, personal growth refers to a feeling of continued development, exhibited when an individual sees self as growing and expanding, is open to new experiences, has a desire to realize potential, and is changing in ways that reflect more self-knowledge and effectiveness.

In considering this framework for wellbeing, there are some clear overlaps with other conceptualisations of wellbeing. For instance, autonomy, relationships, and competence are features of Self Determination Theory (Ryan & Deci, 2000; Deci & Ryan, 2008). The Australian universities initiative focused on wellbeing use the Self Determination Theory as their guiding theory (Baik et al., 2017; Field et al., 2015). Many educationalists have started the use of the Positive Psychology wellbeing model PERMA (Kern et al., 2015) to inform their understanding of both wellbeing factors as well as interventions. The PERMA model shares features with the Ryff model, such as positive emotions (self-acceptance), relatedness (positive relationships), meaning (purpose in life), and accomplishment (environmental mastery and personal growth). Other contemporary wellbeing frameworks that are also aligned with the Ryff model are the APA pathways to resilience (Newman, 2005) and the Five Ways to Wellbeing (Jarden et al., 2013; Thompson et al., 2008).

It has become clear that a few key aspects of wellbeing, i.e. the importance of connectedness and belonging, autonomy, personal growth, and a sense of purpose and meaning are connected to previous research on outcomes of peer leadership experiences. These aspects also have some distinct overlap with the transition literature that evidences the role that connectedness and sense of purpose play in enhancing students' transition to tertiary studies, and ultimately their success (Kift, Nelson, & Clarke, 2010). Therefore, these may be aspects worth

considering in analysing perceived benefits of participation in student leadership activities.

The purpose of the survey was to explore the contours and benefits of student leadership programs in their own environment, particularly as they relate to wellbeing. In the US, many universities have been running peer leadership activities/programmes for a considerable period of time and collecting data on students' development as a consequence of participation in these activities and programmes (see e.g. Foreman & Retallick, 2013; Haber & Komives, 2009; Shook & Keup, 2012; Young & Keup, 2018). In other countries, this has been more recent. A number of publications have reported on specific details of the research in individual participating countries, including the US (Young & Keup, 2018), Canada (Kenedy & Young, 2017) Australasia (van der Meer, Skalicky, & Speed, 2019) and South Africa (Frade & Tiroyabone, 2017). However, no study to date has attempted to understand the outcomes of peer leadership using a cross-national perspective. Our aim was to determine to what extent and in what ways student participation in peer leadership experiences contributes to wellbeing across international contexts. It was considered that new insights might be gained by analysing the combined datasets as well as comparing some different aspects between different regions. It is important to note that the purpose was not to argue that some countries/regions are better or worse than others in certain aspects. There are too many contextual factors that would need to be included for that to be explored in a reasonable way.

2. Methods

For this paper, the focus will be mainly on the data in the survey related to respondents' perceived benefits of their participation in leadership activities. The questions we sought to explore were:

- Research Question 1 (RQ1): What are some of the common and unique perceived benefits of leadership participation reported by students across the five regions?
- Research Question 2 (RQ2): What are some of the relationships between different aspects of impacts of leadership participation?
- Research Question 3 (RQ3): What are the predictors of outcomes that might be related to aspects of student wellbeing?

A more in-depth overview of the development, set-up and participants in the international comparative study can be read in another article on this study (Skalicky, Speed, van der Meer, Young, under review). However, many of the findings reported in this paper include the number of participants across the different countries.

2.1. Data Sources

The US-based National Resource Center for The First-Year Experience and Students in Transition conducted a survey, the "National Survey of Student Lead-

ership” (NSPL) in 2009 and 2013 that sought to map the contours of students’ involvement in leadership programmes across the US, and in particular students’ perceived benefits of participating in these activities. A growing interest in leadership programs in other parts of the world lead to the development of an international version of the NSPL, the International Survey of Peer Leadership (ISPL). This survey was developed for other mainly English-speaking countries, including Canada, the UK, South Africa, and Australasia (Australia and New Zealand).

