

**The relationship between marker of adulthood, psychological characteristics and basic
psychological needs and its independent contribution to wellbeing in emerging
adulthood**

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*This thesis is submitted in partial fulfilment of the Honours degree of
Bachelor of Psychological Science (Honours)*

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October 2020

Word Count: 9,000

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Abstract

Emerging adulthood is a developmental phase between adolescence and adulthood that is unique and diverse in experiences. Past studies have looked at risky behaviours and stress in adolescents and emerging adults, but less have examined the predictors of positive outcomes in the transition to adulthood. Our study looked at the predictors of subjective wellbeing; specifically, it examined relationships between wellbeing and the importance attributed to, and attainment of various markers of adulthood, the psychological identity processes in emerging adulthood and the extent to which the three basic psychological needs specified by Self-Determination Theory – autonomy, competence and relatedness - are met. Two hundred and thirty undergraduate psychology students (aged 18-29 years) completed an online survey which assessed sociodemographic details, satisfaction with life, and positive and negative affect, as well as the markers of adulthood, psychological dimensions of emerging adulthood and satisfaction of basic psychological needs. Results found that markers of adulthood that were personally meaningful and attainable, and over which emerging adults likely to have some control were correlated with wellbeing. In contrast, markers with over which they had less control did not predict wellbeing. By comparing traditional methods focused on markers with the more recent approaches assessing psychological processes, results showed that emerging adults consider psychological characteristics and satisfaction of their basic psychological needs central to their experiences, however, how these factors relate to wellbeing in this period varied based on the measure of wellbeing used.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

Signature:

October, 2020

Contribution statement

In writing this thesis, I identified an emerging area for research. My supervisor and I collaborated to generate research questions of interest, design the appropriate methodology and how to write up analyses. I conducted the literature search, completed the ethics application, and wrote the Qualtrics Survey, that was then checked by my supervisor. My supervisor helped recruit part of my participants but ultimately, I was responsible for the rest of participant recruitment along with data collection, data cleaning, analyses and thesis write-up. Lastly, my supervisor helped edit and proofread the whole thesis.

Acknowledgements

I would first like to sincerely thank my supervisor, Lynn Ward. I feel grateful for her encouragement and constructive feedback. Thank you for creating a study environment in which I felt supported throughout my Honours year even through tough times. I am very fortunate to have worked under your guidance and I am grateful for all of your time this year.

I would like to extend my utmost appreciation to my fellow student Nanette for helping me read through my work. Without your help I do not think I would be able to get through the whole thesis.

To our Course Coordinator, Dr Matthew Dry. Thank you for your willingness to help with any question and for your unwavering professional and personal guidance. To the University of Adelaide and the research participants in my survey who willingly shared their time – thank you.

Last, but certainly not least, I would like to congratulate 2020 Psychology Honours Cohort. This year exceeded all my expectations even through COVID19 we have managed to get this far. Well done everyone.

CHAPTER 1

Introduction

The transition from adolescence to adulthood is a period of significant change involving both opportunities and challenges for individuals. Arnett (2000a) proposed that emerging adulthood is a distinct developmental phase encompassing a period between the ages of 18–25 years (though the upper limit is flexible and can be extended to 29 years). In contrast to earlier developmental periods, development in emerging adulthood is more varied, reflecting an array of issues, dilemmas, and choices, structured according to the individual's circumstance (Baggio et al., 2017; Blinn-Pike et al., 2008; Kins et al., 2009). Some individuals, for example, may be pursuing higher education while others are working, some do both concurrently, some may have left home or started families, whereas others will have a variety of other living arrangements. As a result, it is difficult to determine one's developmental status based on age alone and it is inappropriate to group all individuals aged between their late teens to their late twenties as having the same experiences (Arnett, 2000a, 2000b). In contrast to early work which focused on the achievement of developmental milestones or markers of adulthood, recent approaches attempt to capture how emerging adults perceive the period, focusing on psychological processes underlying their adaptation and development (Arnett 2000a, 2004; Fosse & Toyokawa, 2016).

