# Acknowledgement Patterns in Information Science Students' Dissertations in a Nigerian University: Are there Generational Differences?

## Janet O. Adekannbi

Department of Data and Information Science, Faculty of Multidisciplinary Studies, University of Ibadan, Nigeria janet.adekannbi@gmail.com

# Abstract

This study investigated generational differences in acknowledgement patterns of Information Science students' dissertations at Nigerian's premier university in the past 30 years. Acknowledgements have become commonplace in thesis and dissertations. however, with culture shifting and individuals reflecting this in their attitude, such cultural change may likely produce generational differences in acknowledgement behaviour of different disciplines. A total of 961 Information Science dissertation acknowledgements (DAs) from 1992 to 2021 at the Wilson Olabode Aiyepeku (WOA) library were examined and categorised into two generations - 1st-Gen (1992 – 2006) and 2nd-Gen (2007 – 2021). Data analysis involved descriptives and content analysis of the DAs. Results showed no significant differences in the number of individuals acknowledged by names but a decrease in the average length of DAs in the second generation. Generational differences were observed in the number of individuals acknowledged by categories and in the acknowledgement of library/librarians. Generally, 1st-Gen DAs had the tendency to acknowledge supervisors first, while 2nd-Gen DAs generally acknowledged God first. Expressions of gratitude in the 1st-Gen were more informal than among 2nd-Gen DAs. Also, 1st-Gen DAs acknowledged gratitude

for technical, clerical and access types of support than 2nd-Gen DAs while the latter acknowledged moral, financial and spiritual supports than 1st-Gen DAs. The study showed a declining tendency by the students to acknowledge library/librarians. It also revealed that students in this discipline gave less recognition to data sources, as expression of gratitude for data access dropped significantly in the second generation.

**Keywords:** Dissertation Acknowledgements, Generational Differences, Librarian Acknowledgement, Information Science Students, Nigeria

# **Introduction and Literature Review**

Acknowledgements are expressions of gratitude in scholarly writing for diverse contributions of colleagues, supervisors, mentors, family members and institutions (Cronin, McKenzie, Rubio and Weaver Wozniak, 1993). Such contributions could be in form of personal, financial, academic, moral, technical and even spiritual support (Adekannbi, 2023; Burnett and Raturi, 2020). About fifty years after Mackintosh (1972) investigated patterns of acknowledgements in the Sociology discipline, acknowledgement research has not received so much attention among information professionals especially when compared to the level of attention received by citations. According to Cronin, McKenzie and Rubio (1993), this is partly due to the fact that unlike citations which are formalised acknowledgements that are based on agreed stylistic conventions, acknowledgements are personal interactions between two parties and lack the "commodity status" citations have (p. 407). Notwithstanding, Mackintosh cited in Cronin (1991, p.228) explained that "lack of interest in acknowledgements does not necessarily indicate their

complete irrelevance as rewards in science", otherwise citations should also be treated accordingly. Moreover, according to Diaz-Faes and Bordons (2017), studying acknowledgements is crucial to understanding the influences, interactions and collaborations that occur within the scientific process. It reveals hidden aspect of research and the contribution of individuals deserving recognition. In addition to their serving as rewards for informal contributions, they also provide a richer picture of the social context surrounding a scholarly work (Petrovich, 2022).

The works of Blaise Cronin on acknowledgement behaviour in the last three decades generated some interest in acknowledgement research. Cronin investigated acknowledgement behaviour in various journal disciplines including chemistry (Cronin et al., 2004), psychology and philosophy (Cronin et al., 2003), humanities and social sciences (Cronin, McKenzie and Rubio, 1993), sociology (Cronin, McKenzie, Rubio and Weaver Wozniak, 1993), and Information Science (Cronin, 2001). Following the work of Cronin, many other researchers have also carried out some studies on acknowledgements and most of these have focused on journal articles (Diaz-Faes and Bordons, 2014; 2017; Giannoni, 2002; Paul-Hus and Desrochers, 2019; Rattan, 2013; Tian et al., 2021; Tiew and Sen, 2002), while acknowledgement research on theses and dissertations are just gradually getting some attention. Some of these studies have exclusively focused on the sociocultural characteristics of the acknowledgements (Adekannbi, 2023; Burnett and Raturi, 2020; Hyland, 2003; Mantai and Dowling, 2015; Scrivener, 2009), while others included their linguistic features (Afful, 2016; Afful and Mwinlaaru, 2010; Afful and Awoonor-Aziaku, 2017; Al-Ali, 2010; Nacey, 2022; Nguyen, 2017; Tang, 2021).

