

## **Managing work and study with an eye on the future**

### Author

Eastgate, L, Hood, M, Creed, PA, Bialocerkowski, A

### Published

2022

### Journal Title

International Journal of Educational Research Open

### Version

Version of Record (VoR)

### DOI

[10.1016/j.ijedro.2022.100142](https://doi.org/10.1016/j.ijedro.2022.100142)

### Rights statement

/© 2022 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

### Downloaded from

<http://hdl.handle.net/10072/417660>

### Griffith Research Online

<https://research-repository.griffith.edu.au>



## Managing work and study with an eye on the future

Lindsay Eastgate<sup>a,\*</sup>, Michelle Hood<sup>a,b</sup>, Peter A. Creed<sup>a,b</sup>, Andrea Bialocerkowski<sup>c</sup>

<sup>a</sup> School of Applied Psychology, Griffith University, Gold Coast, Australia

<sup>b</sup> Centre for Work, Organisation and Well Being, Griffith University, Gold Coast, Australia

<sup>c</sup> Griffith Health, Griffith University, Gold Coast, Australia



### ARTICLE INFO

#### Keywords:

boundary management  
future-selves  
possible-selves  
role management  
boundary management strategies

### ABSTRACT

Managing boundaries between roles is critical for healthy functioning and performance. However, little research has examined how working students manage their boundaries between study and work. The current study combined boundary management and future-self constructs to examine the salience of undergraduate students' future-selves and the influence this has on the management of their roles. Using a mixed-methods approach, interview and questionnaire data from 20 working undergraduate students in Australia (15 women, 5 men; aged 18 to 28 years) were integrated and analysed. The results indicated that students thought often about their future-selves and linked this thinking to the management of their current roles, particularly through the implementation of boundary management strategies. Theoretical and practical implications are discussed, with the aim of advancing knowledge on how to assist students with managing their multiple roles while at university.

### 1. Introduction

The transition between adolescence and adulthood is a pivotal point in identity development (Luyckx et al., 2010), and, for tertiary education students, it is a critical time for future career preparation (Super, 1980). Life at university provides students with an opportunity to construct their identity and to further clarify who they are and what are their ambitions for the future, including their occupational aspirations (Pizzolato, 2007). Attending university, however, also can present challenges for those who are faced with some or all of the responsibility for their own livelihood while they study (Morosanu et al., 2010). For example, a recent report suggested that students, more than ever, have to increasingly take responsibility for balancing their multiple, often competing roles, such as studying and working while at university (Choo et al., 2021). In addition, students are reporting challenges associated with managing work and study, with some students citing it as a factor in withdrawing from their university degree (Gopalan et al., 2019). Thus, at a critical time for identity formation and career development, students now are faced with the difficulties of balancing the demands of their current roles, while trying to work towards their future roles or self (e.g., a career in their degree related field).

Research has examined factors that could assist students to manage their various roles (Sung et al., 2013). Boundary management is one area of research that has shown promise in explaining how students manage their roles (Chu, Creed, & Conlon, 2019; Eastgate, Bialocerkowski, Hood, & Creed, 2021) and has been found to be related to

positive student outcomes, such as student well-being and academic performance (Chu et al., 2019). Boundary management theory is positioned in the role identity literature and, thus, suggests that identity-concepts affect how an individual places and manages their role boundaries (Ashforth, 2001; Nippert-Eng, 1996). The decision on where to place boundaries is connected to the psychological attachment an individual has for a role, and the salience of each role (Winkel & Clayton, 2010). Role salience reflects “the importance and value that people attribute to the roles central to their lives and identities” (Greer & Egan, 2012, p.1). It relates to where individuals devote their time and energy (Amatea et al., 1986), and the strength of each role boundary (Hecht & Allen, 2009). For example, if a student deems their role as a student to be most salient, then they are more likely to place strong boundaries around their study role, and they will be less likely to agree to extra shifts at work if it is going to impinge on their study time.

To date, most of the research on boundary management has focused on the implications of current role salience (Ashforth, 2001; Capitano et al., 2017) and has not explored the salience of the future-self. Students offer a unique perspective as they are often balancing several different roles (e.g., work, study, personal relationships, and family expectations), while also working towards a future, career-related goal (Casey Ozaki, 2016; Schuitema et al., 2014). Understanding how students' future-selves relate to the management of their current roles, therefore, could be useful in supporting students while at university.

Researchers have found that the salience of the future-self, or the degree to which the future-self is clear, easy to imagine (Strauss et al., 2012), and psychologically relevant to the present (Oyserman, 2015),

\* Corresponding author.

E-mail address: [lindsay.eastgate@griffithuni.edu.au](mailto:lindsay.eastgate@griffithuni.edu.au) (L. Eastgate).

is important in explaining proactive future-oriented behaviour and decision making. A salient, imagined future-self provides a “compass” for students as they navigate their university journey (Fugate et al., 2004; Perry & Raeburn, 2017). Individuals take more action with regards to their future-self when it is experienced as vivid, linked, in the forefront of their mind, and relevant for current choices (Nurra & Oyserman, 2018). Consequently, imagining one’s anticipated future has been associated with better performance and motivation in the present (Ruvolo & Markus, 1992), such as increases in GPA (Adelman et al., 2017; Oyserman et al., 2007), the prevention of withdrawal during challenging academic situations while at university (Destin et al., 2018), and as a fundamental determinant of action (Bandura, 1986). Kooij et al. (2018) noted that an individual’s future-self influences the perceived instrumentality of their actions and the valence of future outcomes. Thus, by visualising their desired end-state (i.e., the ideal future-self), an individual is able to generate plans and strategies necessary for the achievement of those end goals (Ruvolo & Markus, 1992).

