

Creating a capabilities-based persistence framework (or matrix) on university student persistence

A Framing Paper

Introduction section

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Introduction

This document outlines the theoretical and methodological processes that underpinned the development of a capabilities and capitals-based framework (or matrix) that focusses on how first-in-family students persist at university. This project was funded by the Australian Research Council (DP170100705) and its overall objective has been to increase understanding of how students persist at university in order to provide targeted support for those individuals considering departure, particularly those from educationally disadvantaged or 'equity'¹ groups. The project builds upon related findings that have outlined how first-in-family students utilise existing cultural, familial and knowledge capitals during their transition into, and engagement with, university (for example O'Shea, 2018, 2016; O'Shea, May, Stone, & Delahunty, 2017; O'Shea, Stone, Delahunty & May, 2018) as well as related studies on experiences of higher education participation for Indigenous students (Harwood, Chandler & O'Shea, 2014-2018) and rural/remote students (O'Shea, Southgate, Jardine & Delahunty, 2018).

The research drew on narrative inquiry methodology to foreground the embodied nature of this university experience for the first in family cohort. Broadly, the project was informed by sociological perspectives (Bourdieu, 1986) combined with philosophical understandings of social justice (Nussbaum, 2006; Sen, 1992), in order to provide rich insight into what individuals 'actually do' (or the capabilities and freedoms able to be accessed) that enables persistence at university. It was this in-depth understanding that has underpinned the development of the first capabilities-informed framework that will inform approaches to university student retention.

This framing paper details how this study's methodology and theoretical underpinnings provided the scope for the development of this framework and is intended to provide context for end users, it could also be usefully applied to similar studies in the field which are developing a methodology or theoretical framing (with acknowledgement!). This overview deals with some relatively complex theories and also details the various stages of the research design and data analysis, as a result not all sections will interest a broad readership and for this reason, most sections can be read in isolation and the reader is encouraged to dip in and out at their discretion.

Theoretical Background

...theory is important because it provides us with the frameworks to make sense of complex phenomena. (Bowman, 2010, p.3)

Understanding the reasons why people persist at university is complicated and so in order to do justice to the rich data that was collected as part of this study, I have combined the work of Sen and Bourdieu to consider how it is that students themselves consider this act of

¹ There are currently six targeted equity groups in Australia, including people from i) low socioeconomic backgrounds, 2) rural and isolated areas, 3) non-English speaking backgrounds as well as 4) women in non-traditional areas of study, 5) Indigenous peoples and 6) those with a disability.

persistence. This theoretical fusion will be summarily described in this document but further expanded upon in upcoming publications.

Wilson-Strydom (2015) defines two ways in which the capabilities approach can assist in understanding education participation and achievement. The first refers to the 'capability' to actually engage in education while the second refers to how the 'fertile functioning of being educated' (p.57) impact on the development of associated capabilities such as locating employment or participating knowledgeably in political processes or similar. A key part of the first understanding (the capability to engage) implicitly relates to persisting and achieving in education.

There are **four main reasons** why the capabilities approach is a valuable theoretical framing when examining or theorising social justice in education. Primarily, this particular approach allows recognition of both the 'intrinsic' and 'instrumental value' of education while also (and importantly) foregrounding social justice and its redistributive properties. Another rationale for using this approach is that it centralises 'agency' within the educational access field and finally provides a 'space' to consider the particular capabilities required to achieve 'educational / pedagogic rights' (Wilson-Strydom, 2015, p. 58). The capabilities approach also fundamentally provides a rich lens for conceptually understanding the ways in which students enact persistence in HE, focussing on what students actually 'do' and the skills or experiences they draw upon to negotiate the stratified nature of university. As Wilson-Strydom so clearly articulates (and drawing on Walker's (2006) work), if we consider broad widening participation activities from a capabilities perspective, this allows insight into how 'higher education pedagogy can generate both capabilities and capability deprivations, producing both equity and inequity, belonging and exclusion' (p. 59). Simply put, the capability approach focuses on the flourishings of individuals, offering a counter narrative to attrition data that says 'nothing useful about individual experiences of higher education' (Walker, 2003, p. 170).

