

# Chapter 2

## Research Methods and Approach to Analysis Within Chapters



Ann Luzeckyj, Sharron King and Ben McCann

### 2.1 Background Studies and Approaches

The book is primarily based on two separate research projects, both funded by the Australian Government. These projects provide both qualitative and quantitative data acquired through surveys and interviews with FiF students that helped gain insight into their experience of attending university. They comprised of four components:

- Project 1 involved a large study, where students across the three main South Australian universities were surveyed to ascertain their varying expectations of university study (see Sect. 2.2).
- Project 2 involved three separate parts
  - Part 1 analysed the responses from FiF survey respondents from Project 1 (see Sect. 2.3)
  - Part 2 produced an annotated bibliography based on previous publications related to FiF students and supported the development of themes (see Sect. 2.4)
  - Part 3 included interviews with 18 FiF students identified via the surveys (see Sect. 2.5).

This chapter discusses these various components in greater detail.

### 2.2 Project 1

The first project (Brinkworth et al. 2013) involved administering surveys to students across the three main South Australian universities within a three-year period (2010–2012). These institutions represent a broad cross section of universities as they include both historically elite and more inclusive establishments. Two 76—question surveys containing Likert-style questions, ranking questions and open-ended questions were administered to students across the three institutions. The initial cross-sectional survey, designed to measure student expectations, was administered to first

year commencing students at the beginning of the academic year. The second survey, of equal length and similar construction, was administered to all continuing students in the latter half of the academic year. Over 16,800 students responded to the surveys, indicating a response rate of 25% of the total students invited to participate, with 5,301 of these respondents indicating they were the first member of their family to attend university.

Having close to one-third (32%) of the respondents who identified as FiF students allowed us to gain some insight into their unique experiences at university (Brinkworth et al. 2013). However, given the initial study did not focus on this cohort, we undertook a second, separate project to gain greater understanding of their experiences (King et al. 2014). The second project involved a closer examination of the FiF survey data extracted from the first study, the development of an annotated bibliography and in-depth interviews with 18 FiF students who had completed the surveys from the first study and successfully navigated at least three years of university.

### 2.3 Project 2 Part 1

The survey responses we used in the second project were subjected to a number of statistical tests (including chi-square, ANOVA, Stuart–Maxwell test and Mann–Whitney test, according to the nature of the data and for verification of results). The resulting data provided insight into a range of significant demographic differences between FiF and intergenerational students. As indicated in Table 2.1, identified differences between these two cohorts related to student commencing age, geographical location, living arrangements and type of school attended. FiF students also had a 5% lower university entrance (ATAR) score. The higher number of FiF students who are required to address a range of equity as well as social and cultural barriers is arguably a reflection of their resilience and capacity to ‘pave the way’ for others (as discussed in more detail below).

Not all disparities between FiF and intergenerational students were demographic. FiF students tended to enrol in courses requiring a lower entrance score, such as education, nursing, arts and humanities rather than the traditionally more prestigious areas of engineering, law, medicine and health science which have been shown to lead to both greater job security and higher incomes (Simmons 2013). There were

**Table 2.1** Demographic differences: FiF and intergenerational

Point of difference	FiF (%)	Intergenerational (%)
Mature age	19	12
Rural background	30	22
Living with parents	48	59
Attended public school (rather than Independent or Catholic)	59	49

also differences in the way expectations of university were shaped, with higher numbers of FiF students indicating their expectations were based on advice from school counsellors and teachers, media and university recruiting materials, while intergenerational students' expectations were most often informed by guidance from parents and siblings.

Typically, commencing FiF students expected to undertake more independent study than intergenerational students. This trend persisted even when the data was broken down by age with the greatest proportion of survey respondents expecting to study more than 20 h per week being the mature age FiF cohort. Similarly, FiF students expected their performance at university to be better than in high school, and this was borne out in their actual experience.

Students generally expected to be able to successfully combine study with paid work; however, all groups, including FiF students, found this balance hard to maintain, with significant numbers of students in the second survey finding that external commitments negatively impacted on their study.

Fewer FiF students had friends attending the same university than the intergenerational cohort, a finding which emphasises the importance of providing opportunities for all students to make friends and build peer relationships within orientation programs and the first year curriculum.

These findings are not isolated to the experiences of the surveyed South Australian students but are supported by the findings from other national and international research (i.e. Anders and Micklewright 2015; Collier and Morgan 2008; Crozier et al. 2008; Lehmann 2009; Moschetti and Hudley 2008) and as determined through our development of an annotated bibliography.