The ISPL included a range of questions that were not used in the NSPL. For the majority of the analyses we used the common questions across the five regions. To explore some of the research questions we compared the data from the different regions. We recognise, however, that within each region there may be differences between the different institutions that participated in the surveys.

2.2. Data Analyses

To address the research questions we performed the following analyses (corresponding research questions in parentheses):

- Mean scores of each question related to perceived effects (RQ1);
- Frequency percentages of the perceived highest and lowest impacts as a result of participation in peer leadership programmes (RQ1);
- Internal reliability for the five factors (based on past US-based research) when used across the different regions (RQ2);
- Correlation and regression analyses to explore the relationship between the five different factors and some additional variables (RQ2);
- Regression analyses with different variables as dependent variable, including satisfaction and wellbeing related factors (RQ3).

To explore the questions related to predictors of certain outcomes related to wellbeing, we initially used the complete dataset of all regions combined and ran six regression analyses, using different dependent variables: satisfaction with leadership activity involvement, academic competence, sense of hope for the future, belonging and connectedness, persistence, and purpose/meaning. Our rationale for using the combined dataset was that these constructs are informed by higher education-related research which builds on well-established mainly psychological theories related to motivation and wellbeing. Many higher education institutions around the world draw on the collective knowledge of researchers around the world to understand and make sense of aspects of the student experience. After using the combined datasets we then compared the regression outcomes by region. It is important to emphasise that these analyses are purely aimed at exploring potential relationships that may inform future research that could be aimed at path analyses using validated wellbeing outcome measures. We are not making any definitive statistical claims in this exploratory exercise, but aim to provide sufficiently data-informed indications of possible relationships.

2.3. Measures

The six dimensions of the Ryff model of psychological wellbeing formed our theoretical framework and informed the choice of the dependent variables we used in the regression analyses. The six dependent variables used were mainly single items (continuous variables with self-reported levels of increase of benefits) amongst the survey questions that could be considered wellbeing-related outcomes of participation in leadership activities. These variables are the following. 1) *Personal growth*. We used the “Overall Academic Performance” question as dependent variable. This variable reflects the respondents’ self-reported academic benefits of having developed certain skills and competencies as a result of participation in leadership programmes. 2) *Positive relations with others*. We used the “You are feeling that you belong and are welcome at your institution” as the dependent variable. Belonging and connectedness are key aspects of wellbeing in the Ryff model, as well as other models, such as the APA Ten Paths to Resilience (Newman, 2005) and the other models referenced above. 3) *Purpose in life*. We used “Your desire to engage in continuous learning following graduation” as dependent variable for this. This variable can be seen as an indication that students consider that there is meaning in what they have learned at university and that there is a clear purpose in continuing to engage with their learning. 4) *Environmental mastery*. We used “Expectations of success in a full-time job after graduation” as dependent variable for this. Where respondents indicate an increase of these expectations, this could be considered as reflecting that they have become more confident in certain skills that help them to achieve certain outcomes and therefore succeed in future jobs. This can contribute to goal-directed thinking, consisting of agentic and pathway thinking (Snyder, 2002; Feldman & Snyder, 2005). 5) *Autonomy*. We conceptualized satisfaction as a proxy for autonomy. As student peer leaders are given more opportunity to increase their self-determination, it is likely that their overall satisfaction with the experience will increase. Conversely, if students felt that their experiences were coercive, we presumed that they would have lower levels of satisfaction and would not recommend these experiences to their peers. We used “How would you rate your overall satisfaction with your peer leadership experiences?” and “Would you recommend being a peer leader to other students?” as measures of satisfaction and autonomy. 6) *Self-acceptance*. We chose “Your desire to stay at your institution and graduate” as the dependent variable to illustrate that when students participate in leadership activities, they will find a greater sense of belonging at the institution and will therefore develop a greater sense of identity as a member of the academic community on campus.

A few control variables were used. These included “total number of positions held” for the regression analyses for a number of dependent variable we thought could be impacted on by this factor. We also included the “volunteer status” variable. This variable denotes whether one or more of the leadership positions held were voluntary without any tangible compensation, such as financial, course

credit, or residential living discount. This variable could be considered as an indication of altruistic motivation, rather than only instrumental. We also included the two dummy variables for altruistic and instrumental motivation created from the categorization of the motivation reasons respondents mentioned in one of the open-answer questions.