It is important to note that acknowledgements are crucial in theses and dissertations as much as they are in journals articles considering the fact that the former is equally a very rigorous process involving huge investments of money, time, labour and interpersonal debt (Hyland, 2003). According to Hyland (2004, p. 304), acknowledgements enable students to "achieve a sense of closure at the end of what is often a long and demanding research process". Moreover, some studies have shown that both academics (Cronin and Overfelt, 1994) and students (Bangani et al., 2020; Hyland, 2003; 2004) consider acknowledgements as valuable. Added to this is the fact that acknowledgements have become commonplace in thesis and dissertations, thus confirming its significance to disciplinary communities (Hyland, 2003). Nevertheless, studies have shown that often times students receive no training on writing acknowledgements and resort to copying acknowledgements from previous theses and dissertations (Adekannbi, 2023; Hyland, 2004; Scrivener, 2009). Other studies have also reported that while students often acknowledge the role of supervisors, other academics, family and friends, librarians have not been given so much recognition (Bangani et al., 2020; Hubbard et al., 2018).

Cronin (1991) gave six-category typology which was later modified by Cronin, Mckenzie and Rubio (1993) has been well adopted in understanding acknowledgement behaviour in academic writing. The authors identified the following categories of support in acknowledgements: technical; moral; financial; clerical; access (documents, data, samples, materials, facilities etc); and peer interactive communication. Based on this typology, some patterns in thesis and dissertation acknowledgements have been reported across disciplines and geographical locations. For example, at the institutional level, Scrivener (2009) found that gratitude for moral support constituted 65% of acknowledgements of University of Oklahoma's History doctoral students. Hyland (2003) reported that academic (45%) and moral (30%) supports were the most featured in 240 masters and doctoral dissertation acknowledgements of five Hong Kong universities' graduate students. In Australia, Mantai and Dowling (2015) examined acknowledgements in 79 PhD theses and observed that students valued social support than academic and instrumental support.

Acknowledgement behaviour reportedly differs across disciplines and geographical contexts (Cronin, 1991; Salager-Meyer et al., 2011). According to Huber (1990), academic disciplines are not just environments organised in departments for teaching and learning, but they differ in so many ways including their patterns of communication, cultural practices and preferences. Similarly, Wotring (2007) recognised the possible association between academic disciplines and some behaviour patterns. Much earlier, Cronin (1991) noted the need to establish the degree of stylistic consistency within disciplines. Such investigation would however not be complete without an understanding of the possible changes in acknowledgement behaviour of academic disciplines over the years. However, little is known about generational differences in acknowledgement behaviour among academic disciplines. With culture shifting and individuals reflecting this in their attitude, such cultural change is expected to produce generational differences (Twenge and Donnelly, 2016), and this may likely be reflected in acknowledgement behaviour of different disciplines.

Generational differences have often been used to explain and rationalise different activities. Generations have been approximately divided into four groups namely - the Boomers (1944 - 1960), Generation X (1961 - 1979), Millennials (1980 -1995) and Generation Z (1995 - 2012) (Twenge and Donnelly, 2016). For example, Twenge, and Donnelly (2016) reported generational differences in reasons for going to college, with the Millennials and Generation X valuing extrinsic reasons than the Boomers. Generational differences have further been investigated in education especially about learners and their use of technology (Lai and Hong, 2015; Oh and Reeves, 2014), academic achievement (Duong et al., 2016); and about academics (Kwiek, 2015; Lee and Jung, 2018; Rodriguez, 2014). Moreover, generational differences in academic disciplines cannot be ignored. Similar to biological forms of life, evolution of academic disciplines occurs in response to changes in the environment and interactions among members of the discipline (Cohen and Lloyd, 2014), hence, O'Brien (2012) emphasised the need to account for generational differences in scientific careers. The author reported generational differences in the ways cohorts of researchers communicate their research. However, Campbell et al. (2015) noted that caution should be exercised when applying these generation groups to research investigating generational differences outside the United States of America as most research on generations were done in and applied to the United States. Moreover, Reeves and Oh (2007, p.297) opined that birth year is just one of the factors considered in distinguishing among generations. The authors noted that "most experts have argued that generations are shaped much more by history than by chronological dates".