The generation of strategies, a key factor in the boundary management literature, has been found to assist the achievement of current work-life balance and lower role conflict (Carlson et al., 2016; Spieler et al., 2018). The most notable strategies were proposed by Kreiner et al. (2009) and Sturges (2012). Kreiner et al. identified four categories of boundary management strategies. These were behavioural (e.g., seeking help from others to manage boundaries), temporal (e.g., managing time), physical (e.g., restricting work role to work location), and communicative (e.g., clarifying boundaries with others). Sturges focused on the crafting of roles and identified three main domains for this: physical (e.g., managing times and places for work and family roles), cognitive (e.g., clarifying expectations regarding work-family balance), and relational (e.g., negotiating work and home roles and boundaries with others). However, as noted by Eastgate et al. (2021), these strategies were constructed in the work-family domain and might not be as relevant to the working tertiary student population. In addition, the strategies were focused on achieving work-life balance and did not assess how other factors, such as identity, might influence the management of roles and the type of strategy implemented.

Therefore, the purpose of this study was to combine the concepts of future-self and boundary management to better understand how students manage their roles while at university. There were two specific aims. The first was to investigate whether students had a clear concept of their future-self, and, if so, how salient was it. The second aim was to examine if, and how, future-self assisted students in deciding how to manage their current roles and what boundary management strategies to implement.

## 2. Method

### 2.1. Research Design

By combining two areas of research, boundary management and future-self, which to our knowledge have not been investigated together in a tertiary student population, our research is exploratory in nature. Mixed-method studies are useful when investigating research questions that are exploratory in nature and when the complexity of the phenomena cannot be described in their entirety using a single method (Morse & Niehaus, 2009). This allows for data integration, which facilitates the development of both breadth and depth of understanding of the constructs being examined (Johnson et al., 2007; Tashakkori & Creswell, 2007). The use of mixed methods also heeded the call by Packard and Conway (2006) for research focusing on future-selves to use a combination of methods.

Working from a pragmatic paradigm, we employed a convergent research design, which was comprised of a qualitative core component (semi-structured interviews) and a quantitative, supplementary component (a brief questionnaire). Interview and questionnaire data were collected from the same participants, thus allowing for an in-depth descrip-

tion of how future-self is perceived and if it assists students in deciding how to manage the boundaries of their multiple roles, while also quantitatively measuring each student’s connection with their future-self.

### 2.2. Participants

Data were collected from 20 undergraduate university students who attended a large, multi-campus university in Queensland, Australia. The number of students selected was based on recommendations for qualitative saturation (Guest et al., 2006; Saunders et al., 2017; Weller et al., 2018) and where “new information produces little or no change to the codebook” (Guest et al., 2006, p. 65). To address the aims of the study, students who were working while studying were recruited and invited to participate. The sample consisted of students aged 18 to 28 years with a mix of both young women ( $n = 15$ ) and men ( $n = 5$ ). The age range included mature-aged and traditional school-leaver students. Hours worked per week ranged from 5 to 35 ( $M = 19$ ). Most viewed their primary role as “student” ( $n = 15$ ), while four rated themselves as “employees who studied”, and one as a “mother who studied”. All but two were first year students, and all were working towards the completion of their bachelor degree.

### 2.3. Procedure

Following ethical clearance, students were recruited via advertisements posted on their course website and asked to complete a brief online questionnaire followed by a single, (approximately) 45-minute, semi-structured interview. The questionnaire included demographic questions and scales to quantify perceived future-self. The interviews were conducted via telephone or in-person to fit around the students’ schedules. Most preferred telephone interviews. Prior to the interview, students provided signed consent and were offered a \$20 shopping voucher for participating.

All participants were asked a standard set of questions with individualised follow-up and probing questions to gain richer information. Interviews were audio recorded, deidentified, and then transcribed verbatim for analysis.

### 2.4. Measures

An online questionnaire was used to gather demographic information (age, gender, hours worked per week, major roles, current primary role, year of study, and degree enrolled in) and measures of perceived future-self. Students responded to all scales using a Likert-like response format of 1 (*strongly disagree*) to 5 (*strongly agree*). Average scores were calculated for each construct.

#### 2.4.1. Future-self measure

The 9-item Husman and Shell (2008) Future Time Perspective Scale, which assesses the value placed on the future and connectedness to it, was adapted for the student sample. Future value was assessed using three items (e.g., “Given the choice, it is better to get something you want in the future than something you want today”;  $\alpha = .73$ ). Connectedness to the future was assessed using six-items (e.g., “I have been thinking a lot about what I am going to do in the future”;  $\alpha = .73$ ). Previous studies found good subscale reliability ( $\alpha = .87$  and  $.88$ , respectively) and validity was supported by demonstrating positive associations with student engagement (Muenks et al., 2018) and career decision-making (Walker & Tracey, 2012).

#### 2.5. Interview protocol

A semi-structured interview protocol was developed based on the relevant literature on boundary management and future-self (e.g., Patton, 2015). The purpose of the interviews was to gain an in-depth account on how students described and rated the importance of their

**Table 1**  
Summary of Participants' Questionnaire Results

Demographics					
Hours worked per week	Range	<i>M</i>	<i>SD</i>		
	8-35	19	7.11		
Age (years)	18-28	23.5	3.47		
Gender	Female	Male			
	<i>n</i> = 15	<i>n</i> = 5			
Roles reported	Student	Employee	Partner	Mother	Athlete
	<i>n</i> = 20	<i>n</i> = 17	<i>n</i> = 9	<i>n</i> = 1	<i>n</i> = 2
Primary role	<i>n</i> = 15	<i>n</i> = 4	<i>n</i> = 1		
Scales	Range	<i>M</i>	<i>SD</i>		
Future-self					
Value	2.67 - 5.00	3.68	0.58		
Connectedness	2.67 - 5.00	3.99	0.61		

future-self, and how future-self influenced the structure and management of their various role boundaries. Interviews commenced with students describing a typical day, which allowed them to ease into the interview, for the interviewer to build rapport with the participants, and to understand the various roles that the students held and how they framed these roles (Bryman, 2015).