To measure the perceived impact of students' participation in leadership programs, questions were included that asked respondents to indicate "To what degree have the following changed as a direct result of your peer leadership experiences?" Respondents could answer on a 7-point scale anchored by "greatly decreased" and "greatly increased". The 2013 US survey included 32 questions, the international survey 38 questions. The UK added another four questions to their survey.

3. Results

The mean results of all individual impact-related questions by country can be found in Appendix 1. Where respondents answered with "unable to judge", their answer was treated as a missing value.

3.1. Common and Unique Perceived Benefits of Leadership Participation Reported by Students across the Five Regions

To examine the commonalities, **Table 1** presents the top quartile of the highest increases in benefits, i.e. the top 8 benefits by country (AU: Australia & New Zealand; CA: Canada; SA: South Africa; UK: United Kingdom; US: United States). To measure the increase, we calculated the percentage of participants who indicated that a skill had "increased" or "greatly increased" as a result of their peer leadership experiences. The differences in the numbers (N) are partly due to the respondents who answered "unable to judge" to some questions (or some who did not answer these questions).

The top three rows show the common increases across all regions. The fourth row shows additional common increase across the regions who participated in the ISPL. The rows below that show the other top benefits by country that were not common across all regions and/or ISPL participants. As can be seen there are some clear commonalities amongst the different countries. Not surprisingly, all five countries counted increase in leadership skills amongst the top ten, in three countries as the top, and the other two countries second or third place. Another high rating skill for all countries was "interpersonal communication". Amongst the top outcome in most countries was an increase of "You're feeling that you are contributing to your campus community". This question was not included in the US version.

In their survey "Your knowledge of campus resources", however, was rated high. This outcome also rated highly in the other countries, except for South Africa.

Table 2 presents the results of the examination of the bottom quartile, i.e. the perceived benefits with the lowest increase. It is interesting that seven out of

eight lowest perceived benefits were common across all five regions. All seven are related to more academic related outcomes, both academic performance and skills.

Table 1. Top quartile perceived benefit increases.

Benefits	AU		CA		SA		UK		US	
	N	%	N	%	N	%	N	%	N	%
Leadership skills	228	81.58	441	81.41	412	85.92	406	73.15	3841	87.35
Interpersonal communication skills	229	77.73	441	74.15	413	81.84	411	66.42	3839	82.50
Meaningful interaction with peers	225	70.67	431	78.42	410	81.95	402	67.91	3849	81.22
Feeling that you are contributing to your campus community	225	84.89	426	85.21	400	80.00	401	67.58	*	*
Adaptability skills	229	75.55	442	71.27	411	81.75			*	*
Knowledge of campus resources	224	73.21	430	82.33			401	59.85	3842	83.63
Feeling that you belong and are welcome at your institution	226	70.80	426	73.24			399	58.40	3837	76.60
Building relationships with people with whom you work	223	69.51			399	80.95	393	59.80	3823	78.32
Teamwork skills			442	74.21			407	63.39	3848	77.49
Interaction with people with backgrounds different than your own					405	80.74				
Critical thinking skill					416	80.29				
Meaningful interaction with staff members									3836	75.86

* Questions not included in US survey.

Table 2. Bottom quartile perceived benefit increases.

Perceived benefits	AU		CA		SA		UK		US	
	N	%	N	%	N	%	N	%	N	%
The time to your expected graduation	219	5.48	412	9.47	371	21.29	375	5.33	3701	8.00
The number of credit hours (US & CA)/ subjects, units, or courses (AU & UK)/modules or subjects (SA) you have completed each term/semester	218	5.96	414	9.66	372	27.42	374	10.43	3719	14.84
GPA/average mark	205	11.71	394	19.04	368	38.32	362	12.71	3641	19.36
Overall academic performance	217	15.21	408	19.36	378	39.68	372	15.32	3710	23.75
Academic skills	224	43.30	430	35.81	401	58.85	399	28.57	3785	39.92
Sharing ideas with others in writing	223	43.50	418	44.02	396	64.39	391	33.50	3770	46.53
Written communication skills	226	48.67	442	44.80	405	66.17	405	31.36	3810	53.39
Ethical decision-making skills	218	45.87					379	34.30	3787	64.59
Meaningful interaction with teaching staff			426	51.41						
Desire to stay and graduate					412	68.24				