The work of Pierre Bourdieu (1930-2002) is being used to more deeply contextualise the nature of capabilities by exploring the complex social arrangements that individuals exist within. The cornerstones of Bourdieu's theory, namely field, capital and habitus, are utilised to examine the positionality of individuals by closely examining the lives they are currently living and also, the actual 'flourishings' that are accessible to them. In summary, the term 'field' is used to convey the ways in which forms of power are manifested and perpetuated within particular social fields; this is a complex movement that is nuanced to particular social settings. Habitus is based on an individual's socialisation and leads to people thinking / acting / behaving in particular ways often without regard for the constructed nature of these actions or behaviours. Reay (1998) describes habitus as '...primarily a dynamic concept, a rich interlacing of past and present, individual and collective interiorized and permeating both body and psyche' (p.521). Hence, habitus can be regarded as a 'transforming machine' that while reproducing the dominant social conditions does this in a 'relatively unpredictable way' (Bourdieu, 1993, p.87). Finally, Bourdieu (1986) identifies various forms of capital which include: social, cultural and also, symbolic capital, the latter generated through manifestations of prestige (for example qualifications, art forms etc). Each of these concepts is useful in exploring the nature of persistence but it is particularly the exploration of capital that can offering richer understanding of the range and type of

'conversion factors helping and hindering the development of capabilities.' (Hart, 2012, p. 53).

Policy Background

This research is also timely as a number of policy documents have explicitly referred to poorer academic outcomes recorded for those students from equity backgrounds. The three reports specifically informing the equity environment in terms of persistence are the following:

Report Details	Key Quote(s) related to persistence
National Regional, Rural and Remote Education Strategy Framing Paper Regional Education Expert Advisory Group (December 2018)	<i>'When students from regional and remote backgrounds do undertake university study, they are less likely to graduate than metropolitan students (60 per cent for remote students, 69 per cent for regional students and 75 per cent for metropolitan)'. (p5)</i>
Performance-Based Funding for the Commonwealth Grant Scheme Report for the Minister for Education (June 2019)	The recent Performance-based Funding proposal is anew funding measure that is based upon improving university student outcomes. The model proposes funding to be distributed based on key performance indicators, including <i>student experience, graduate outcomes and equity group participation</i> . Improving retention rates is highlighted as an important indicator.
The Demand Driven University System: A mixed report card. Productivity Commission Research Paper (June 2019)	While increased numbers of students from low SES backgrounds attend university, any gain is limited by 'rising drop-out rates'. (p.69) <i>'University drop-out and completion rates vary considerably across different groups. Members of equity groups, including students that are Indigenous, or grew up in regional and remote areas or from low SES backgrounds have much lower completion rates and higher drop-out rates'. (p74)</i> <i>'...the average share of undergraduate students considering early departure was 19 per cent in 2018. It was 30 per cent for Indigenous students, 21 per cent for 'first in family' students and 22 per cent for low SES students'. (p74)</i>

The release of these reports all within six months of each other in 2018-2019 means that there is a 'climate of readiness for change' (Hinton, Gannaway, Berry & Moore, 2011, p.10) within this environment and also, an increasing focus on the ways in which learners can be adequately supported to 'persist' at university. Certainly, the environment in which this research occurred was very attuned to issues of 'retention' and how to retain students, for example a number of insitutions that students attended had 'retention' strategies in place or even a dedicated unit devoted to student 'retention' or 'transition'. This research deliberately focussed on the act of persistence, preferring to explore how students themselves articulated their movement through the university and the ways in which this was encouraged or inhibited by existing relational, structural or environmental factors.

However, this research is situated within a particular political context, which also means that there are certain dominant perspectives relating to what 'persistence' is and what the act of 'persisting' looks like. Given this current political context, it is important that my own positioning in relation to this study is considered as well as the intent of this framing paper, both these areas are explored in the next section.

Focus of Framing Paper

The focus of this persistence framework is on 'attributes of success' (Molla, 2019) rather than negotiating the forms of structural disadvantage that can be assumed to exist for many of the participants in this study. Such a focus might be considered as limiting as the result is a lack of critical engagement with overarching power or structural imbalances within society. Indeed, if adopting a critically reflexive position then the concept of persistence is in itself a questionable one, particularly if framed within neo-liberal meritocratic understandings. To be very clear, I do not subscribe to the idea that persistence is necessarily a positive thing, instead recognising how this can be a form of 'symbolic violence' (Bourdieu, 1984), enacted when existing cultural capital does not match what is expected or required within the HE context.