To understand how participants viewed their future-selves, questions were posed on their perceptions of their future and how their future-self affected their current roles, particularly the management of these roles (e.g., "How does where you want to be in the future affect some of your decisions now?"; "Do you think where you want to be in the future impacts where you put your energy and resources now and, if so, how?"). Follow up questions were used to explore these perspectives.

## 2.6. Data Analysis

SPSS (v23) was used to calculate descriptive statistics (e.g., *M*, *SD*,  $\alpha$ ) for each scale. Then, the quantitative results and the verbatim transcribed interviews were imported into NVivo (v12). To ensure rigour and trustworthiness of the results, we used the thematic analysis process outlined by Braun and Clarke (2006). Following their recommendation, for the initial step the first author familiarised themselves with the data and coded six interviews into themes relating to future-self, considering specifically how participants thought about their future-self, how connected they were to their future-self, the perceived impacts, how thinking about this affected the management of their roles, and boundary management strategies they employed. Then, to negate the potential bias of the first author, an experienced research assistant was employed to independently code the same six interviews. The coded interviews were then compared, and when discrepancies were identified, these were discussed, reviewed, and a consensus reached. Following these steps, the remaining interviews were coded.

Queries were run in NVivo to integrate the quantitative and interview data to gain a more complete representation (O'Cathain et al., 2007). This allowed for the analysis to be based on participants' scale scores and the interview data. For example, one query was based on participants' scores on how they rated their future-self and the interview codes for the specific impacts of future-self. After this step, the other authors reviewed and discussed the findings until consensus was reached. The authors also classified the boundary management strategies that emerged and how these related to the previously identified strategies outlined by Sturges (2012) and Kreiner et al. (2009).

## 3. Results

Demographic data and scale statistics are reported in Table 1. Participants reported a range of responses to the perceived future-self, indicating the heterogeneity of the sample. This variability was related to participants' different role management styles and the strategies they

implemented. Specifically, the results suggested that students thought about their future-self. The interview data also suggested that the future-self was related to four themes: (a) prioritising the student role (b) how roles were structured, (c) the compromises that needed to be made for role management, and (d) the motivation to continue engaging in the student role. Each of the themes represented a boundary management strategy that the participants utilised to assist with the management of their roles.

### 3.1. Salience of future-self

The first aim of the study was to examine the extent to which students thought about and gave importance to their future-self. The results indicated that students do think about their future-self, as they all reported that they think about where they want to be in the future. Most stated that they think about this often. As one female, participant described:

*I would say, like, quite often I think about my future. It is something that concerns me a lot. I feel like I do think really far into the future. More career wise. I feel like I am very focused on that.*

Another female participant also summarised how she thought about her future:

*I think about my future every time I don't get a concept, I'm like, you got to do this, you know what you want to do. When I'm talking about grades, like what GPA we have with people, I will contemplate my future because I'm not doing that well. I'll think, Oh, am I really going to be able to get this, you know, degree that I want and the future that I want and everything like that.*

Therefore, the participants were very aware of their future-self and that their study was a key factor in achieving their desired future. One male participant noted:

*Yeah, I'm constantly evaluating it [my future]. I'm still not positive. I've got an idea that I'm sort of moving towards, but that's changing...I'm freaking out about [it] even though it's three years away. I'm constantly evaluating to make sure that I'm still on that path, I guess.*

The quantitative results were consistent with the interview data. Most participants (*n* = 17) rated their connectedness to the future as 3.5 or higher (on a 5-point scale). Students who rated connectedness to their future as lower (below the scale mid-point of 2.5) spoke about their future-self in the interview, but in a more general manner that was linked to shorter-term goals. When asked about their future-self and what they wanted to achieve in the future, the three participants who scored the lowest on the connectedness measure only spoke about the future with respect to completing their degree rather than achieving a career or job. One female participant stated:

*I'm like pretty keen just to, like, graduate, but sometimes, yeah, I'm just like, Oh, I could be doing this instead of this. Like, sometimes I do have those thoughts, but it's not strong enough for me to just, like, change my like actions... I definitely just want to, like, find what I'm passionate about after I graduate.*

These three students reported that thinking about their future-self had minimal influence on their decisions today. When asked if their future-self affected their decisions now, one participant stated, "Not really. I'm just trying to, I'm like, I'm just focusing on, like, the main classes I have to do for my subjects and stuff like that." In contrast, those who scored higher on connectedness to their future-self reported that they actively made decisions about how they managed their current roles to work towards their conceptualisation of their future-self. For example, one high scoring female participant stated, "That's [future-self] the reason why I'm working so hard at university. So, I'm often having to try and convince myself to work hard because I want to be like where I want to be in the future."

Therefore, aligned with the first aim of our study, students were very aware of their future-selves, seemed to have a clear idea of the future they were striving for, and it was something they thought about often. The questionnaire data also highlighted the importance of students' connectedness with their future. Integrating the questionnaire data with the interview data, revealed that the measure of connectedness to the future-self was more relevant to the implementation of strategies, than the measure of value placed on the future. Students who were more connected to their future (i.e., students who rated their connectedness to the future above the mid-point) felt this influenced their decisions on the management of their current roles, whereas those students who were less connected to their future did not report it to influence their decisions in the same way.