## 2.4 Project 2 Part 2

Preparing the annotated bibliography on FiF students' experiences in higher education formed the second part of our second research project. Australian and international publications predominantly from Australia, the USA, the UK, New Zealand and Canada and published from 2000 to 2014 were explored to ascertain the extent of published knowledge and/or research related to the FiF student experience in higher education from both an Australian but also a broader global perspective. Research organisations, government websites and published documents from higher education conferences were all explored to identify relevant policy documents, working papers and other literature. In order to ensure only the most appropriate literature pertaining to FiF student experiences was included, publications discussing specific programs or intervention strategies to improve transition and academic success for FiF students and research focusing on aspirations and experiences prior to commencing university (such as those of high school students) were considered outside the scope of, and therefore excluded from, the bibliography.

This careful focus uncovered 155 publications identifying what was being said about students beginning university who do not have siblings or parents who have participated in higher education before them (King et al. 2014). The document includes a range of books, reports and articles published from 2000 to 2014, predominantly from Australia, the UK and the USA. In developing the bibliography, we became aware of the varying nomenclature and university systems across these three locations. The most prominent difference related to the terms ‘FiF’ and ‘first generation’, which are often used interchangeably within the literature. The meaning of these terms, however, does differ as one (FiF) may include siblings while the other (first generation) does not. The definition used in this study, as discussed in detail in the Introduction chapter, focuses on those students who were the first members of their immediate family (including both parents and siblings) to attend university.

Developing the annotated bibliography allowed us to identify how other authors and researchers discussed FiF students and explored their experiences. Our evaluation of the literature uncovered four key themes: individual, student, journey and networks. As indicated in Fig. 2.1, each theme includes a number of subthemes regarding how the FiF student experience is presented in the literature (King et al. 2014).

In order to build our understanding and develop the conceptual framework, we took the breakdown of these themes and subthemes a step further and identified individual attributes to associate with each subtheme and provided a more Australian



Fig. 2.1 Conceptual framework of the four key themes

**Table 2.2** Subthemes and attributes of the individual

Individual characteristics	Skills and abilities	Influences on self	Understanding of self
Determination Independence Motivation Perseverance Work ethic Resilience Self-doubt Sense of stigmatisation	Academic skills Coping strategies Higher order skills Intellectual ability Support-seeking behaviour Time management	Habitus Cultural context Social and cultural capital Financial capital	Locus of control Self efficacy Self identity Agency

context so these could be more easily applied to the students we surveyed and intended interviewing.

### ***2.4.1 The Individual***

We conceptualised the theme ‘the individual’ through a lens of how each student develops as they encounter the joys and misgivings related to deciding to attend university. Doing so allowed both the subthemes and the linked attributes to be identified. These are shown in Table 2.2.

### ***2.4.2 The Student***

We saw the theme of ‘the student’ as relating to a person’s decision to participate in higher education, which is life changing and for many involves re-evaluating their core understandings and beliefs about themselves and the world as they take on a new identity as a student. Three subthemes of ‘student’, and their attributes, are shown in Table 2.3 (the fourth subtheme, ‘Transitioning on’ was included in Fig. 2.1 but not here, as it was added as we conceived the interview questions and further developed the conceptual framework, but was missing from the initial conceptualising we did as we developed the annotated bibliography).

### ***2.4.3 The Journey***

The metaphorical concept of ‘the journey’ fitted how we identified the experience undertaken by ‘the student’. These two themes are closely linked; however, the theme of the ‘journey’ relates more to the external aspects of their personal experiences

**Table 2.3** Subthemes and attributes of the student

Becoming student	Enculturation	Consolidating identity
Decision to enrol	Adjustment	Achievement
Newness	Developing student identity	Attrition
Navigating physical space	Extracurricular activities	GPA
Preparedness	Identity tension	Mastering role of student
Academic culture	Isolation	Transformation
Academic discourse	Sense of belonging	
Engagement	Sociocultural incongruity	
Institutional habitus	Campus life	
University expectations	University experience	

**Table 2.4** Subthemes and attributes of the journey

Motivation	Chasing ‘what’ and ‘where’	Enablers/barriers
Aspirations	Access	Financial support
Career	Campus location	Work/family/study balance
Financial freedom	Course choice	Costs
Job prospects	Distance education	Perceived benefits
Life catalyst	Higher Education	External commitments
Pathways—Australian	Contribution Scheme (HECS)	Previous attitude to education
Tertiary Admission Ranking (ATAR)	debt	
Specific job skills	University choice	
Social mobility		

while overarching both the student and the individual. The attributes provide insight to three of the ‘journey’ subthemes, as shown in Table 2.4.