Over the years, acknowledgement behavior in the Library and Information Science (LIS) discipline has received some focus. The notion is that within the LIS research community, there is the hidden influence of scholars, peers and other individuals whose contributions cannot be revealed through citation counts (Freeman, 1998). Cronin (1991) made the first attempt to analyse acknowledgments in Information Science literature by investigating the nature of acknowledgements in the Journal of the American Society for Information Science (JASIS) between 1970-1990. Cronin et al. (1992) also carried out a 20-year analysis of four top-ranking Library and Information Science journals namely, College and Research Libraries, Information Processing and Management, Library Quarterly and Journal of Documentation. An investigation of the aggregate data from these five journals in the two studies was carried out by Cronin (2001) and compared with data from 1991 to 1999. More studies on acknowledgement behavior in the Library and Information Science discipline (Adekannbi, 2023; Cronin and Overfelt, 1994; Davis and Cronin, 1993; Noruzi and Mohammadi, 2012; Rattan, 2013; 2014) clearly confirms that the genre has not only become entrenched in scholarly communication, but is also an evidence of a "maturing appreciation" for its significance within the academia (Cronin, 2001, p.432). According to Cronin et al. (1992, p.109), "structural, cultural, organisational, behavioural and literary differences between disciplines would have an influence on acknowledgement practice". Moreover, intellectual indebtedness as reflected in acknowledgements differ over time from one discipline to another (Salager-Meyer et al., 2011).

However, not much is known about possible changes overtime in LIS acknowledgements especially with reference to thesis and dissertations, although an earlier study investigated patterns of acknowledgements in masters' dissertations in the Information Science discipline (Adekannbi, 2023). As stated by Becher and Trowler (2001), the cultural identity of a discipline can be influenced by the professional language of such discipline and dissertations and theses are useful representations of the professional language of disciplines (Parry, 1998). Acknowledgements section reveals the social aspect of an LIS writer beyond the other pages most readers focus on and a holistic understanding of the social aspect of an LIS writer provides a richer understanding of the characteristics of the LIS discipline. But are there any significant changes in the way LIS students express gratitude in their acknowledgements?

#### **Objectives of Study**

Specifically, this study examined generational differences in the length of acknowledgements, patterns in the categories of acknowledgees, and types of support acknowledged. It is believed that findings from this study, which is being carried out in phases will provide more valuable understanding of the characteristics of LIS students and this will be a valuable addition to LIS literature.

## Methodology

This current study investigated generational differences in acknowledgement patterns of Information Science students' dissertations at Nigerian's premier university in the past 30 years. These dissertations are domiciled at the Wilson Olabode Aiyepeku library at Africa Regional Centre for Information Science (now Department of Data and Information Science), in the institution. Information Science programme started in the institution at the Africa Regional Centre for Information Science in the year 1990 after the United Nations Educational, Scientific and Cultural Organization (UNESCO), supported by International Development Research Centre considered the need to establish a Centre of Excellence in information science in the English-speaking part of West Africa. The idea was for this Centre to provide training in information science and technology at the postgraduate level for university graduates in the natural and social science disciplines, which adequately prepares them for taking up careers in relevant sectors of African economies.

The population for this study is the dissertation acknowledgements section of Information Science master's students. A total of 963 dissertations (1992 -2021) were found at the WOA library, although two of these had no acknowledgements section and were thus not included in the study. Previous studies have also noted the prevalence of the culture of including acknowledgements section in dissertations (Hubbard et al, 2018; Mohammadi and Tabari, 2013; Scrivener, 2009). The acknowledgements section as found in the dissertations in the library were all placed in the preliminary pages before the main text. This study employed bibliometric method using both quantitative and qualitative approaches, to investigate the generational differences in the acknowledgement patterns. However, it is important to note the limitation of using the widely known generation groups (the Boomers (1944 – 1960), Generation X (1961 – 1979), Millennials (1980 – 1995), Generation Z (1995 -2012)) in carrying out this study especially since the researcher had no access to the birth dates of the students. Hence, classifying the students into these generational groups will be on the wrong assumption that all students in each graduating class were born within the same generational group. A safe option was to understand their generational differences through the years of graduation. This study considered the fact that the minimum age range in the conventional generation groups is 15 years (Millennials -1980 - 1995), hence the 961 dissertations spanning a total of 30 years were divided into two generations of 15 years each. Dissertations submitted from 1992 to 2006 were classified as first generation, while those from 2007 to 2021 were classified as second generation. As shown in Table 1, 345 dissertations were in the first generation (1st-Gen) representing 35.9% of the total master's dissertations found in the library. The total of 616 dissertations classified in the second generation (2nd-Gen) shows that enrollment in this programme has largely increased in the last 15 years.