Navigating through emerging adulthood can be challenging and stressful, and how well individuals manage themselves during this period influences their sense of worth and personal wellbeing. Past research has often focused on risk-taking behaviour because it is most prevalent during this period. Binge drinking, illicit drug use, drunk drinking, and casual sex have often been identified as the most problematic behaviours (Schwartz & Petrova, 2019). Furthermore, mental health problems, such as anxiety and depression are prominent in this period (Silins et

al., 2018). The rate of anxiety-related conditions has increased over the years: females between the age of 15-24 accounted for 24.6% in 2017-18 compared to 18.9% in 2014-15. Similarly, anxiety-related conditions for males of the same age doubled from 7.9% in 2014-15 to 13.9% in 2017-18 (Australian Bureau of Statistic, 2019).

As previous studies have typically looked at predictors of risky behaviour and stress in emerging adults, our study will instead focus on positive outcomes. Despite challenges and struggles faced during this period, there is evidence to suggest that emerging adults are optimistic, showing strong passion, motivation and willpower, in part because of the opportunities the transitional period can provide for them (Arnett, 2000a; Arnett et al., 2014). Optimism displayed by emerging adults is associated with a decrease in depressive symptoms, as well as increases in wellbeing and social support (Mackenzie et al., 2018; Weier & Lee, 2016). One theoretical approach, self-determination theory (Deci & Ryan, 2000), focuses on the importance of having basic psychological needs for competence, relatedness, and autonomy met to ensure optimal development. To date, this theory has not been extensively applied to understanding wellbeing in emerging adulthood.

The current study will address this gap by investigating the relationships between wellbeing, the achievement of markers of adulthood, self-perceptions of psychological processes and basic psychological needs in emerging adulthood. The following review will provide additional context and empirical justification for the approach taken in the current study.

1.1 Traditional markers of adulthood

Historically, there has been an assumption that young people will move from adolescence to adulthood in a timely manner and accomplish certain milestones by certain ages (Neugarten & Hagestad 1976). Neugarten and Hagestad (1976) proposed the idea of the ‘social clock’ in which cultural norms govern peoples’ behaviours throughout their lifespan. The social clock decides when certain events should occur, and the adherence to or deviation from such expectations can influence the development of one’s personality and wellbeing. According to Neugarten and Hagestad (1976), young adults who meet life events ‘on time’ tend to have positive outcomes. Individuals who are ‘off-time’, although may not necessarily report having adverse experiences do tend to have more difficulties. For instance, individuals who do not follow the social clock may feel stressed or judge themselves harshly for not living up to their family or societal expectations, especially when others are achieving these milestones on time (Hoffnung et al., 2018).

Today’s society has become less rigid in its expectations of when significant life events should occur (Neugarten & Neugarten 1987; Wrosch & Freund, 2001). Traditional markers of adulthood or age-graded roles such as completing education, getting married, and becoming a parent have become less prescriptive and have provided more time and freedom of opportunity for young people before they assume adult roles (Arnett, 2001; Sharon, 2015; Weier & Lee, 2015). However, young people would be portrayed negatively, when they assign less importance to age-graded marker, societal labels levelled at them include “generation me” or “entitled” (Bauerlein, 2008). This sense of entitlement is assumed to also provide young people with an excuse to avoid or postpone taking on traditional adult roles if they may seem too challenging to achieve (Weier & Lee, 2016). While this may be true to some extent, it is also the result of a rapidly changing society that demands emerging adults to adapt to how they

approach milestones and psychological experiences. Prolonged education is one of the main reasons young people report for delaying other life transitions (AIHW, 2015). Nowadays, first entry-level positions in many fields require more education than in the past, so higher education and training are considered important foundations for a growing majority of emerging adults.