This may not be totally surprising considering that the explicit focus of leadership programmes is not on enhancing the academic performance of the leaders per se. It is important to note, however, that these were the self-reported perceived benefits of the survey participants.

Lastly, as a way to confirm these perceived lowest benefits, we examined respondents' perceived decrease in benefits, as presented in **Table 3**. To measure the decrease, we calculated the percentage of participants who indicated that a skill had "decreased" or "greatly decreased" as a result of their peer leadership experiences. As can be seen, five of the perceived decreases in benefits that were common across the five regions, were also in the common lowest perceived benefits across the five regions. However, the percentages of respondents who perceived that their involvement impacted negatively on certain benefits were very low. Also, the number of respondents who felt unable to judge whether it impacted on their academic performance seemed to be higher for this question, and a large number of respondents answered that there was no change in these areas of their academic life.

Another way to compare respondents' perception of benefits, rather than individual items, was to compare the mean scores of the five factors that the US group developed based on their data (Young & Keup, 2018). These five factors were developed using structural equation modelling and confirmatory factor analysis based on previous research. The last column of Appendix 1 shows which of the perceived benefits clustered together in one of the five factors.

Table 3. Top quartile perceived decreases.

Perceived benefits	AU		CA		SA		UK		US	
	N	%	N	%	N	%	N	%	N	%
GPA/average mark	205	4.39	394	6.09	368	3.80	362	2.49	3641	3.46
Overall academic performance	217	2.30	408	3.68	378	3.70	372	2.15	3710	1.91
Time to expected graduation	219	1.83	412	2.18	371	3.23	375	1.33	3701	1.86
Academic skills	224	.45	430	2.56	401	1.75	399	2.76	3785	1.85
The number of credit hours (US & CA)/subjects, units, or courses (AU & UK)/ modules or subjects (SA) you have completed each term/semester	218	1.38	414	5.31	372	1.61	374	1.87	3719	1.83
Desire to stay and graduate	220	.91	426	1.41	403	1.74	395	2.28		
Expectations of success in a full-time job after graduation	212	1.42	412	1.46						
Desire to engage in continuous learning following graduation	223	.90			402	1.74				
Feeling that you belong and are welcome at your institution			426	1.41			399	2.01	3837	.47
Time management skills					411	1.70			3860	.78
Confidence peer interaction							392	1.28		
Presentation skills									3823	.47

Table 4 provides the mean scores for each factor by region as well as the Cronbach Alpha reliability score that reflects the internal consistency amongst the items that make up the five factors.

The reliability scores across all the regions for all five factors suggest that the range of benefits cluster together in similar factors in all five regions. The mean scores are also within the same ballpark across the regions. Furthermore, the low mean score for the perceived benefits for academic success confirms the results of the scores for individual items as presented in the previous tables.

Table 5 shows that there is a significant relationship between each of the five factors. The strongest one was between employability outcomes and skills, institutional commitment and interaction.

One of the open-ended questions asked the respondents what their motivation was to participate in a student leadership activity. Some respondents answered with multiple motivations, some did not answer the question. A thematic analysis of the 5210 responses identified six main categories. Some respondents had more than one motive. **Table 6** provide these categories.

3.2. Wellbeing Related Benefits

To explore relationships between questions that relate to different aspects of wellbeing, a number of regression analyses were conducted.

The following diagram, **Figure 1**, summarises the results of six regression analyses of the combined dataset using six different wellbeing indicating dependent variables. Some of these dependent variables also were predictors of some of the other dependent variables.

Table 4. Factor means and reliability scores.