The 961 dissertation acknowledgements (DAs) were scanned and the following data attributes were extracted from each DA: year of publication; DA length; number of acknowledgees by names; first person to be acknowledged; gratitude to supervisors and other faculty members, librarians, friends, parents, other family members and institutions; and types of support acknowledged. Individuals whose relationships with the students were not clearly defined were placed in the category 'unclassified'. This study adapted Cronin, Mckenzie and Rubio (1993) typology for the type of support captured and included a seventh category, *spiritual support* as this was found in many of the DAs. Hence, the seven

categories of support were academic, access, clerical, financial, moral, spiritual and technical.

Data collected were subjected to both qualitative (content analysis) and quantitative (descriptives) analyses. MS-Excel and SPSS were used for the quantitative analysis. Only descriptive analyses were carried out on the quantitative data because no sampling was carried out as population data was used in the study. Useful excerpts from texts were used to complement findings from the quantitative analyses. According to Mantai and Dowling (2015), qualitative analysis adds depth to findings from quantitative analyses and can reveal themes relating to the students' personal and academic journey.

Generation of dissertations	Frequency	Percentage	
First Generation (1st-Gen)	345	35.9	
Second Generation (2nd-Gen)	616	64.1	
Total	961	100.0	

#### Table 1: Breakdown of dissertation generations

# Results

## **General Description of the DAs**

#### Length of DAs

A descriptive analysis of the 961 DAs showed that the average length of DAs in the 1st-Gen (approximately 261words) was higher than the 2nd-Gen with approximately 240 words per DA (Table 2). This shows a difference of 20.05 words between the two generations.

Table 2: Descriptives	of	the	DAs	by	generation
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Generation	Total	Minimum	Maximum	Mean
1st-Gen	345	22	1512	261.20
2nd-Gen	616	41	704	240.15

# Number of Individuals Acknowledged by Names

The descriptives as displayed in Table 3 shows a higher average of 18 individuals acknowledged by

names among the 1st-Gen students compared to 17 individuals by the 2nd-Gen students. This difference of 1 is however not considered significant.

Generation	Total	Minimum	Maximum	Total No. of Individuals	Mean
1st-Gen	345	1	166	6,296	18.25
2nd-Gen	616	0	85	10,152	16.48

### Generational Differences In Groups Of Individuals And Organisations Acknowledged by Names

#### Individuals

Figure 1 reveals a breakdown of the categories of acknowledgees by names across both generations. Almost 50% of individuals acknowledged by names

in the 1st-Gen DAs were friends. This generation also had higher percentages of administrative staff, programme related and unclassified individuals acknowledged relative to the total number of acknowledgees. However, the 2nd-Gen DAs had higher percentage of academic staff and family members acknowledged by names.

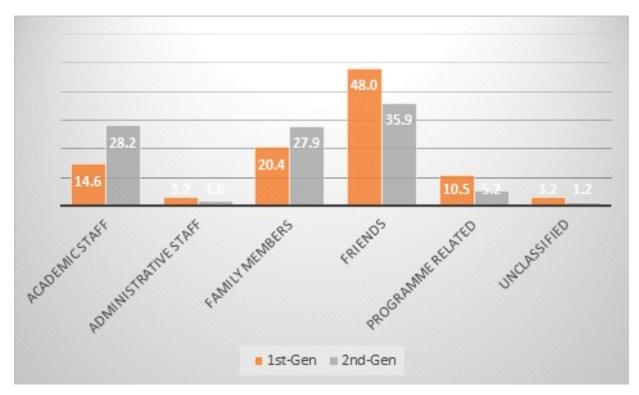


Figure 1: Categories of acknowledgees by names

Table 4 reveals the breakdown in the average number of individuals in these categories acknowledged by their names. As shown, the 1st-Gen DAs acknowledged more administrative staff, friends, programme related and unclassified individuals by names, whereas the 2nd-Gen DAs acknowledged more academics and family members by names

Categories	Generation	Total No. of Individuals	Mean	Std Deviation
Academic staff	1st-Gen	917	2.66	2.139
	2nd-Gen	2,860	4.64	3.254
Administrative staff	1st-Gen	204	0.59	1.530
	2nd-Gen	167	0.27	0.840
Family members	1st-Gen	1,286	3.73	4.256
	2nd-Gen	2,828	4.59	3.585
Friends	1st-Gen	3,023	8.76	13.522
	2nd-Gen	3,646	5.92	6.656
Programme related	1st-Gen	664	1.92	3.138
	2nd-Gen	528	0.86	1.973
Unclassified	1st-Gen	202	0.59	2.080
	2nd-Gen	123	0.20	1.043

Table 4: Breakdown of categories

## **Organisations**

A total of 353 organisations were acknowledged in the 961 DAs and 88.4% of these were classified as directly related to the students' academic activities as these organisations were largely acknowledged for data collection, funding and few others were the students' employers. The remaining 11.6% were mostly religious organisations. As shown in Table 5, 66.0% of the organisations acknowledged and directly related to the programme were acknowledged in the 1st-Gen DAs which is quite high considering the low population of DAs in this generation. This means that although the population of 2nd-Gen DAs were quite higher, they acknowledged fewer directly related organisations.