Although being off-time by postponing (or forgoing) milestones can incur social and personal costs, there is emerging evidence to suggest that psychological processes and perception of milestones are more significant predictors of wellbeing than simply whether they are achieved. Sharon (2015) explored the relationship between emerging adults' views of achieving adulthood by examining the importance attributed to and achievement of specific milestones in a sample of 1,133 emerging adults in the USA. Participants indicated which milestone they thought were important for reaching adulthood, and which of these they had either achieved or were yet to achieve. Results showed that the discrepancy or fit between the importance and achievement was not predictive of subjective wellbeing when considering all the milestones as a whole. Instead, the fit scores for specific domains encompassing milestone were better predictors – based on the extent to which people had control over their achievement. Relational maturity, for example, encompasses various markers including establishing an equal relationship with parents and having greater consideration for other (a psychological factor); it is an area where individuals are able to exert some control and it was found to be related to wellbeing. In contrast, fit scores for markers that individuals have less control over or have yet to attain – for example, specific adult roles or role transitions, such as getting married or having children were not associated with wellbeing.

Instead of milestones, the prominence of individualistic character qualities has been highlighted as being particularly relevant in western culture. Individualistic characteristics, focusing on psychological development have been found in a range of studies that surveyed

emerging adults from western cultures (Nelson & Luster, 2015; Wängqvist & Frisé 2015; Krahn et al., 2018). Those studies highlighted the importance of independence, taking responsibility for one's actions, autonomous decision-making, parental autonomy and financial independence as some of the important criteria of adulthood (Arnett, 2001).

Consistent with this, Baggio and colleagues (2017) used a sample of 4,991 Swiss men between the age 18-25 years to examine psychological processes around perceptions of emerging adulthood using Arnett's IDEA-8 scale, along with classic markers of achieved adulthood such as financial independence and having stable relationships to predict wellbeing. They found that psychological aspects were more significant predictors of wellbeing than whether participants had achieved the specific milestone examined. Specifically, psychological wellbeing was associated with actively taking part in activities that people have personal meaning and value for.

1.2 Psychological characteristics of emerging adulthood

Arnett (2004, 2000a) proposed five distinct characteristics that incorporate self-perceptions and experiences of psychological processes involved in emerging adulthood: these reflect the extent to which the period is considered one of 'identity exploration', 'experimentation', 'instability', 'self-focus', and 'feeling in-between'. These characteristics were initially based on research conducted in the 1990s, where Arnett interviewed 300 young Americans between the ages of 18 to 29 years from different socioeconomic and educational backgrounds, asking questions about what they wanted out of life (cited in Munsey, 2006). Arnett identified similarities in responses, first the theme of personal identity that is typically thought to be settled during adolescences and second, questions around their adult status. Many

participants were unsure whether they were clear from the struggles of adolescence, yet started to feel responsible for themselves while still being closely tied to family. Arnett's characteristics are described in more depth below.

Age of Identity exploration refers to emerging adults deciding what kind of person they want to be, and life they want to live (Arnett et al., 2014). By trialling different possibilities, emerging adults are able to develop an identity for themselves. For example, identity exploration can help emerging adults discover their capabilities and shortcomings, solidify their values and beliefs and determine their position in society (Arnett, 2000a). Traditionally, Erikson (1950) proposed that the characteristics of identity exploration occurred during adolescence; but today, identity exploration has become a central feature of emerging adulthood. People are spending longer setting the foundations for their adult life, reflecting on their commitments in love and work (Côté, 2006; Arnett et al., 2014). More importantly, taking an active approach to identity exploration allows individuals to become more aware of their strength and weaknesses, which facilitate psychological wellbeing and allows for a successful transition to adulthood (Edidin, 2010; Guardia, 2009).

Age of experimentation/possibilities. Emerging adulthood is the age of possibilities, where many pathways remain possible, and little about the person's direction has been established (Lederman, 2013; Arnett, 2004). Unlike identity exploration, the age of experimentation focuses more on optimism, taking on independence, achieving their personal goals, finding job opportunities, potential partners, and other commitments (Arnett, 2000a). Furthermore, the developmental period provides the opportunity to make independent decisions which are otherwise constrained in adolescence by family influence and in full adulthood where there are more likely to be long-term obligations in personal relationships and work to consider (Arnett, 2000a, 2004). Past literature have highlighted that emerging adults

who display optimism tend to have a decrease in depressive symptoms and an increase in wellbeing (Mackenzie et al., 2018; Weier & Lee, 2016). Additionally, researchers have also demonstrated that aspiring about the future helps with the construction of self-determination skills - BPNS- competence, relatedness and autonomy (Guardia, 2009).