The ATAR is a ranking between 0 and 99.95 that indicates a student’s entry, relative to others within their state and age group into university (<https://www.tutoringforexcellence.com.au/blog/what-is-an-atar-a-simple-explanation-for-parents-students-and-teachers/>). It is used as the main form of entry into university in all Australian states except Queensland which will introduce the ATAR in 2020.

### 2.4.4 The Networks

The ‘networks’ theme developed as we perceived the added importance of the contacts and supports developed by students who did not have the advantage of guidance from family members or caregivers who had attended university. This theme bookends the others and brings them together. It includes several attributes within its two subthemes, as shown in Table 2.5.

**Table 2.5** Subthemes and attributes of the networks

The ‘who’	The ‘how’
Family support (or lack thereof)	Family expectations
Friends	Institutional support
Influencers	Lack of guidance
Learning support	Support
Peers	
Role models	
Support from teaching staff	

We used the same themes, subthemes and attributes to guide our development of the interview questions. They also supported our initial thematic analysis of the interview transcripts produced during the third phase of the second research project.

### 2.5 Project 2 Part 3

The third phase of our second research project involved semi-structured interviews with FiF students. The three authors conducted this research. Six FiF students from each of their corresponding institutions, the University of South Australia (UniSA), the University of Adelaide and Flinders University were recruited, based on having identified as FiF students when participating in the first project (discussed above). All interview participants had attended university for three or four years and while some had completed their original degree and had gone on to enrol in further study, a number were continuing study as part-time students or were in the final year of a double degree. We deliberately selected students from a wide range of disciplines such as arts, engineering, speech pathology and graphic design in order to understand a broader range of student perspectives. Our interest in talking to students who continued at university (rather than those who had prematurely left) was based on wishing to identify the factors that had enabled and encouraged FiF students to continue with their studies. Table 2.6 shows detailed demographics of the interview participants (using their pseudonyms and an age range for each, so participants cannot be easily identified).

Of the 18 FiF students interviewed, 44% were male, 50% were school leavers, with a wide range of disciplines covered; 28% were studying degrees in the arts, 33% health science related degrees, 17% business degrees and 17% science-based degrees.

The interviews provided an opportunity to develop an understanding of the FiF experience and give insight into how FiF students successfully negotiate university life.

We used in-depth conversational interviews (Riessman 2008) as these provided opportunities to collect ‘deep and rich levels of narrative description’ and gain insight into the students’ outlook on their personal experiences (O’Shea 2015, p. 500). The

**Table 2.6** Participant demographics

Pseudonym	Gender	Age	Discipline area Degree completion	Full-time Part-time	Pathway to university	Living arrangements while studying
Gail	F	<25	Animal Sciences Graduated from honours	FT	School leaver	Lived at home with parents
Denise	F	36–45	Psychology	FT	Mature age entry	Lives alone in a one-bedroom unit
Brian	M	<25	Mathematics, now Master of Mathematics	FT	School leaver	Lives in university college; relocated from rural area
Cory	M	<25	Engineering	FT	School leaver	Living with parents
Rowan	M	26–35	Psychology	PT	Mature age entry	Lives alone
Jen	F	26–35	Arts	FT	Mature age entry	Lives with husband
Pete	M	>46	Arts	PT	Mature age entry	Lives with wife
Sue	F	<25	Tourism, now Master of Teaching	FT	School leaver	Lives in house share with friends; relocated from interstate rural area
Nina	F	26–35	Midwifery	PT	Mature age entry	Lives with husband and 6 children—youngest approx. 6 month
Marg	F	36–45	Politics	PT	Mature age entry	Lives with two sons—eldest finishing school

(continued)