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Table 5: Acknowledgement	of organisations
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Category	1st-GenFrequency	2nd-GenFrequency	Total
Directly related	206 (66.0%)	106 (34.0%)	312 (100.0%)
Indirectly related	18 (43.9%)	23 (56.1%)	41 (100.0%)
Total	224	129	353

#### Acknowledgement of librarians

Acknowledgements to librarians were seen in only 124 of the 961 DAs, representing 12.9% of the DAs. A breakdown into generations showed that 61.3% of these were acknowledged in the 1st-Gen DAs. Of the 616 2nd-Gen DAs, only 48 contained acknowledgements to librarians. Table 6 shows the tendency for 1st-Gen DAs to acknowledge librarians than the 2nd-Gen DAs.

			Acknowledgement of librarian		
			Yes	No	Total
Generation of dissertation	First generation	Count	76	269	345
	dissertations	Expected Count	44.5	300.5	345.0
		% of Total	7.9%	28.0%	35.9%
	Second generation	Count	48	568	616
	dissertations	Expected Count	79.5	536.5	616.0
		% of Total	5.0%	59.1%	64.1%
Total		Count	124	837	961
		Expected Count	124.0	837.0	961.0
		% of Total	12.9%	87.1%	100.0%

The acknowledgements were mostly made to the librarians at the Wilson Olabode Aiyepeku Library (formerly called ARCIS library), while in very few DAs, librarians in other libraries in the institution were also acknowledged. Content analysis of the 124 DAs which contained acknowledgements to librarians showed that 54.0% mentioned the librarians in a general group of administrative staff, 31.5% were special mentions without specifying any library assistance or services rendered. In this latter category, the students expressed gratitude for the librarians' 'cooperation', 'selfless assistance', 'friendliness'.

My gratitude goes to Mrs\_\_\_\_\_ for her selfless assistance and readiness to help at all times in the library.

I also appreciate the full cooperation of all ARCIS staff particularly the librarian Mrs. \_\_\_\_\_ for her friendliness Many thanks to the staff of ARCIS library \_\_\_\_\_ and \_\_\_\_\_ for their cooperation and understanding during the data gathering exercise.

In 14.5% of DAs which contained acknowledgements to library, specific library assistance rendered to students were mentioned such as reference services, access to newspapers, past students' projects and journals as shown below.

I sincerely appreciate the librarian at the ARCIS library \_\_\_\_\_\_for her untiring efforts by advising on how to get reference materials for this project.

I am particularly grateful to the entire staff of IITA Library and especially Mr.\_\_, for his kind assistance. They were all very nice. I am equally grateful to Mrs\_\_, Reference Librarian at the Kenneth Dike Library of the University of Ibadan for her helpful assistance in locating and using copies of Bibliography of Agriculture in that library.

I am appreciative of the tremendous support of the ARCIS librarian, Mrs. who kept the work going by allowing me uninterrupted access to the newspapers in the library.

#### First Acknowledged

Crosstabulation was used to show the generational difference in the 'first acknowledged' in the DAs. Table 7 shows the tendency for 1st-Gen DAs to acknowledge their supervisors first, while 2nd-Gen DAs had the tendency to acknowledge God first. These differences are quite high when the expected counts are compared with the observed counts.

			FirstAcknowledged					
			Supervisor	Parents	Spouse	God	Others	Total
Generation of DAs	1st-Gen	Count Expected Count % of Total	128 77.9 13.3%	6 8.3 0.6%	1 1.1 0.1%	201 251.7 20.9%	9 6.1 0.9%	345 345.0 35.9%
	2nd-Gen	Count Expected Count % of Total	13.570 89 139.1 9.3%	17 14.7 1.8%	2 1.9 0.2%	500 449.3 52.0%	8 10.9 0.8%	616 616.0 64.1%
Total		Count Expected Count % of Total	217 217.0 22.6%	23 23.0 2.4%	3 3.0 0.3%	701 701.0 72.9%	17 17.0 1.8%	961 961.0 100.0%

#### Table 7: Generation of dissertations \* First Acknowledged Crosstabulation

Moreover, content analysis of the DAs shows a striking contrast in the formality of expressions used in acknowledgements to supervisors. Among the 1st-Gen DAs, quite a number of DAs contained expressions that were informal. The use of words such as "brother" and "friend" was observed among some of the 1st-Gen DAs as shown below:

> I am also deeply grateful to my supervisor Dr.\_\_ who apart from being my supervisor, is a friend and a big brother. I thank him very much for his "Anyway, and Pam Pam Pam".