The objective of this framing paper is to define the analytical and theoretical context for the persistence framework that emerged from the data. However, this is not to ignore or dismiss the social stratification encountered by these participants and this foci will be a feature of further publications. These publications will consider the circumstances under which people persist at HE including the possible emotional and social repercussions such persistence heralds. The desire to create an empirically informed tool that explored persistence has been derived from a belief that if individuals are being encouraged to attend university then we, as academics and equity practitioners, have a moral obligation to ensure that the sector is endeavouring to understand the nature of persistence and ensuring that the necessary support and interventions are offered across cohorts. Essentially this is what, I feel, we do have some 'control' over but this is not to disregard the broader political and social implications of this persistence nor the impact navigating this environment can have on individuals relationally and also, personally (O'Shea, 2020; O'Shea & Delahunty, 2018; Groves & O'Shea, 2019)

The data outlined in this paper then details how students articulated their actually enactment of persistence in HE. Specifically, the analysis focussed on identifying the types of 'capabilities' and 'capitals' that underpin or inform successful persistence in this environment. The study also examined 'conversion factors' as a sensitising concept in the actual enactment of preferred fertile functionings. Conversion factors recognise the intricacies of the situatedness of individuals or their 'intersecting dimensions' and draw attention to what is required for individuals to attain 'particular functionings' (Walker & Unterhalter, 2007, p. 10). We know that certain types of capital lead to certain forms of advantage, hence all capital is not created equal. So while people may attain capital through forms of education for example, attention needs to be focussed on how this capital is converted into advantage (Hart, 2012). In short, possession of different forms of capital does not automatically result in the conversion or 'activation' of this (Hart, 2012, p.57) so simply achieving the possession of different forms of capital does not in itself guarantee

individual wellbeing. Instead someone may appear to have the requisite capitals but does not have the capacity or the flourishings to achieve the desired well-being.

Overview of Study

The participants selected for this study were all at the culmination of their studies and, while each was recruited on the basis of being the first in the family to attend university, all were intersected by a range of demographic and social factors (please see Figure 1). Recruitment included providing participants with a choice to complete the survey and/or participate in an interview. Those interested only in being interviewed contacted the researchers by email, while the survey was accessed via a link. At completion of the survey an option to be interviewed was given (participant details were removed to retain survey anonymity). 42 survey participants indicated interest, with 15 actually participating in an interview. In total, 376 Australian students participated in either interviews (n=70) or surveys (n=306) (see Table 1). Both of these approaches aimed to closely examine how individuals defined and reflected upon the act of persistence within university and the strategies employed in this enactment.

The methodology adopted was deliberate in its intent to enable rich understandings of how individual learners, who are intersected by various equity categories, can work within and around HE systems for productive outcomes. Essentially if widening participation activities only focus on providing 'the mechanisms of fair competition' (Marginson, 2011, p30) then it fails to consider the 'capacity' of learners to function or compete equally once within HE. Like Marginson (2011), this study advocates for a realist perspective on social justice that ensures focus remains on how people actually action and achieve justice within different contexts. The deeply intersected nature of this student cohort also provides great insight into how persisting at university is negotiated by those who do not fit neatly into pre-defined categories. Intersectionality is key to understanding how multiple indicators impact on the persistence of our university students as Hankivsky (2014) explains:

... inequities are never the result of single, distinct factors. Rather they are the outcome of intersections of different social locations, power relations and experiences (p. 3)

In this study, participants were able to self-select a range of equity categories which they considered were applicable to them. Many identified more than one category as reflective of their circumstances, which clearly indicated the extent to which individuals were intersected by a number of potentially limiting factors to gaining a HE degree. The following diagram represents this diversity of the participants through a series of 'chords'; as expected, many students fell into one or more categories with the creation of additional 'grouped codes' (where two or more categories were selected) to further represent this multiplicity.