Age of instability. Age of instability takes into consideration that exploration comes with uncertainty and instability. Arguably, emerging adulthood is perhaps the most unstable developmental period because emerging adults are frequently changing their jobs, relationships, and residential status than do adults in other age groups (Arnett et al., 2014). Regarding residential status, most emerging adults still live with their parents as compared to earlier generations (Weier & Lee, 2015). The proportion of young people between the age of 20–24 still living with their parents was 43% in 2016; compared to 36% from 1981, while 17% between the age of 25–29 years still lived at home; compared to 10% from 1981 (Australian Institute of Family Studies, 2019). Findings from the Australian Temperament Project found that parents were particularly important sources of support in emerging adulthood because they provide financial, practical, and emotional support (Vassallo et al., 2009). Parental support can help lessen some burden found during this developmental period, but it can also have the opposite effect. Young people may feel burdened or ashamed of themselves, as society often views being dependent on parental support to be problematic, in contrast to independence, which is a value associated with adulthood (Fingerman, 2017).

Age of self-focus. Being self-focused does not refer to being selfish or self-centred; instead, it means that emerging adults have fewer obligations for others than any other developmental period may have (Arnett et al., 2014). Fewer obligations mean that emerging adults have more freedom, in that they can make decisions independently without necessarily needing consent to make that decision for themselves (Arnett et al., 2014). The considerable

autonomy given to emerging adults means they have the freedom to make choices and live the way they want (Arnett, 2004, 2006). According to Arnett (1998), practising self-focus in emerging adulthood is important to achieve self-sufficiency, which will help emerging adults, become ready to commit to others in love and work.

Age of feeling in-between. Some emerging adults tend to feel ambivalent about their adult status because they see themselves as neither adolescents nor fully grown adults (Arnett et al., 2014). Emerging adults are yet to experience the responsibilities associated with normative adulthood, such as getting married or an established career (Arnett, 2000a, p. 469). However, this status changes over time, as they begin achieving their goals and accomplishing milestones. The majority report that they feel like they have become adults in their late twenties and early thirties (Arnett et al., 2014). This ‘in-between’ feeling has been observed in a range of countries, including America (Arnett, 2000a, 2004), Australia (Weier & Lee, 2015), China (Nelson & Chen, 2007) and Israel (Mayseless & Scharf, 2003). It has been argued that the time spent suspended in ‘in-between’ status or lacking a clear social role may cause distress and decrease wellbeing (Sharon, 2015).

Given that psychological processes and perceptions have been identified as stronger significant predictors of wellbeing than achieving milestone (Baggio et al., 2017), it would be expected that the Arnett’s five psychological characteristics would be important for wellbeing. Specifically, a focus on ‘instability’ or on ‘feeling in between’ are likely to be associated with low wellbeing, whereas a focus on ‘identity exploration’ ‘experimentation’ and ‘self-focus’ are likely to be associated with high wellbeing.

1.3 Self-determination theory – Basic Psychological needs

Self-determination theory (SDT) represents a broad framework of human motivation and personality that focuses on the satisfaction of three basic psychological needs - competence, relatedness, and autonomy (Deci & Ryan, 2000).

Competence refers to the need to experience oneself as capable, to master new challenges and skills. This need motivates many exploratory growth behaviours in people (Deci & Ryan, 2000). Relatedness is an interpersonal dimension which refers to our desires to form meaningful bonds or have connections with others; to be cared for and care for others (Deci & Ryan, 2000). Lastly, autonomy refers to the need to be in control of one's life and is satisfied when people experience their actions as due to free choice without external interference (Deci & Ryan, 2000). Autonomy leads to greater self-ownership of behaviours, feelings of personal control. Autonomous individuals can rely on others for direction and guidance to foster their own beliefs and values (Ryan & Deci, 2002).