> I am grateful to my supervisor, Dr\_\_. .... Sir, I will miss your "ok", "anyway" and your usual "uh" during lecture periods.

I would like to thank and acknowledge my supervisor and friend, Dr\_\_\_\_. ... Gratitude also goes to my second supervisor, Mr. \_\_\_. He got me into this "mess".

In contrast, expressions of gratitude used in most 2nd-Gen DAs were more formal and it was common to see supervisors referred to as fathers, mothers among the 2nd-Gen DAs.

My profound gratitude goes to my supervisor, Prof\_\_ whose academic inputs and impact helped in restructuring the objectives and content of this study.

My sincere appreciation also goes to Dr. \_\_\_\_\_ whose motherly guidance, patience and commitment in the choice of this project title and thorough supervision helped me a lot in the course of writing this project

My sincere appreciation goes to my highly respected supervisor, Professor\_\_\_\_\_ for his relentless support and guidance. Your contribution and constructive criticism have pushed me to expend such efforts I have exerted to make this work as original as it can be.

I wish to express my heartfelt appreciation to my able supervisor, Dr.\_\_\_\_ for his fatherly role, conscientious attention, professional and thorough supervision all through my research.

# Types of Support Acknowledged

Figure 2 presents the generational distribution of types of support acknowledged in the DAs. Moral support was the highest in both generations with the percentage in 2nd-Gen DAs being slightly higher. In both generations, family members and friends were mostly thanked for moral support. Acknowledgements for financial support was higher among the 2nd-Gen DAs (19.7%) compared with 1st-Gen DAs that had 16.0%. However, content analysis of the DAs showed a difference in the acknowledgees that received this gratitude. Among the 1st-Gen DAs, acknowledgees of financial support included both family members and funding organisations, especially International Development Research Center (IDRC) as shown in some expressions below:

My profound gratitude goes to Professor\_\_\_\_\_, who nominated me for Canada's International Development Research Center (IDRC) Scholarship which has enabled me to go through this programme. I cannot but be grateful to my mother, Mrs\_\_\_ for her love, care, financial and spiritual support throughout my stay at ARCIS. I am grateful to the International Development Research Center that provided the funding through the IDRC Bursary award that enabled me undertake the Masters programme in Information Science. This study is a direct result of this Bursary.....I am also sincerely grateful to Mr\_\_\_\_ for providing funds for mailing the completed questionnaires to me in Ibadan.

However, among 2nd-Gen DAs, most acknowledgees of financial support were parents and other family members. It appeared that funding by IDRC had been discontinued during this period as there was not a single reference to IDRC scholarship in the DAs.

Gratitude for spiritual support was higher among 2nd-Gen DAs (19.7%), although it should be noted that in both generations, this gratitude was mostly given to parents and family members, while in few cases religious affiliations. Gratitude for access to data, technical and clerical supports were the lowest in both generations, although a far less recognition for these categories was observed among 2nd-Gen DAs. Some expressions showing gratitude for these types of support are shown below:

> Worthy of mention is Mr\_\_ for teaching me programming and rendering help where and when necessary despite his tight schedule.

> My sincere appreciation goes to the Management and Staff of \_\_\_\_\_\_ for allowing me to use the facilities of this great institution for this study.

> I appreciate the members of Nigerian Union of Teachers, \_\_\_\_\_ State for their support during the interview sessions and assistance given towards the completion of this project.

> My profound gratitude goes to my darling husband \_\_\_\_\_\_ who patiently proofread my work; words cannot express his manner of person, his love and moral support.