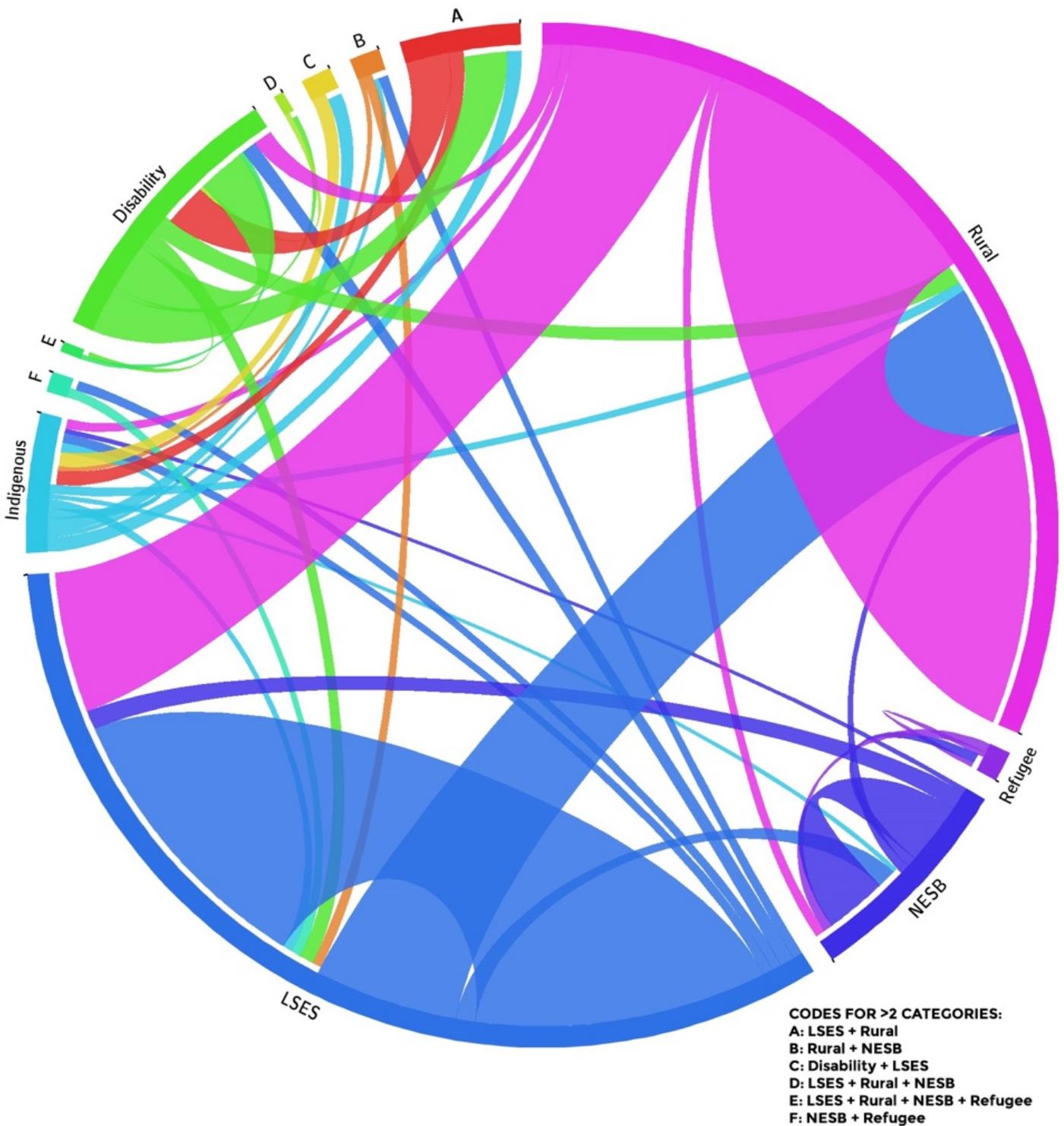


Figure 1: Chord Diagram that represents the intersectionality of this cohort

Figure 1 shows the multiple equity categories that participants selected as representative of their situations. The diagram visualises both single categories selected (e.g. LSES or Rural or NESB etc) as well as the inter-relationships between them if more than one equity category was selected. Each category is represented by colour on the outer rim of the circle (i.e. LSES

= blue, NESB = purple, Rural = pink etc). **Selection of a single equity category** is shown by the chord ‘looping’ back on itself (i.e. single selection of Rural shown by the pink chord looping back within its own domain).

Where more than one category was selected these are joined by a chord. The chord’s thickness indicates the number of participants who selected this combination as representative of their background or circumstances. **Selection of two categories** is shown by the chord joining the other domain e.g. Rural+LSES, Rural+Disability. **Selection of more than two categories** is more complex and shown as groups coded as A, B, C, D, for example some participants selected three categories (A) LSES+Rural+another category, or five categories (E) LSES+Rural+NESB+Refugee+another category. The chord diagram purpose is to illustrate the complexity of intersectionality and the multi-dimensional realities of these participants.

Data was collected from both urban and regional universities, but the latter is over-represented in the data sample (see Table 1). This focus on regional institutions was intentional and recognises that these universities attract a more diverse student population who are studying in a range of modalities and in varying patterns of attendance. Table (1) also indicates the spread of data collection from each of the institutions as well as the spread of attrition rates for each of the institutions. The exact rates have not been replicated in order to avoid identification of the institution and similar to the diversity of institutional type, these rates also vary across institutions. Overall, the mean attrition rate across these institutions is 21% which is above the national attrition rate of 15% (HESP, 2017). All rates are based upon the modified attrition rates (2014) used in the Higher Education Standards Panel (HESP, 2017) recent report: ‘*Improving retention, completion and success in higher education*’.