A growing body of work has supported the basic premise of self-determination theory, that satisfying the three psychological needs - competence, relatedness, and autonomy, directly affects subjective wellbeing and other health outcomes (Deci & Ryan, 2000, 2017; Reis et al., 2000). According to Deci and Ryan (2000, 2017), individuals with greater overall needs satisfaction tend to be more autonomous, perform better, experience less burnout and have higher levels of psychological wellbeing.

Previous studies have consistently found that competence was the most important basic psychological need for predicting wellbeing in young people, whereas findings for relatedness and autonomy were more varied (Hollifield & Conger 2015; Levesque et al., 2004; Inguglia et al., 2015; Reis et al., 2000). Butkovic and colleagues (2019) used a sample of 393 Croatian

adults between the age 20-40 years to examine whether there was a difference in emerging adults and those approaching midlife in psychological needs, self-esteem and life satisfaction. Results showed that competence was the strongest predictor for wellbeing measured by life satisfaction in emerging adulthood. As for midlife adults, a different pattern arose, where needs for relatedness and autonomy seem to be more predictive for wellbeing measured by life-satisfaction (Butkovic et., 2019). Similarly, though not looking at middle aged adults, Chen and colleagues (2015) study used a sample of late adolescents from Belgium (17-18 years) and China (16-24 years), and found both competence and autonomy contributed to wellbeing across both samples, whereas there was no association with relatedness in either sample.

Since satisfying the three psychological needs contribute to wellbeing and our study will take an exploratory approach to examine predictors of the construct, it is important to understand how wellbeing is measured. One way to measure wellbeing would be through a self-reported measure known as subjective wellbeing. This construct reflects how people evaluate and feel about the experiences in their lives, whether these be positive or negative (Diener, 2000). Hence, subjective wellbeing is a multidimensional construct that incorporates both emotional (affective) and cognitive (evaluative) aspects (Diener, 2000). This distinction between affective and evaluative aspects of wellbeing is an aspect that has not typically been considered in studies based on achieving markers and on psychological perceptions and experiences of emerging adulthood.

1.4 The current study

The current study aims to investigate the relationship between subjective wellbeing, and constructs derived from three different approaches to understanding psychosocial development during the period of emerging adulthood. Specifically, it focused on (1) the attainment of critical milestones of markers of adulthood and (2) the importance of psychological characteristics including self-perceptions of experiences as well as (3) the extent to which basic psychological needs are met in this period. This study provides an opportunity to replicate Sharon's (2015) study on young adults in the USA by looking at whether the fit between the importance individuals attributed to various developmental markers alongside whether or not these had been attained was related to wellbeing in an Australian sample. In addition, it addressed a gap in the current literature by combining this approach with Arnett's (Reifman et al., 2007) five psychological characteristics of emerging adulthood, and the extent to which basic psychological needs of competence, relatedness, and autonomy are satisfied. Since there has been research that suggests that psychological states are more closely associated with psychological wellbeing than the traditional markers of adulthood (Baggio et al., 2017), this study will determine the independent contribution these predictors made to two aspects of wellbeing. These were assessed using a measure that focused on emotional or affective responses (positive affect) and a measure that reflected a judgemental or cognitive evaluation (life satisfaction).

1.4.1 Aims

1. The first aim was to determine which markers of adulthood are considered to be important and to have been attained in the sample of Australian emerging adults who took part in this study. This will be addressed using descriptive statistics to examine responses to the Markers of Adulthood scale (MoA) (Arnett, 1994, 2001, 2003)
2. The second aim was to partially replicate Sharon's (2015) findings by examining the relationship between wellbeing and the importance attributed to and achievement of various markers of adulthood. Sharon (2015) found that the roles that emerging adults have control over predicted wellbeing, whereas markers that adults have less control over did not.
3. The third aim was to investigate the relationship between subjective wellbeing, the five psychological characteristics of adulthood (IDEA) as proposed by Arnett and the satisfaction of basic psychological needs for autonomy, competence and relatedness. There are theoretical and empirical grounds for proposing that specific characteristics of Arnett's approach are either positively or negatively related to wellbeing. Numerous studies have found that satisfying the three basic needs are important for optimal wellbeing, but there is very limited research investigating whether there is a relationship between three basic psychological needs and the five psychological characteristics of emerging adulthood.
4. The fourth aim was to determine whether the fit between importance and achievement of developmental markers, the five psychological characteristics of adulthood and the three basic psychological needs are independent predictors of the subjective wellbeing of emerging adults. No specific hypothesis was proposed given the exploratory nature of this aim.