### 3.2. Prioritisation of the student role

The second aim was to investigate if the future-self influenced the management of students' roles or the implementation of various strategies. Thus, expanding on the results from the first aim of our study, we found that the students who had a more salient future-self, reported that it assisted them with the management of their roles through the implementation of boundary strategies. The first boundary management strategy that emerged from the interviews was the prioritisation of the student role. Participants stated that they needed to prioritise the student role to progress towards their visualised future-self, as exemplified by the following female participant:

*My goal for the future definitely affects my decisions a lot. Because if I didn't have a goal, I would be probably working a lot more so I can live more comfortably. So, I definitely prioritise study over things that I do want to be doing at the time, often like visiting my family and just hanging out and, like, working more so I can have more money.*

Similarly, another female participant stated:

*Thinking about where I want to be in the future really keeps me on track, prioritising that I want to study to be what's most important. So, as I said, like, prioritising, if I've got study that pretty much comes before hanging out with friends and work.*

Two students reported that they realised their current work roles were less important to their future-self, and, as a result, they prioritised their study role. According to one male participant:

*Because I know that it's [work] not in the grand scheme of my life. It's very unimportant. And then I guess I'm more vigilant with uni because I know that I need to maintain a certain GPA to get into Honours and Masters.*

Hence, prioritising the student role was an important strategy that students implemented to manage their competing roles as well as way

to ensure they were devoting their time to the role that would facilitate their progression towards their future goals.

### 3.3. Structuring roles

Structuring roles was the second strategy to emerge from the data. Participants stated that they structured their roles in a way that ensured they were able to prioritise the role that was seen as most important to their future. Five students reported providing their university timetable to their employer and requested shifts be scheduled around their class times. In addition, 11 students reported that they changed work schedules when they had assessments, such as when assignments were due.

One participant expressed that, driven by her future-self, she structured her current roles to enable substantial work hours while completing her studies. She recognised that it was likely that, upon graduation, she would gain a graduate position with the same employer, thus, it was important for her to ensure there was time for work:

*I really try to work there as much as I can around uni because that's probably where I will work once I'm finished uni. So, I really do try to prioritise, like, my work, and the relationships, and the work I bring to my job because I know that that's what my career is going to look like when I'm finished.*

One male participant described how he viewed his roles as a hierarchy, with current demands being relevant to his priorities:

*Actually, I can understand the hierarchy of my priorities for sure. I don't leave my work aside because I also understand my commercial commitments right now and my necessities and my daily necessities. So, everything in balance and now an understanding of my priorities and understanding the whole process and my life of course.*

However, two students felt they needed to add roles, specifically volunteer work experience, to achieve their desired future-self. They recognised that adding new roles would necessitate restructuring all roles. One noted:

*I am looking at steps for volunteering work. I'm organising my work scheduling and my uni around [it]...Just to gain a better understanding and work with people that are dealing with these sort of problems. I feel like work might have to take it back seat, even though it might be difficult with it being my source of income and volunteering won't pay me. So, I need to still be able to earn money so that I can go to university. So, it might have to take a small step back... My relationships... I might have to explain to them that I don't have as much time and that I need to do these other things for myself, for my growth and the career that I want to pursue.*

While most students ( $n = 17$ ) reported structuring their roles primarily around a single future-self career goal (e.g., becoming a psychologist), one female student referred to structuring her roles to enable a future that encompassed a number of different life roles:

*Yeah, that's something [the future] that I think about when I stop studying in order to spend time with my family or my partner. 'Cause I realised that, yeah, that I don't want to, with my life, just doing the career and being alone. I want to keep these people in my life and that does require maintenance and spending time with them...Because I know that I need to like feed into my relationships to keep them healthy.*

Therefore, regardless of the differences in each participants' perceived future-self, all assessed the most effective ways to structure their roles to meet their future goals.

### 3.4. Making sacrifices for future-self goals

Six participants reported that focusing on their future-self often resulted in making sacrifices in other roles. Sacrificing social roles was mentioned, as highlighted by a female student:

*I suppose my, my current career ambition is to become a clinical psychologist. So, I've, it's extremely competitive to get into it. You need to have extremely high grades and everything. So, I do, I suppose make sacrifices in terms of, like, social settings or anything like that to ensure that I am putting most of my attention towards my studies.*

Another described the sacrifice of not meeting the expectations of friends and family members who wanted her time and struggled to understand how she put so much time into her studies but not into them:

*I have to just deal with the fact that I'm not always going to be 100% available for everyone that I care about in my life. Sometimes I need to put my priorities in place knowing that, while there might be other things that are calling for my attention right now, in the long term I have this goal of, you know, going into clinical psychology.*

Eight participants mentioned sacrificing paid work hours to prioritise their study, as they considered the latter to be more important to achieving their future-self. One female participant was willing to sacrifice her paid work so that she could put more time into voluntary work experience related to her studies and, thereby, to her future-self:

*I'm considering next year quitting my job and being happier with less money. To be able to talk to a physio I know and ask to do like work shadowing with him. 'Cause I, I definitely want to see what it's like and I think it'll be more motivating to get that extra experience.*

Another participant reported being willing to sacrifice promotions at work because she realised that this would reduce the time available for her study, "Like, maybe if I'm offered like a promotion, I won't take it because yeah, I just want my main priority to be uni." These eight students also scored higher on their connectedness to their future-self. Thus, there was consistency between scores on the connectedness to future-self scale and self-reported decisions to make sacrifices in other areas of their lives and to prioritise the study role that would enable them to achieve their desired future-self.

### 3.5. Motivation to continue engaging in student role

Participants reported that thinking about their future-self assisted them to engage with their study even when their motivation was depleted. As stated by one female participant:

*It's like whenever I don't have enough motivation, I just think, you know, I have what I want to be in the future...so I look up to that. So, I, you know, I'm motivated to study and when I don't want to work, I know that I have to pay my tuition; so, I need to work. So that gives me a kind of motivation.*

Increased motivation based on thinking about future career aspirations, assisted students to study, particularly when there were other competing roles and activities. Thus, for some, imagining the future-self was a strategy to refocus when they experienced difficulty with a task. As summarised by one female participant:

*I'm just the type of person who could just stay at home and watch a series all day long. It is, it is difficult, but I just have to, I just kind of imagine my future and that I have worked so hard and that it kind of drives me.*

One male participant stated that his future-self gave him more of a reason to do better at his studies and put more time into his student role:

*I feel like it [future-self] motivated me to put more effort and time into my study. Kind of coming to the realization that it is something I really enjoy and something I really want to pursue. That just motivates me more to, to do better.*

Two participants also viewed their future-self as part of a larger future plan. This gave them motivation to work harder at their studies.