Institutions: data collected from Apr 2017 to Sep 2017	Attrition %	Surveys #	Interviews #
Institution 1 (City WA)	10-15 %	76	16
Institution 2 (Regional QLD)	15-20%	24	3
Institution 3 (Regional NSW)	20-25%	11	1 [^]
Institution 4 (Regional NSW)	10-15%	63	17*
Institution 5 (Regional VIC)	20-25%	43	6
Institution 6 (Regional QLD)	15-20%	46	11
Institution 7 (City, SA)	15-20%	14	3
Institution 8 (Regional NSW)	10-15%	12	7
Institution 9 (Regional, TAS)	35%+	17	6
TOTAL		306	70*

[^]One transcript included here was later removed as the participant revealed it was their second degree and all their children had degrees.

*A paired interview conducted is counted as 1 interview, but demographic data obtained for each individual

Table 1: Data Collection Summary

The approach taken in this study intentionally created a space for students themselves to consider their journey through HE and the ways in which they achieved (or not) the functionings (or outcomes) desired. The study design was also participant-centred; students were not only encouraged to reflect deeply upon these journeys but also, were all given an

opportunity to nominate the equity descriptors that best described their personal and demographic status. As discussed in the previous section, when exploring persistence strategies it was also important to consider other social and contextual factors that are influential in this HE experience.

Such a democratic approach arguably provided an opportunity to foreground alternative and perhaps, hidden, understandings of valuable 'fertile functionings' within the HE persistence space. Such functionings may or may not fit with meritocratic understandings of what 'successful persistence' looks like or how this is measured within the sector (O'Shea & Delahunty, 2018). Instead, any understanding of persistence needs to be situated closely within students' own perspectives of how individual 'fertile functionings' are enacted and achieved. In other words, how learners themselves considered achievement was key to this study particularly what it was that each individual valued, regardless of whether this value was recognised by the university they attended (Delahunty & O'Shea, 2019).

This research adds to understanding of how social structures may inform the persistence of students from equity backgrounds and also the necessary 'conversion factors' required in order to enable or enact this persistence. Like Sen, this study recognised the need to deeply examine the actual freedoms people have to 'formulate capabilities' or valued doings and beings, as these conversion factors that allow the necessary resources to be converted into valued or fertile functionings (Sen, 2002, pp. 86-94). Bourdieu (1986) also foregrounds how people have differential access to various forms of capitals through interactions occurring in various fields, but this can be a hidden constraint. If we combine capitals with understandings of capabilities this provides added depth as having certain capital dispositions does not automatically translate into achieving well-being. Instead purposefully reflecting upon an individuals' access to conversion factors allows a deeper understanding of the transference of capital and the enacting of well-being.

Based on this understanding, the creation of a capital / capabilities based framework, that would underpin strategies and interventions designed to support students through this HE journey, is proposed. This framework will be embedded within the list of capabilities and capitals that have been derived from analysis of both surveys and interviews. Two lists were developed: one which was 'ideal' and a second which was more pragmatically focussed. Before highlighting these lists, it is first necessary to explain the rationale for focussing on a canonical list and how this informed the findings of this study.

Developing lists

There is some debate around the usefulness of developing lists of capabilities. According to Sen (1999), lists do not capture the unique nature of contexts and instead he suggests that capabilities should be defined at a local level. For Sen (1999), understanding capability requires dialogue across the community; he is not opposed to lists per se but rather cautions against the applicability of these at a general level. Instead, any list needs to be identified as being both particular and situated, bounded by time, place and space. Sen's approach is then to offer a conceptual framing that enables thinking to emerge but this should always be embedded in dialogic discourse and debate; lists should never be regarded as fixed or canonical but rather emergent and changeable depending on context. However,

for some, this approach is too vague and allows much latitude in interpretation, Nussbaum (2006) for example has developed a list of central human capabilities, Walker (2006) has focused on the HE environment and developed the 'ideal-theoretical list of HE capabilities' which refers to the capabilities developed throughout study at university, whereas Wilson-Strydom (2015) focused on the capabilities that underpin transition to university from the schooling environment.