Factors	All		AU		CA		SA		UK		US	
	Mean	α										
1. Skills	6.01	.90	5.85	.88	5.88	.89	6.07	.88	5.53	.89	6.08	.88
2. Interaction	6.02	.82	5.72	.80	5.79	.79	5.97	.86	5.62	.82	6.11	.81
3. Institutional commitment	6.01	.84	5.74	.79	5.90	.79	5.92	.86	5.46	.82	6.10	.81
4. Employability outcomes	5.79	.93	5.63	.91	5.64	.91	5.94	.92	5.27	.94	5.87	.93
5. Academic success	4.60	.83	4.45	.78	4.46	.84	5.01	.86	4.43	.88	4.58	.82

Table 5. Correlations between the different factors.

Factors	Skills	Interaction	Institutional commitment	Employability outcomes
Skills				
Interaction	.648**			
Institutional commitment	.652**	.637**		
Employability outcomes	.788**	.692**	.718**	
Academic success	.402**	.359**	.371**	.436**

** Correlation is significant at the .01 level (2-tailed).

Table 6. Motivation reasons for participation in leadership activities.

Theme	Percentage of respondents
Altruistic	58%
Instrumental	17%
Developmental	11%
Utilising/sharing skills	7%
For the experience, to get experience	28%
To engage or be involved	18%
Other	4%

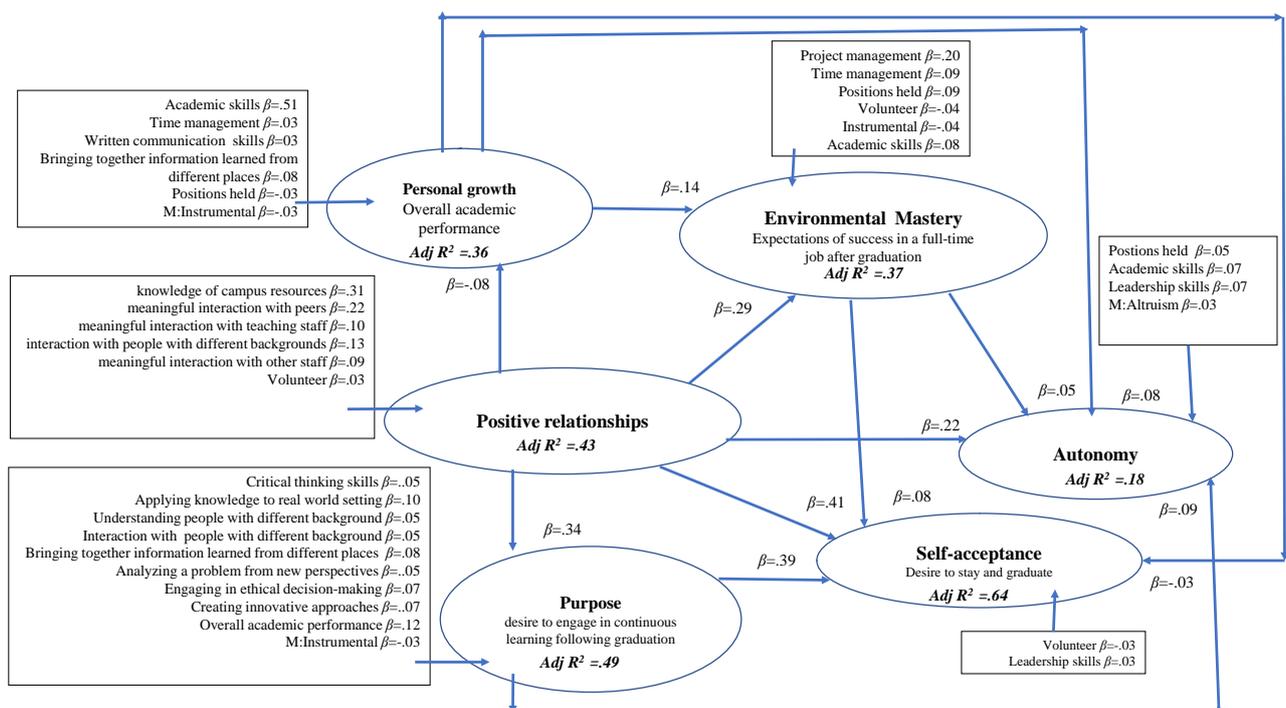


Figure 1. Summary of the regression analyses to explore the relationships between the different wellbeing indicators and other predictors.