1.4.2 Hypotheses

Hypothesis 1: The overall fit score between importance and achievement of markers of adulthood is positively correlated with subjective wellbeing.

Hypothesis 2: Markers over which people have more control (relational maturity and norm compliance) are positively correlated with wellbeing.

Hypothesis 3: Markers over which people have less control (role transitions and independence) are not related to wellbeing.

Hypothesis 4: The characteristics of identity exploration, experimentation and self-focus are positively correlated with subjective wellbeing.

Hypothesis 5: The characteristics of instability and feeling in-between are negatively correlated with subjective wellbeing.

CHAPTER 2

Method

2.1 Participants

A sample of 230 participants were recruited for this study. Participants consisted of first- and second-year psychology students from the University of Adelaide, aged between 18 and 29 years ($M = 20.35$, $SD = 2.61$). First-year students were recruited via the Research Participation System (RPS) in exchange for course credit ($N = 152$), and second-year students from Foundation Health and Lifespan Development (FoHLD) course were recruited as part of a research training assessment task ($N = 78$). Students provided demographic information; specifically, gender, ethnic background, living arrangement, study status, work status, and marital status (Table 1). As shown in table 1, students were predominately female, domestic students studying full time, living with either a parent or caregiver, working part-time and were single. Eligible students required proficiency in English and were excluded from the study if they did not meet the age criteria of emerging adulthood, defined here as aged between 18 and 29 years. There were 10 data sets that did not meet the inclusion criteria.

Table 1*Descriptive statistics for demographic features (N=230)*

Variable	Characteristic	n	%
Gender	Male	52	22.61
	Female	174	75.65
	Neither	2	0.87
	Prefer not to specify	2	0.87
Ethnicity	Caucasian/ Australian	108	46.96
	European	40	17.39
	Asian	73	31.74
	Middle Eastern	4	1.74
	Black/ African	4	1.74
	Indigenous/Torres Strait Islander	1	0.43
Living arrangements	With parent/caregiver	154	66.96
	With roommate	39	16.96
	with partner/spouse	14	6.09
	Alone	16	6.96
	other	7	3.04
Study status	Domestic, full time	182	79.13
	Domestic part-time	10	4.35
	International full-time	38	16.52
	International part-time	0	0
Work status	Full-time	4	1.74
	Part-time	111	48.26
	Not- working	83	36.09
	other	32	13.91
Marital status	Single	193	83.91
	De-facto	18	7.83
	Married	4	1.74
	Other	15	6.52

Note: Ethnicity was a text box entry

2.2 Measures

Participants completed an online survey that assessed demographic characteristics along with five standardised self-report scales, two assessing subjective wellbeing the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) and Scale of Positive and Negative Experience (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener, 2009); one assessing satisfaction with extent to which basic psychological needs were being met (Deci & Ryan, 2000), along with one measuring the achievement of milestones associated with adulthood (Arnett, 1994, 2001, 2003) and one the psychological processes associated with the transition of emerging adulthood (Reifman, Arnett & Colwell, 2007).

2.2.1 Basic Psychological Needs Scale (BPNS)

The BPNS (Deci & Ryan, 2000) is a 21-item self-report scale measuring individuals' experienced satisfaction levels of psychological needs of autonomy, relatedness and competence. Participants indicate the extent to which they felt each statement related to their life and respond on a scale of 1 (Not at all true) to 7 (Very true). Nine items are worded negatively. Examples of items included, "*I feel like I am free to decide for myself how to live my life*" and "*I really like the people I interact with.*" Items that were worded negatively were reversed scored by subtracting the item response from 8. For example, a response of 2 would be converted to a 6. Once reversed scored, the items from each subscale was combined and averaged separately. Gagné (2003) obtained a moderately good internal consistency for autonomy (Cronbach's $\alpha = 0.69$), relatedness (Cronbach's $\alpha = 0.86$), and competence (Cronbach's $\alpha = 0.71$).