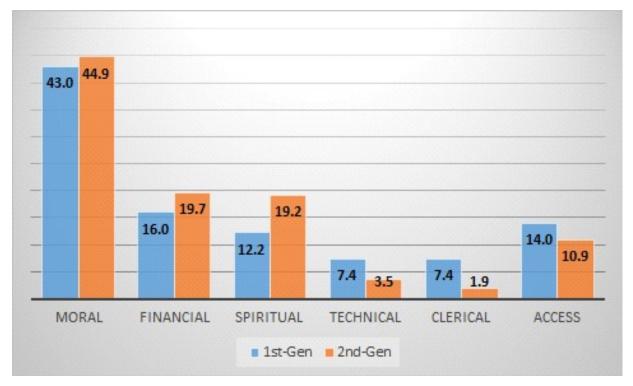


Figure 2: Generational distribution of types of support acknowledged

# **Discussion of Findings**

A total of 961 DAs written over a period of 30 years by Information Science students at University of Ibadan, Nigeria's premier university, was investigated in order to examine generational differences in their acknowledgement behaviour with respect to the length of DAs, categories and number of persons acknowledged, first to be acknowledged, acknowledgement of librarians and types of support acknowledged. The DAs were categorised into two generations: 1st-Gen (1992 to 2006) and 2nd-Gen (2007 to 2021). The study found no significant generational difference in the number of individuals acknowledged by names, but the difference in the average length of DAs was over 20 words as the 1st-Gen DAs contained longer texts. However, a breakdown of acknowledgees by categories showed statistically significant generational differences in the average number of individuals acknowledged. The 1st-Gen DAs acknowledged more friends, administrative staff, programme related and unclassified individuals by names, whereas the 2nd-Gen DAs acknowledged more academics and family members by names. A striking limitation of this study

is the dearth of existing studies for comparison due to the study's novelty. However, this current study which found a decrease in the average number of words in the DAs seem to contradict an earlier study by Lou et al. (2019) which examined 2,328 academic papers of 53 Chinese Information Scientists in order to understand the generational differences in their academic writing pattern. Among other findings, the study showed that the number of words used have increased generation after generation. It should however be noted that the study used scientists born between 1930s and 1980s and this may likely have contributed to the contradiction found between Lou et al. (2019) and this current study which must have included students born much later. Added to this is the fact that while the current study examined dissertation acknowledgements, Lou et al. (2019) findings were based on academic articles written by the information scientists, which can thus explain the contradiction in research findings.

A significant difference was observed in the 'first acknowledged' in the DAs. The tendency to acknowledge supervisors first was observed more among the 1st-Gen DAs, compared to the 2nd-Gen DAs which showed the tendency to acknowledge God first. Moreover, some differences in the formality of expressions used in acknowledgements to supervisors was also noted. While some casualness was observed in expressions used to eulogise supervisors by some 1st-Gen DAs, most acknowledgements made to supervisors in 2nd-Gen DAs were largely formal in their expressions. This observation on the face value could suggest that the students in the 1st-Gen had a freer and more relaxed relationship with their supervisors compared to students in the 2nd-Gen. However, another likely explanation is that most students in the 2nd-Gen extended the general formality involved in writing a dissertation to writing the acknowledgements section. Content analysis showed that this formality was not only peculiar to the gratitude expressed to supervisors but observed generally in most paragraphs in the DAs. Similar to this finding, Lou et al. (2019) also noted a change in writing patterns of academic papers across generations of Chinese Information Scientists. The authors reported an increasing tendency for Information scientists to adopt a more standardised pattern of writing and be more careful in their choice of expressions.

A major finding in this study is the association between generation of DAs and acknowledgement of librarians. Although the 1st-Gen DAs were only about 36% of the total DAs, it was interesting to note that over 60% of acknowledgements to library/ librarian were made by 1st-Gen DAs. The implication of this is that the acknowledgement of librarians by students in this discipline appear to be decreasing as the years pass by. Although no known study has investigated generational differences in acknowledgement of librarians, few such as Hubbard et al. (2018) and Bangani et al. (2020) have recently analysed acknowledgements of librarians in theses and dissertations and reported low acknowledgements of libraries and librarians in these publications. Arriving at a reason for this declining recognition accorded librarians by students in the population of the current study appears herculean. On the one hand, it might be plausible to conclude that the increasing reliance on electronic resources which most students have access to online without the mediation of any library staff might be responsible for the declining recognition given to librarians. It thus appears that libraries are used more as locations for reading and less for access to academic resources. Perhaps it can also be reasoned that LIS students do not usually require library assistance as they might be more independent in using library resources as compared to students from other disciplines. On the other hand, the extremely low acknowledgements to library/librarians generally observed among 2nd-Gen DAs might reveal the need for librarians in the 21st century to continue to work towards sustaining their relevance in academic activities. More than a decade ago, Melchionda (2007) expressed that the explosion of the Internet posed a threat to the role of academic librarians as many library patrons had access to digital resources from their homes and not exclusively at the libraries. This trend keeps increasing as the information explosion, evolution of various information technologies and social media have created a new generation of library users who require information and other services beyond what exists in the traditional book and shelf libraries. Hence, librarians also need to keep improving in their professional skills in order to meet the needs of this new community of library users and sustain their relevance. Noteworthy, Mwaniki (2017) emphasised the need to improve the quality of teaching in library and information science programs in line with the continuous technological changes in the world as there will continue to be new competencies needed to meet the growing needs of this generation of library users today and in the future. However, the reality with most libraries at public universities in Nigeria at the moment is that lack of funds and infrastructural enablers specifically, power supply and Internet facilities have reduced the functions of academic libraries to simply buildings that store books and journals which are often times outdated. Many librarians are thus limited in fully carrying out their roles which with the evolution of new technologies include offering more interactive user services in addition to enabling access to electronic information resources.