Positive relationships in particular were a predictor for all the other five dependent variables.

Table 7 shows the Adjusted R-squared values for the combined dataset (as shown in the diagram above) as well as the values for the individual countries/region. This shows that there were no major differences between the overall dataset results and those of individual countries.

4. Discussion

Although there were differences between regions/countries, overall the results showed that there were common increased perceived benefits of leadership participation reported by students across the five regions, as well some common decreased benefits. In all countries respondents perceived that their leadership

Table 7. Adjusted R-squared values of wellbeing indicators.

Wellbeing Aspect	ALL	AU	CA	SA	UK	US
Personal Growth	.36	.30	.41	.39	.43	.34
Self-Acceptance	.64	.65	.53	.66	.70	.63
Purpose	.30	.46	.40	.48	.50	.49
Positive Relations	.43	.31	.37	.42	.45	.43
Environmental Mastery	.37	.29	.33	.39	.41	.36
Autonomy	.18	.17	.18	.08	.24	.19

skills, peer interaction and interpersonal communication skills had increased considerably because of participation in leadership programmes, and that GPA, overall academic performance and time to graduation had not increased and that some respondents perceived these to be potentially somewhat decreased. The decrease could be considered possibly understandable especially as students' involvement in different leadership activities may for some students' impact on the time they spend on their study activities. However, the percentage of respondents that reported decrease in these areas was very low and many reported that there was not a change in this area, or that they could not judge the impact. It can be argued that students' involvement in peer leadership-related activities is not directly aimed at enhancing academic outcomes, but is more aimed at developing students' graduate outcomes, which are also related to employability outcomes, and developing life-long learning skills and contribute to social integration (van der Meer & Scott, 2009).

The overall benefits and correlations between the different aspects of impacts of leadership participation suggest that involvement in leadership activities activated students' engagement with many different people, and prompted various skills development and perceptions of beneficial outcomes. And all of these aspects related to leadership involvement seemed to influence each other.

The exploration of aspects related to wellbeing also suggested that participation in leadership activities had many positive impacts. Students' engagement with other people in particular seemed to result for many in a sense of belonging which in turn seemed to impact positively on different aspects of leadership participation benefits. This reflects the fact that connectedness and sense of belonging are key aspects of many wellbeing and resilience models (Newman, 2005; Ryan & Deci, 2000; Ryff, 1995; Seligman, 2018; Thompson, Marks, & Cordon, 2008). The importance of a sense of belonging for students in educational contexts for their overall wellbeing and academic success has come to the fore in quite a lot of research over the last decade (see e.g. Ahn & Davis, 2019; Cunningham & Brown, 2014; Dueñas & Gloria, 2017; Vaccaro & Newman, 2016; van Gijn-Grosvenor & Huisman, 2019).

The beta coefficients of time management and project management seem to confirm that future-oriented hopeful thinking could be positively impacted on by developing a sense of pathway and agentic thinking (Snyder, 2002).

One of the purposes of comparing the data from the different countries was to see whether there are potentially common benefits in different countries. That might help us in understanding what some of the basic potential benefits are of students' engagement in peer leadership related activities that may be to some degree irrespective of the cultural context. This is not to say that cultural contexts do not matter or may play an important role in how activities are organised, who participates and who benefits; and indeed how students conceive of leadership as a construct. Considering some of the findings of this exploratory comparative study, it seems that there were some key benefits and impacts across the different countries in the world involved in this study even though all these countries have quite different cultures and contexts. Especially considering the wellbeing-related issues in higher education institutions across the world, this could suggest that developing student-leadership related activities and/or programmes, and increasing the number of students involved in these activities and/or programmes could contribute to potentially enhancing an overall increase of students' wellbeing in tertiary institutions.