**Table 2.6** (continued)

Pseudonym	Gender	Age	Discipline area Degree completion	Full-time Part-time	Pathway to university	Living arrangements while studying
Roxie	F	26–35	Speech Pathology, now Honours	FT	Mature age entry	Lives with partner
Carol	F	<25	Audiology, now Master of Audiology	FT	International, fee paying	Lives with other international students—off campus
Carl	M	<25	Podiatry	FT	School leaver, gap year	Lives in share house with friend relocated from rural area
Todd	M	<25	Double degree Journalism and International Relations (IR), now completing Honours in IR	FT	School leaver	Lives with parents and younger siblings
Kerry	F	>46	Commerce	PT	Mature age entry	Lives with husband and two primary school-age children
Brendon	M	<25	Double degree in Law Management Completing third year of 5-year degree	FT	School leaver	Lives with parents and younger sister

(continued)

**Table 2.6** (continued)

Pseudonym	Gender	Age	Discipline area Degree completion	Full-time Part-time	Pathway to university	Living arrangements while studying
Travis	M	<25	Media Arts	FT	School leaver, two gap years	Caring for father with disability
Alison	F	<25	Graphic Design	FT	School leaver	Lives in share house with partner; relocated from rural area

questions used to guide the semi-structured interviews were developed following the analysis of the literature collected and collated for the annotated bibliography. Questions were based on the themes we derived as the literature was explored (see Fig. 2.1 above). Students were emailed a copy of the potential questions a few days before the recorded interview so they had an opportunity to think about how they might respond to the questions (e.g. how they felt during orientation week and their initial coping mechanisms).

The interviews were conducted in a conversational manner to allow participants to lead as much as possible and direct what they wanted to say, rather than being strictly focused on the questions. We attempted to allow students to have agency over the conversations by giving up our control of them. A process which allowed students' stories to more naturally unfold (Barbour and Schostak 2005; Riessman 2008). We saw the interviews as a process of 'active asking and listening' where both interviewer and participant supported the making of meaning (Hesse-Biber and Leavy 2011, p. 94). We deliberately encouraged participants to reveal their experiences using their own words and in their own time, providing space for discussions to unfold organically as the participants chose how the 'story' developed. No two interviews followed the same path as some students chose not to answer particular questions, admitted that they did not have anything to say in relation to some questions or, because their responses dealt with multiple aspects of their transition experience, other questions were pre-empted. In some cases long, detailed responses were given to one or two questions, while little else was discussed.

The interviews were all recorded and transcribed. The interviewer checked each transcript for accuracy before sending it to the participant who was asked to confirm their agreement with its contents. Participants were de-identified and an alias assigned to each transcript. Using the thematic framework as a basis (see Fig. 2.1, above), each transcript was coded by the researcher who conducted it and at least one other. Given the same framework was used to determine the interview questions, other themes that emerged as a result of the interviews and their analysis were added to

the framework for further exploration and consideration as transcripts were revisited (e.g. transitioning on).

The interviews provided an opportunity to develop an understanding of the FiF experience and give insight into how FiF students successfully negotiate university life. Through interviewing FiF students, we were also able to acknowledge their different lifestyles, backgrounds and prior knowledge and discuss how these influenced their impressions and productivity at university. We have uncovered some of the constraints these students face and the various living and personal costs associated with attending university. Furthermore, we have begun to discover how their aspirations to attend university are shaped and the factors that influence them most significantly while at university. Our interviews provided a compelling collection of stories, which reflect the cross-disciplinary and cross-institutional nature of the FiF student experience, they helped reveal how university life has influenced FiF students' self-identity and their extended relationships with family and friends.

The analysis process allowed new themes and subthemes to emerge as interviews were revisited. As new subthemes and attributes were considered and added to the framework a greater understanding of how FiF students succeed at university developed. As our appreciation of the FiF experience progressed, we realised the initial themes provided a useful overarching insight into FiF student experience but as discussed in the Introduction and literature review chapter these themes were too easily applied to all students who are new to university. Therefore, rather than focusing on the initial themes and subthemes, we developed the chapters for this manuscript on broader aspects of the student experience.

## 2.6 Presenting the FiF Experience

Each chapter discusses a broader aspect of the student experience from the various perspectives derived as a result of the analysis of the quantitative data and from the qualitative responses from the surveys and from the interviews. In writing the chapters, we considered what students said about the topic and identified specific quotes which best captured their collective ideas. Our aim was to provide a representation of students which is both honest and positive. We have presented their stories, as told by them, discussing how, despite having various obstructions placed in their way, the students (often due to their own sheer determination) have succeeded.