One female participant believed that her future-self would provide community benefit, and this gave her the motivation to keep going, "But I think that having long term goals that benefit the community, I think that that keeps me going and, like, gives me a reason for living in a way." Another female student wanted a better life for herself and that motivated her to work hard at university:

*Anything that I do here relies on me staying here throughout the duration of my course. So, I, I tend to work harder just because like it's more risky for me. And yeah, just to build a better future than what I have back home I suppose.*

Thus, students reported that focusing on their future-self gave them a way to visualise their goals, which assisted in generating additional resources when required. To summarise the results for the second aim, focusing on the future-self appeared to assist students with the management of their current roles through the engagement of boundary management strategies. The results showed that students' connection to their future-self, particularly, how specific their future-self was (e.g., "I want to be a doctor" vs. "I want to complete my degree") can influence the boundary strategies they implement and how they manage their boundaries around each of their roles. The perceived instrumentality of the student role for achieving their future-self seemed to also influence how they decided to structure their roles and what sacrifices they were prepared to make to progress towards their future-self.

## 4. Discussion

Using a mixed-method approach to investigate how students manage their role boundaries by examining the influence of future-self, we confirmed that students think about their future (Aim 1), and this factored into their decisions about how they managed their roles while at university (Aim 2). Previous research on future-selves found that future-oriented identity plays a key role in the motivation of proactive behaviour (Strauss et al., 2012), career decision making self-efficacy (Walker & Tracey, 2012), the reduction of procrastination (Blouin-Hudon & Pychyl, 2017), and a reduced risk of withdrawing from challenging circumstances (Destin et al., 2018). Our results align with the previous literature to highlight the influence that envisioning one's future-self has on how students view their current roles and the boundaries they place around these roles. Our study also confirmed previous studies (Adelman et al., 2017; Chung et al., 2009) that found that the connectedness to one's future-self assists students in directing their focus from the present demands towards possible long-term rewards.

Our study also extended the literature on boundary management theory by examining how a focus on the future-self can assist with the implementation of boundary management strategies. Supporting previous studies that have examined boundary management strategies (Kreiner et al., 2009; Sturges, 2012) and the proactive behaviours that are a result of connecting with the future-self (Strauss et al., 2012), we found evidence that a salient future-self contributes to students engaging in three of boundary management strategies - prioritising the student role, structuring of roles, and making sacrifices. Additionally, we found a new strategy - the motivation to engage in the student role - emerged as a student-specific strategy that was directly associated with future-self salience.

Prioritisation of the student role was one of the key strategies identified that was related to future-self. This is similar to the cognitive crafting strategy proposed by Sturges (2012) and the prioritising of work-behaviour strategies suggested by Kreiner et al. (2009), which enable differential permeability of boundaries (differing strength of boundaries) and invoke triage (prioritisation of different roles or tasks). Our findings also are consistent with those of Eller et al. (2016), who also examined boundary management strategies used by non-traditional, post-graduate students, and found evidence that students allowed differenti-

ated permeability of their role boundaries. However, we extended this by showing that this strategy was associated with future-self salience and that prioritisation of roles is a strategy that extends beyond the work-family literature and post-graduate students and is relevant to the undergraduate student population.

Since, worldwide, student drop-out rates are higher during the undergraduate (compared to postgraduate) degree (Belloc et al., 2010; Hernandez-Martinez, 2016), focusing on the future-self could assist students in prioritising the student role and clarifying the best way to structure their roles to enable university success. As students have limited resources and energy that they can expend in each of their roles (Alarcon et al., 2011), strategically structuring their roles so that they are prioritising their student role could be beneficial in their management of their roles. The strategy of structuring roles relates to Sturges' (2012) physical and temporal crafting, which was defined as "managing the length, timing and temporal experience of the working day" (p. 1545). This seems even more relevant for students who are balancing several different, often conflicting, roles. Kreiner et al. (2009) also suggested that the temporal strategy of "controlling work time" was key to reducing boundary violations and often meant creating and utilising "blocks" of time for each role. In the student context, Eller et al. (2016) found that post-graduate students would use breaks at work (e.g., lunch break) to engage in study role requirements.

For the students in our study, prioritising and structuring roles, however, often required sacrifice in other areas of life. The strategy of "making sacrifices for future-self goals" is similar to Sturges' (2012) cognitive crafting strategy of "making compromises", which she defined as "sacrificing an 'ideal' work-life balance in return for future benefits." (p. 1547). We found that students were sacrificing time with family and friends, earning money, and current career progression, to ensure they were giving the appropriate time to their studies, which they perceived as instrumental to progressing towards their future-self.

The new strategy to emerge was the connection to their future-self provided students with motivation to engage with their student role. When energy levels or resources were depleted, their future-self focus generated additional motivation and resources to continue. The ability to tap into their future-self to assist with motivation might explain why some students persist and complete their degrees and others do not. Those with less salient future-selves might lack the motivation needed to continue with study under challenging competition from other roles such as work, resulting in dropping-out from study or the deferral of their study. Although neither Kreiner et al. (2009) nor Sturges (2012) identified this as a strategy, the broader literature on future-selves has shown that visualising one's future-self is related to self-regulation (vanDellen & Hoyle, 2008), proactive behaviours (Strauss et al., 2012), and commitment and investment in required roles (Haskins & vanDellen, 2019). Thus, for students, visualising their future-self could provide them with the additional motivation to engage in proactive boundary management strategies, including the ability to self-regulate and make the necessary sacrifices to free up resources that can be invested in managing their priority student role effectively.