5. Limitations

As this was an initial exploratory study there are some clear limitations. Firstly, there were some differences between the original US-based study and the subsequent study across other parts of the English-speaking world. There were also a few differences between the questions in the non-US countries. This means that not all the available data was able to be used across all five countries/regions. In a future study we intend to have more consistent data across all countries/regions. This will mean we will also be able to possibly identify slightly different factors using larger range of questions.

6. Conclusion

As mentioned in the study by [Skalicky et al. \(2018\)](#), given institutional investment in extra- and co-curricular programs and opportunities, there is a greater imperative for providing evidence-based data to demonstrate the benefits of students' participation in these programmes. We believe that this comparative study contributes to supporting the organisational units in universities that are involved in organising and supporting leadership-related activities and/or programmes in making a case to the top management of universities that their organisational units should be actively supported and resourced. Apart from using data to support their argument, it may be worthwhile to engage the overall university, including governance, management, academic faculty, professional staff and students in a more broadly-based discussion on the importance and benefits of developing the "whole-student", and not focus mostly on academic and epistemic development only. Considering the stage of life of most students who attend university, as well as the diverse, complex and overall connected world in which we now live, we need to see the role of developing the whole-student as both developmentally, socially and ethically important. Any activity that sup-

ports students developmentally is particularly important for their overall well-being. Involvement in leadership-related activities and/or programmes can support students' development of their social skills, such as contributing to their appreciation of diversity as well as their interaction with others and appreciation of contributing to society. Having an understanding of, and having evidence-based data available of the benefits of involving students in leadership-related activities and/or programmes, could be considered an ethical imperative of university management to actively support and resource the relevant organisational units within universities. After all, having research-based evidence that certain support initiatives benefit the whole-student, but not acting on this evidence could be considered unethical.

7. Future Research

Considering the findings of this research, and the argument that it is important for universities to focus on the whole-student, it would be worthwhile to conduct future research that replicates and further enhances this comparative study. Having a greater number of participants across more institutions in each country may further inform our understanding about the key benefits of leadership activities/programmes irrespective of the context as well as dependent on the context.

Also, including some additional items in the survey related to wellbeing may further our understanding of this. There is a large amount of research related to wellbeing with a large range of validated survey items from which some items could be selected for the leadership-related survey. This might then allow for more statistically effective approaches such as path analyses, structural equation and multi-level modelling.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix 1. Mean Results of All Questions Related to Perceived Benefits of Involvement in Peer Leadership Programme Involvement. And Included in the Five Factors

	ALL		AU		CA		SA		UK		US		Factor
To what degree have the following changed as a direct result of your peer leadership experiences?	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	
Academic skills	5239	5.02	224	5.16	430	4.89	401	5.49	399	4.77	3785	5.00	5
Critical thinking skills	5334	5.77	227	5.61	440	5.57	416	6.12	408	5.21	3843	5.83	1
Time management skills	5351	5.95	227	5.76	443	5.86	411	5.9	410	5.41	3860	6.04	1
Organizational skills	5349	5.9	228	5.77	442	5.77	410	5.86	409	5.57	3860	5.97	
Project management skills	5279	5.89	224	5.66	436	5.76	399	5.8	403	5.38	3817	5.99	1
Leadership skills	5328	6.37	228	6.28	441	6.26	412	6.33	406	5.96	3841	6.43	1
Teamwork skills	5332	6.07	226	5.82	442	6.02	409	6.16	407	5.71	3848	6.11	1
Interpersonal communication skills	5333	6.2	229	6.13	441	6.08	413	6.17	411	5.83	3839	6.26	1
Written communication skills	5288	5.48	226	5.37	442	5.31	405	5.75	405	4.94	3810	5.53	
Presentation skills	5302	5.82	226	5.64	437	5.62	410	6.05	406	5.33	3823	5.89	
Problem solving skills	1484	5.64	227	5.57	440	5.63	409	6.05	408	5.27			
Decision-making skills	1490	5.73	228	5.67	440	5.7	412	6.06	410	5.46			
Adaptability skills	1484	5.93	229	6.04	442	5.94	411	6.18	402	5.59			
Creativity skills	1467	5.55	224	5.66	435	5.48	403	5.95	405	5.15			
Your meaningful interaction with professors or teaching staff	5287	5.92	224	5.54	426	5.49	402	5.86	400	5.53	3835	6.03	2
Your meaningful interaction with staff members	5292	5.98	222	5.64	432	5.78	402	5.87	400	5.51	3836	6.08	2
Your meaningful interaction with peers	5317	6.16	225	5.99	431	6.13	410	6.19	402	5.82	3849	6.20	2
Your knowledge about people with backgrounds different than your own	1459	5.81	225	5.71	430	5.9	404	6.13	400	5.46			
Your interaction with people with backgrounds different than your own	5287	6.04	225	5.76	432	5.97	405	6.17	400	5.51	3825	6.11	
Your understanding of people with backgrounds different than your own	5280	5.98	224	5.68	429	5.86	404	6.11	398	5.44	3825	6.05	
Your knowledge of campus resources	5306	6.27	224	6.04	430	6.34	409	5.99	401	5.71	3842	6.36	3
Your feeling that you belong and are welcome at your institution	5295	6.05	226	5.94	426	6	407	5.86	399	5.6	3837	6.13	3