FiF students are often represented as problematised or deficit and in need of additional support. For example, as outlined by O'Shea et al. (2017, p. 35), using demographic data as a basis of discussion 'foregrounds deficiency as the starting point'. As these authors point out demographic detail has its uses in specific contexts, which includes providing a point for comparison, however, researchers of the FiF student experience also need to be aware of the historic conditions surrounding students who encompass these demographics. For example, universities traditionally embrace and perpetuate cultural and class bias, privileging white, middle or upper-class and (in

Australia, the UK and the USA) western backgrounds, and these characteristics subtly presented as both aspirational and more worthy (Hinz 2016; O’Shea et al. 2017). The information provided by the FiF students we surveyed and interviewed demonstrates their resilience and truly reflects their position as both pioneers (Gist-Mackey et al. 2017; Greenwald 2012; McInnis et al. 1995) and trailblazers (O’Shea et al. 2017).

## References

- Anders, J., & Micklewright, J. (2015). Teenagers’ expectations of applying to university: How do they change? *Education sciences*, 5, 281–305. <https://doi.org/10.3390/educsci5040281>.
- Barbour, R. S., & Schostak, J. (2005). Interviewing and focus groups. In B. Somekh & C. Lewin (Eds.), *Research methods in the social sciences*. London: SAGE.
- Brinkworth, R., McCann, B., Burke da Silva, K., King, S., Luzecky, A., McCann, J., Palmer, E., Hill, J., & Scutter, S. (2013). In *Student and staff expectations and experiences, Final Report*. Canberra: Office for Learning and Teaching Final Report. [https://ltr.edu.au/resources/CG9-1158\\_Brinkworth\\_report\\_2013.pdf](https://ltr.edu.au/resources/CG9-1158_Brinkworth_report_2013.pdf). Accessed February 7, 2019.
- Collier, P. J., & Morgan, D. L. (2008). “Is that paper really due today?”: Differences in first-generation and traditional college students’ understandings of faculty expectations. *Higher Education*, 55(4), 425–446.
- Crozier, G., Reay, D., Clayton, J., Colliander, L., & Grinstead, J. (2008). Different strokes for different folks: Diverse students in diverse institutions: Experiences of higher education. *Research Papers in Education*, 23(2), 167–177. <https://doi.org/10.1080/02671520802048703>.
- Gist-Mackey, A. N., Wiley, M. L., & Erba, J. (2017). “You’re doing great. Keep doing what you’re doing”: Socially supportive communication during first-generation college students’ socialization. *Communication Education*, 67(1), 52–72. <https://doi.org/10.1080/03634523.2017.1390590>.
- Greenwald, R. (2012). Think of first-generation students as pioneers, not problems. In *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Think-of-First-Generation/135710> Accessed June 15, 2018.
- Hesse-Biber, S., & Leavy, P. (2011). *The practice of qualitative research* (2nd ed.). Thousand Oaks: SAGE.
- Hinz, S. E. (2016). Upwardly mobile: Attitudes toward the class transition among first-generation college students. *Journal of College Student Development*, 57(3), 285–299.
- King, S., Luzecky, A., McCann, B., & Graham, C. (2014). In *Exploring the experience of being first in family at university: A 2014 Student Equity in Higher Education Research Grants Project*. Perth: National Centre for Student Equity in Higher Education. Retrieved from <https://www.ncsehe.edu.au/publications/exploring-the-experience-of-being-first-in-family-at-university>. Accessed June 15, 2018.
- Lehmann, W. (2009). University as vocational education: Working-class students’ expectations for university. *British Journal of Sociology of Education*, 30(2), 137–149.
- McInnis, C., James, R., & McNaught, C. (1995). *First year on campus: Diversity in the initial experiences of Australian undergraduates*. Canberra: AGPS.
- Moschetti, R., & Hudley, C. (2008). Measuring social capital among first-generation and non-first-generation, working-class, white males. *Journal of College Admission*, 198, 25–30.
- O’Shea, S. (2015). Arriving, surviving, and succeeding: First-in-family women and their experiences of transitioning into the first year of university. *Journal of College Student Development*, 56(5), 499–517.

- O'Shea, S., May, J., Stone, C., & Delahunty, J. (2017). *First-in-family students, university experience and family life: Motivations, transitions and participation*. UK: Palgrave Macmillan.
- Riessman, C. (2008). *Narrative methods for the human sciences*. Los Angeles: Sage Publications.
- Simmons, O. S. (2013). Lost in transition: The implications of social capital for higher education access. *Notre Dame Law Review*, 87(4), 205–252.