#### 4.1. Theoretical and practical implications

The results of this study extend both the identity literature and the boundary management literature by demonstrating that future-self contributes to students engaging in boundary management strategies. Although an individual's identity is a key construct of boundary management theory (Nippert-Eng, 1996), much of the research on boundary management has only examined the current role identity (Capitano et al., 2017; Matthews et al., 2010). Our study is the first to examine the role of future-self and how it assists with the management of roles. Our results indicated that a salient future-self assists students in understanding what their priorities are and how best to structure their

roles to progress towards the achievement of their future goals. Thus, we provide evidence that both current and future-self should be considered when examining how individuals manage their various roles.

Although our study was exploratory, it provides new insights for academic advisers by highlighting the influence that a salient future-self can have on how students manage their current competing roles to achieve their career goals. While previous research has emphasised the benefits of students focusing on their future-self (Barnett et al., 2019; Oyserman et al., 2015), our study provides insights into specific strategies that students could implement to progress towards their future-self. Practitioners could assist students to envision their future-self and then support them to implement boundary management strategies that will aid their progress towards that version of their future-self. This could be of particular use to students who are struggling to manage their competing roles and whose academic engagement is poor. If students are guided to clarify the goals they have for their future-self, they might be more aware of what current roles they need to prioritise, how best to structure those roles, what aspects of other roles they might need to sacrifice to prioritise study, and how to harness the future-self to motivate them to keep persisting with their study when they find it difficult. Assisting them to tap into their future-self could not only foster a more optimal study-life balance, but also support their overall well-being while at university.

#### 4.2. Limitations and future research

Although, the results of this study indicated that future-self is related to boundary management strategies, this study was exploratory and further research is required to confirm these results. Participant narratives indicated that a salient future-self was related to the implementation of strategies; however, the results were based on participants who were all enrolled at one university, were mostly in their first year of university study, and were mostly female. Therefore, further research is needed with more diverse samples to confirm the generalisability of these findings. For example, future research could examine how domestic and international students balance work and study and the role played by the future-self. International students have limited work rights as do students receiving a scholarship. Therefore, these constraints might enable better management than, say, domestic students and those not on scholarship who can work unlimited hours, so might require additional motivation to prioritise study. In addition, quantitative studies with large samples would add to establishing the direct or indirect effects between the salience of future-self and the use of boundary strategies. Quantitative studies could examine models in which future-self salience predicts boundary management strategies and, in turn, student outcomes such as study performance and perceived career goal progress. A daily diary study would also assist in understanding the daily strategies that students engage in and how these are influenced by their future-self. Nevertheless, the results of our study suggest that combining future-self with boundary management is a promising area that warrants further enquiry.

#### 5. Conclusion

The results of our study indicated that consideration of the future-self is important when examining how university students manage their competing role boundaries. By having a salient future-self, students are more inclined to engage in proactive boundary management strategies to assist them with the management of their roles. Increasingly, students are reporting challenges associated with managing their various roles while at university. Thus, if research can provide students with effective strategies to manage their roles and achieve role balance, then students will be better placed to complete their degrees and progress towards their future career goals.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Disclosure statement

There are no potential conflicts of interest

## Acknowledgements

This research was funded by the Australian Research Council (grant number DP180100930)