Continued

Your desire to stay at your institution and graduate	5258	5.83	220	5.53	426	5.64	403	5.84	395	5.31	3814	5.92	3
Your desire to engage in continuous learning following graduation	5261	5.89	223	5.52	419	5.61	402	5.97	398	5.23	3819	6.00	3
Your feeling that you are contributing to your campus community	1452	6.17	225	6.38	426	6.34	400	6.18	401	5.87			
Analyzing a problem from new perspectives	5248	5.77	224	5.67	422	5.62	398	5.9	391	5.31	3813	5.83	4
Creating innovative approaches to complete a task	5238	5.78	223	5.79	418	5.6	395	5.94	392	5.28	3810	5.84	4
Providing direction through interpersonal persuasion	5169	5.8	220	5.8	412	5.67	392	5.85	391	5.34	3754	5.86	4
Sharing ideas with others in writing	5198	5.36	223	5.3	418	5.3	396	5.69	391	5.04	3770	5.36	4
To what degree have the following changed as a direct result of your peer leadership experiences?	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	
Building relationships with people with whom you work	5263	6.09	223	5.91	425	5.98	399	6.15	393	5.68	3823	6.15	4
Engaging in ethical decision-making	5196	5.71	218	5.34	420	5.5	392	5.91	379	5.06	3787	5.79	4
Bringing together information learned from different places	5235	5.92	223	5.78	421	5.82	394	6.03	390	5.41	3807	5.98	4
Applying knowledge to a real-world setting through hands-on experiences	5206	5.95	223	5.61	424	5.83	391	5.98	386	5.34	3782	6.04	4
Expectations of success in a full-time job after graduation	4253	5.73	212	5.46	412	5.44	390	5.97	382	5.19	2857	5.83	4
Confidence peer interaction									392	5.85			
Confidence faculty interaction									391	5.78			
Confidence academic work									390	5.1			
Confidence employability									388	5.6			
Your GPA (US & CA)/ average mark (AU, SA, & UK)	4970	4.4	205	4.23	394	4.35	368	4.92	362	4.29	3641	4.37	5
The number of credit hours (US & CA)/ subjects, units, or courses (AU & UK)/ modules or subjects (SA) you have completed each term/semester	5097	4.31	218	4.11	414	4.05	372	4.71	374	4.24	3719	4.32	5
The time to your expected graduation	5078	3.80	219	3.86	412	3.78	371	3.53	375	3.89	3701	3.82	

Continued

Your overall academic performance	5085	4.62	217	4.38	408	4.53	378	4.97	372	4.45	3710	4.62	5
Would you recommend being a peer leader to other students?	5247	1.23	223	1.14	426	1.28	397	1.21	391	1.45	3810	1.21	
How would you rate your overall satisfaction with your peer leadership experiences?	5247	6.25	223	6.22	426	6.27	397	6.03	391	5.9	3810	6.31	