For types of support acknowledged, statistically significant generational differences were observed. Moral, financial and spiritual supports were the most recognised with the 2nd-Gen DAs expressing them more than the 1st-Gen DAs. In both generations, recognition for moral support was given largely to family members and friends. Burnett and Raturi (2020) reported similar findings from analysis of

acknowledgement sections of postgraduate Education students of the University of the South Pacific. The authors reported that most acknowledgements contained extensive network of family and friends being thanked for moral support than academics. Access to data, technical and clerical supports were the least recognised in both generations, but more gratitude for these support types was observed among 1st-Gen DAs. This is quite worrisome considering the fact that the dissertation topics showed that most of the dissertations were written based on data collected from individuals, communities and organisations at different levels. This result suggests a decline in students' recognition of the role of providers of research data and contrasts findings from a previous related study. For example, Hyland (2004) examined the 240 acknowledgement sections of five Hong Kong universities graduate students' dissertations in six disciplines. The four support types investigated were access to data, financial, technical and clerical supports. Findings showed that gratitude for access to data constituted more than 50% of the gratitude expressed for all the support types. This is quite understandable as the obvious truth is that without the cooperation of those studied or those who provided data for the study, the dissertation writing could not have been successful. Acknowledgement of data sources should not be limited to scholarly works cited in the dissertation. The acknowledgements section provides avenue for recognition of individuals, communities, institutions and organisations who provided data for the dissertation. Findings from the current study however tends to show the increasing tendency for students to distance themselves from sources of data collection. Hence, this might portray the students in both generations and more in the second generation as individuals who see mainly themselves, the faculty members as well as family and friends playing the most important roles in the successful completion of their dissertations and academic programme.

# Conclusion

This study examined a total of 961 DAs of Information Science graduates of Africa Regional Centre for Information Science, University of Ibadan. Findings from quantitative analyses showed no significant generational differences in number of individuals acknowledged by names but a decrease in the average length of DAs in the second generation. They however showed that 1st-Gen DAs acknowledged more friends, administrative staff, programme related and unclassified individuals by names, whereas the 2nd-Gen DAs acknowledged more academics and family members by names. The tendency to acknowledge supervisors first was also observed more among the 1st-Gen DAs, while 2nd-Gen DAs showed the tendency to acknowledge God first. This study also reported on the tendency for 2nd-Gen DAs to be more formal in their expressions of gratitude. Two major findings from this study are to a large extent disturbing. The first one is the decreasing recognition of library/librarians. Findings from this study suggest that students are somewhat disconnected from the library during their programme and this appeared to have worsened in the second generation. It is not clear whether this is a reflection of the level of impact of librarians on the students' academic activities during their programme or a reflection of lack of gratitude on the part of the students. However, as discussed in the previous section, it might be that LIS students do not usually require library assistance and might be more independent in using library resources compared to students from other disciplines. Notwithstanding, this is an aspect that requires further investigation in order to provide a better understanding of the impact of library/librarians on graduate students of Information Science discipline. Secondly, it was worrisome to observe a decreasing tendency to acknowledge data sources in DAs as acknowledgements given for access to data dropped from 14% in the first generation to about 11% in the second generation despite most of the dissertations being outcome of research conducted on various individuals, communities, institutions and organisations. Granted, the acknowledgement section is generally personal to the students and not usually reviewed by dissertation committee, however, it is important that students be helped to appreciate the importance of recognising data sources. Such recognition should not be limited to cited scholarly studies but should include sources of data collected through questionnaire, interviews, focus group discussions and other data that have led to the successful writing of the dissertation. Moreover, the Centre's manual of style can be revised to address this aspect as acknowledgement of data sources should be a norm in scholarly writing. This study suggests further studies comparing acknowledgement patterns in Information Science dissertations at institutional, regional and international levels. This could drive a more holistic description of acknowledgement behaviour in the Information Science discipline.

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Janet O. Adekannbi is a Senior Lecturer at the Department of Data and Information Science, University of Ibadan, Nigeria. She holds master and doctoral degrees in Information Science obtained from the same University. Her areas of interests include Knowledge Management, Indigenous Knowledge Systems and Social Informatics.