## References

- Adelman, R. M., Herrmann, S. D., Bodford, J. E., Barbour, J. E., Graudejus, O., Okun, M. A., & Kwan, V. S. Y. (2017). Feeling closer to the future self and doing better: Temporal psychological mechanisms underlying academic performance. *Journal of Personality, 85*(3), 398–408. [10.1111/jopy.12248](https://doi.org/10.1111/jopy.12248).
- Alarcon, G. M., Edwards, J. M., & Menke, L. E. (2011). Student burnout and engagement: A test of the conservation of resources theory. *The Journal of Psychology, 145*(3), 211–227. [10.1080/00223980.2011.555432](https://doi.org/10.1080/00223980.2011.555432).
- Amatea, E. S., Cross, E. G., Clark, J. E., & Bobby, C. L. (1986). Assessing the work and family role expectations of career-oriented men and women: The life role salience scales. *Journal of Marriage and Family, 48*(4), 831–838. [10.2307/352576](https://doi.org/10.2307/352576).
- Ashforth, B. E. (2001). Role transitions in organizational life: An identity-based perspective. Lawrence Erlbaum Associates. doi:[10.4324/9781410600035](https://doi.org/10.4324/9781410600035).
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall.
- Barnett, M. D., Hernandez, J., & Melugin, P. R. (2019). Influence of future possible selves on outcome expectancies, intended behavior, and academic performance. *Psychological Reports, 122*(6), 2320–2330. [10.1177/0033294118806483](https://doi.org/10.1177/0033294118806483).
- Belloc, F., Maruotti, A., & Petrella, L. (2010). University drop-out: An Italian experience. *Higher Education, 60*(2), 127–138. [10.1007/s10734-009-9290-1](https://doi.org/10.1007/s10734-009-9290-1).
- Blouin-Hudon, E. M. C., & Pychyl, T. A. (2017). A mental imagery intervention to increase future self-continuity and reduce procrastination. *Applied Psychology, 66*(2), 326–352. [10.1111/apps.12088](https://doi.org/10.1111/apps.12088).
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. [10.1191/1478088706qp063oa](https://doi.org/10.1191/1478088706qp063oa).
- Bryman, A. (2015). Social research methods (5th ed.). Oxford University Press.
- Capitano, J., DiRenzo, M. S., Aten, K. J., & Greenhaus, J. H. (2017). Role identity salience and boundary permeability preferences: An examination of enactment and protection effects. *Journal of Vocational Behavior, 102*, 99–111. [10.1016/j.jvb.2017.07.001](https://doi.org/10.1016/j.jvb.2017.07.001).
- Carlson, D. S., Ferguson, M., & Kacmar, K. M. (2016). Boundary management tactics: An examination of the alignment with preferences in the work and family domains. *Journal of Behavioral and Applied Management, 16*(2), 1158. [10.1108/CDI-06-2015-0086](https://doi.org/10.1108/CDI-06-2015-0086).
- Casey Ozaki, C. (2016). Possible selves, possible futures: The dynamic influence of changes in the possible selves on community college returnees persistence decisions. *Journal of College Student Retention: Research, Theory & Practice, 17*(4), 413–436. [10.1177/1521025115579248](https://doi.org/10.1177/1521025115579248).
- Choo, C. E. K., Kan, Z. X., & Cho, E. (2021). A review of the literature on the school-work-life interface. *Journal of Career Development, 48*(3), 290–305. [10.1177/0894845319841170](https://doi.org/10.1177/0894845319841170).
- Chu, M. L., Creed, P. A., & Conlon, E. G. (2019). Work-study boundary congruence, contextual supports, and proactivity in university students who work: A moderated-mediation model. *Journal of Career Development, 10.1177/0894845319830253*.
- Chung, W.-T., Lee, J., Husman, J., Stump, G., Maez, C., & Done, A. (2009). Connecting to the future: How the perception of future impacts engineering undergraduate students' learning and performance. In *Proceedings of the 39th IEEE Frontiers in Education Conference*. [10.1109/FIE.2009.5350499](https://doi.org/10.1109/FIE.2009.5350499).
- Destin, M., Manzo, V. M., & Townsend, S. S. M. (2018). Thoughts about a successful future encourage action in the face of challenge. *Motivation and Emotion, 42*(3), 321–333. [10.1007/s11031-017-9664-0](https://doi.org/10.1007/s11031-017-9664-0).
- Eastgate, L., Bialocerkowski, A., Hood, M., & Creed, P. (2021). Applying boundary management theory to university students: A scoping review. *International Journal of Educational Research, 108*. [10.1016/j.ijer.2021.101793](https://doi.org/10.1016/j.ijer.2021.101793).
- Eller, A. M., von Borell De Araujo, B. F., & von Borell De Araujo, D. A. (2016). Balancing work, study, and home: A research with master's students in a Brazilian university. *Revista de administração Mackenzie, 17*(3), 60–83. [10.1590/1678-69712016/administracao.v17n3p60-83](https://doi.org/10.1590/1678-69712016/administracao.v17n3p60-83).
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior, 65*(1), 14–38. [10.1016/j.jvb.2003.10.005](https://doi.org/10.1016/j.jvb.2003.10.005).
- Gopalan, N., Beutell, N. J., & Middlemiss, W. (2019). International students' academic satisfaction and turnover intentions: Testing a model of arrival, adjustment, and adaptation variables. *Quality Assurance in Education, 27*(4), 533–548. [10.1108/QAE-01-2019-0001](https://doi.org/10.1108/QAE-01-2019-0001).
- Greer, T. W., & Egan, T. M. (2012). Inspecting the hierarchy of life roles: A systematic review of role salience literature. *Human Resource Development Review, 11*(4), 463–499. [10.1177/1534484312445322](https://doi.org/10.1177/1534484312445322).
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82. [10.1177/1525822X05279903](https://doi.org/10.1177/1525822X05279903).
- Haskins, L. B., & vanDellen, M. R. (2019). Self-regulation as relating to one's ideal possible self. *Social and Personality Psychology Compass, 13*(10), 1–14. [10.1111/spc3.12499](https://doi.org/10.1111/spc3.12499).
- Hecht, T. D., & Allen, N. J. (2009). A longitudinal examination of the work-nonwork boundary strength construct. *Journal of Organizational Behavior, 30*(7), 839–862. [10.1002/job.579](https://doi.org/10.1002/job.579).
- Hernandez-Martinez, P. (2016). Lost in transition: Alienation and drop out during the transition to mathematically-demanding subjects at university. *International Journal of Educational Research, 79*, 231–239. [10.1016/j.ijer.2016.02.005](https://doi.org/10.1016/j.ijer.2016.02.005).
- Husman, J., & Shell, D. F. (2008). Beliefs and perceptions about the future: A measurement of future time perspective. *Learning and Individual Differences, 18*(2), 166–175. [10.1016/j.lindif.2007.08.001](https://doi.org/10.1016/j.lindif.2007.08.001).
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133. [10.1177/1558689806298224](https://doi.org/10.1177/1558689806298224).
- Kooij, D. T. A. M., Kanfer, R., Betts, M., & Rudolph, C. W. (2018). Future time perspective: A systematic review and meta-analysis. *Journal of Applied Psychology, 103*(8), 867–893. [10.1037/apl0000306](https://doi.org/10.1037/apl0000306).
- Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2009). Balancing borders and bridges: Negotiating the work-home interface via boundary work tactics. *The Academy of Management Journal, 52*(4), 704–730. [10.5465/AMJ.2009.43669916](https://doi.org/10.5465/AMJ.2009.43669916).
- Luyckx, K., Lens, W., Smits, I., & Goossens, L. (2010). Time perspective and identity formation: Short-term longitudinal dynamics in college students. *International Journal of Behavioral Development, 34*(3), 238–247. [10.1177/0165025409350957](https://doi.org/10.1177/0165025409350957).
- Matthews, R. A., Barnes-Farrell, J. L., & Bulger, C. A. (2010). Advancing measurement of work and family domain boundary characteristics. *Journal of Vocational Behavior, 77*(3), 447–460. [10.1016/j.jvb.2010.05.008](https://doi.org/10.1016/j.jvb.2010.05.008).
- Morosanu, L., Handley, K., & O'Donovan, B. (2010). Seeking support: researching first-year students' experiences of coping with academic life. *Higher Education Research & Development, 29*(6), 665–678. [10.1080/07294360.2010.487200](https://doi.org/10.1080/07294360.2010.487200).
- Morse, J. M., & Niehaus, L. (2009). Mixed method design: principles and procedures. Left Coast Press. doi:[10.4324/9781315424538](https://doi.org/10.4324/9781315424538).
- Muenks, K., Yang, J. S., & Wigfield, A. (2018). Associations between grit, motivation, and achievement in high school students. *Motivation Science, 4*(2), 158–176. [10.1037/mot0000076](https://doi.org/10.1037/mot0000076).
- Nippert-Eng, C. E. (1996). Home and work: Negotiating boundaries through everyday life. University of Chicago Press.
- Nurra, C., & Oyserman, D. (2018). From future self to current action: An identity-based motivation perspective. *Self and Identity: The Self across Time, 17*(3), 343–364. [10.1080/15298868.2017.1375003](https://doi.org/10.1080/15298868.2017.1375003).
- O'Cathain, A., Murphy, E., & Nicholl, J. (2007). Integration and publications as indicators of "yield" from mixed methods studies. *Journal of Mixed Methods Research, 1*(2), 147–163. [10.1177/1558689806299094](https://doi.org/10.1177/1558689806299094).
- Oyserman, D. (2015). Pathways to success through identity-based motivation. Oxford University Press.
- Oyserman, D., Brickman, D., & Rhodes, M. (2007). School success, possible selves, and parent school involvement. *Family Relations, 56*(5), 479–489. [10.1111/j.1741-3729.2007.00475.x](https://doi.org/10.1111/j.1741-3729.2007.00475.x).
- Oyserman, D., Destin, M., & Novin, S. (2015). The context-sensitive future self: Possible selves motivate in context, not otherwise. *Self and Identity, 14*(2), 173–188. [10.1080/15298868.2014.965733](https://doi.org/10.1080/15298868.2014.965733).
- Packard, B. W.-L., & Conway, P. F. (2006). Methodological choice and its consequences for possible selves research. *Identity, 6*(3), 251–271. [10.1207/s1532706xid0603\\_3](https://doi.org/10.1207/s1532706xid0603_3).
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice (4th ed.). SAGE Publications, Inc.
- Perry, J. C., & Raeburn, R. (2017). Possible selves among urban youth: A study of developmental differences and the aspirations-expectations gap. *Journal of Career Development, 44*(6), 544–556. [10.1177/0894845316670032](https://doi.org/10.1177/0894845316670032).
- Pizzolato, J. E. (2007). Impossible selves: Investigating students' persistence decisions when their career-possible selves border on impossible. *Journal of Career Development, 33*(3), 201–223. [10.1177/0894845306296644](https://doi.org/10.1177/0894845306296644).
- Ruvolo, A. P., & Markus, H. R. (1992). Possible selves and performance: The power of self-relevant imagery. *Social Cognition, 10*(1), 95–124. [10.1521/soco.1992.10.1.95](https://doi.org/10.1521/soco.1992.10.1.95).
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2017). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity, 52*(4), 1893–1907. [10.1007/s11135-017-0574-8](https://doi.org/10.1007/s11135-017-0574-8).
- Schuitema, J., Peetsma, T., & van der Veen, I. (2014). Enhancing student motivation: A longitudinal intervention study based on future time perspective theory. *The Journal of Educational Research, 107*(6), 467–481. [10.1080/00220671.2013.836467](https://doi.org/10.1080/00220671.2013.836467).
- Spieler, I., Scheibe, S., & Stamos Roßnagel, C. (2018). Keeping work and private life apart: Age-related differences in managing the work-nonwork interface. *Journal of Organizational Behavior, 39*(10), 1233–1251. [10.1002/job.2283](https://doi.org/10.1002/job.2283).
- Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology, 97*(3), 580–598. [10.1037/a0026423](https://doi.org/10.1037/a0026423).
- Sturges, J. (2012). Crafting a balance between work and home. *Human Relations, 65*(12), 1539–1559. [10.1177/0018726712457435](https://doi.org/10.1177/0018726712457435).
- Sung, Y., Turner, S. L., & Kaewchinda, M. (2013). Career development skills, outcomes, and hope among college students. *Journal of Career Development, 40*(2), 127–145. [10.1177/0894845311431939](https://doi.org/10.1177/0894845311431939).
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*(3), 282–298. [10.1016/0001-8791\(80\)90056-1](https://doi.org/10.1016/0001-8791(80)90056-1).



- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The new era of mixed methods. *Journal of Mixed Methods Research*, 1(1), 3–7. [10.1177/2345678906293042](https://doi.org/10.1177/2345678906293042).
- vanDellen, M. R., & Hoyle, R. H. (2008). Possible selves as behavioral standards in self-regulation. *Self and Identity*, 7(3), 295–304. [10.1080/15298860701641108](https://doi.org/10.1080/15298860701641108).
- Walker, T. L., & Tracey, T. J. G. (2012). The role of future time perspective in career decision-making. *Journal of Vocational Behavior*, 81(2), 150–158. [10.1016/j.jvb.2012.06.002](https://doi.org/10.1016/j.jvb.2012.06.002).
- Weller, S. C., Vickers, B., Bernard, H. R., Blackburn, A. M., Borgatti, S., Gravlee, C. C., & Johnson, J. C. (2018). Open-ended interview questions and saturation. *PloS one*, (6), 13. [10.1371/journal.pone.0198606](https://doi.org/10.1371/journal.pone.0198606).
- Winkel, D. E., & Clayton, R. W. (2010). Transitioning between work and family roles as a function of boundary flexibility and role salience. *Journal of Vocational Behavior*, 76(2), 336–343. [10.1016/j.jvb.2009.10.011](https://doi.org/10.1016/j.jvb.2009.10.011).