This study drew upon the voices and words of students to embed the capabilities list within the context of this cohort but equally recognises that these data are necessarily bounded and limited contextually. The study focused on first-in-family (FiF) students, but given that this was a highly intersected and diverse group (see Figure 1), this generalisability will always be limited. To broaden the context of the study, surveys and interviews were also conducted internationally with FiF participants in the UK, Ireland and Austria in 2018. This international focus was designed to test the applicability of this data across locations but equally acknowledging that the proposed list is still bounded in nature, this cross-analysis will occur in 2020. Like Wilson-Strydom (2015), the impetus for developing a list was to enable 'close-up' work on specific areas rather than more broad application to human development. This list can then also be used to underpin pedagogical interventions specifically targeted at developing capabilities or creating a recognition of what might be useful (or a necessary conversion factor) within the HE environment. As Walker (2006) argues:

We need to ask not only which capabilities matter, but how well we are doing practically in higher education in fostering these capabilities. (p. 142)

If the capabilities or capitals that assist persistence in HE are identified then there is an opportunity to consider how these are (or might be) encouraged and supported. Hence, like Wilson-Strydom (2015), this study recognises that 'a theoretically and empirically grounded capabilities list...provides a useful practical tool for advancing social justice in the context of university access' (p. 65).

When examining the capabilities, it is vital to consider who can develop these capabilities and who may not have the ample opportunity to do this. Equally, such analysis provides the opportunity to explore what might impact on the agency and the necessary 'well-being freedoms' (Wilson-Strydom 2015, p.66) that underpin such development. By focussing on human development with specific reference to how individuals enact their preferred ways of being, this research avoids assuming that these 'ways of being' are aligned with dominant discourses and policy initiatives. The list then not only serves to identify what might assist students to achieve their preferred 'fertile functionings' but also, provides the foundations for addressing possible gaps in requisite capabilities and conversion factors.

Approaches to Developing Lists

The main objective of this study was to develop an empirically validated list that identifies the persistence capabilities of the first in family students that participated in this study. However before outlining the persistence framework, it is important to clearly identify how

this list has been developed; an approach informed by five overarching criteria developed by Robeyns' (2003). While these criteria were developed in reference to the field of gender equality, the explicit nature of this approach enabled replication and it has been successfully applied to other lists focused on the HE sector (Wilson-Strydom, 2015). Details of these criteria are outlined below:

- **Explicit Formulation:** This requires the development of the list to be defined explicitly but also to be defensible and critically discussed.
- **Justified methodologically:** How the list was developed methodologically should be clearly outlined and justified, this should be a very detailed account with the appropriateness of this approach explained.
- **Sensitive to context:** Recognition of the specific context that the list refers to is required and this needs to be referenced and contextualised within the list through language choice and references.
- **Levels of generalisability:** Robeyns suggests developing two forms of the list, an ideal one that is unconstrained by restrictions imposed by funding, policy or data and then a more 'pragmatic' list that considers these factors.
- **Exhaustive and non-reductive:** Each capability should have depth and include various elements, there may be some overlap between the capabilities and some may require additional detail and description

By drawing on these five criteria, this study sought to examine the ways in which students used existing and available resources and converted these into valued or productive capabilities that underpin 'fertile functionings' within the university environment. This list not only recognised how attending university may be considered an individual act or a personal choice but also, how such actions are deeply constrained and influenced by socio-economic and cultural issues; as Wilson-Strydom (2015) explains:

... the freedom of agency individuals have is qualified and constrained by social, political and economic factors and opportunities. (p. 73)

If we only considered the outcomes of persistence, in this case successful graduation, then this may mask the ways in which learners had to adapt or change in order to get to the point of graduation. Exploring how students reached this point and the capabilities that they perceived as leading to this functioning (in this case graduation) potentially offer insight into the invisible constraints or differences that were encountered en route. This forces us to question the educational opportunities or choices available to different populations and explore how choices and actions have been shaped by social constraints. As Wilson-Strydom (2015) further explains this may require asking 'searching questions' and avoiding a reliance on markers such as 'happiness' or 'satisfaction' as indicating equal access or freedom of choice. Of specific focus in this study is how participants identified the capabilities that assisted them in persisting and equally, how they converted these capabilities into valued functionings within this environment, with specific reference to the 'conversion factors' required to achieve this. Drawing on the work on Bourdieu (1986) allowed an analysis of how various forms of capital may be regarded as a types of commodities that could be converted into capabilities (Hart , 2012), providing more 'more finely grained insights into the processes and experience of inequality.' (Bowman, 2010, p. 6).