2.2.2 Satisfaction with Life Scale (SWLS)

The SWLS (Diener, Emmons, Larsen, & Griffin, 1985) is a five-item questionnaire measuring the judgmental or cognitive component of subjective wellbeing. Participants cognitively judged their life as satisfying or unsatisfying by rating items on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Scores are added together ranging from 5 to 35 where 20 represents the neutral point and a higher score indicated a higher level of satisfaction with life and vice versa. A sample item reads as follows: “*In most ways my life is close to my ideal*”. Previous research has supported SWLS as a reliable and valid measure of life satisfaction (Diener et al., 1985). Internal consistency ranged between 0.79 to 0.89 (e.g., Adler & Fagley, 2005; Pavot & Diener, 1993) and 1-month test reliability ranged between 0.80 to 0.84 (e.g., Pavot, Diener, Colvin, & Sandvik, 1991, Steger, Fraizer, Oishi, & Kaler, 2006.)

2.2.3 Scale of Positive and Negative Experience (SPANE)

The SPANE (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener, 2009) is a measured the emotional or affective component of wellbeing and is comprised of 12-items. Six items assessed for positive feelings (e.g. “good” and “pleasant”) and six items assessed for negative feelings (e.g. “bad” and “unpleasant”). Participants rated on a 5 point- likert scale from 1 (very rarely or never) to 5 (very often or always) based on the amount of time the feelings were experienced during the past four weeks. The scale can be divided into a positive and negative affect feeling score or used as an overall affect balance score. A positive feeling score (SPANE-P) was calculated by adding up the six positive feeling items, and a negative feeling score (SPANE-N) was determined by adding up all the negative items. The scores varied from 6 to 30. An affect balanced score (SPANE-B) was calculated by subtracting the negative feelings score (SPANE-N) from the positive feelings score (SPANE-P). A respondent

with a very high score would indicate that they experience any of the positive feelings more than the negative feelings. Our study only used the positive feeling score to represent the affective component of wellbeing. The scale showed high internal consistency after 1 month for SPANE-P (Cronbach's $\alpha = 0.84$), SPANE-N (Cronbach's $\alpha = 0.80$) and SPANE-B (Cronbach's $\alpha = 0.88$), as well as high convergent validity with other scales that measure subjective wellbeing (Diener et al., 2009).

2.2.4 Inventory of the Dimensions of Emerging Adulthood (IDEA)

The IDEA (Reifman, Arnett & Colwell, 2007) contains 31-item used to assess individual differences in perception of psychological states associated with emerging adulthood. It consists of 6 sub-scales: "identity exploration," (7 items) "experimentation" (5 items) "feeling in-between," (3 items) "Instability," (7 items) "self-focus" (6 items) and "other-focus" (3 items) Participants were asked to think an approximated five-year period, from the last few years, and the next few years with present time in the middle. Example items include: "*Is this period of your life a time of many possibilities?*" Participants responded on a 4-point Likert scale indicating the degree to which they agree or disagree with a question: 1 (Strongly disagree) to 4 (strongly agree). As per Arnett's five characteristic of emerging adults, "other focus" was not included in final analyses for our study. Internal consistency reliability for the subscales were generally strong, between .70-.85. Test-retest reliability correlations over a one-month interval ranged from .64-.76 for all subscales except for feeling in-between (Reifman et al., 2007).

2.2.5 Markers of Adulthood (MoA)

The MoA (Arnett, 1994, 2001, 2003) is comprised of 40 items used to measure participants abilities, milestones, and behaviours toward the transition to adulthood. The first

20 items were used to measure the importance of attaining specific adulthood markers. Participants' beliefs about which markers were necessary to attain adulthood were rated on a likert scale from 1 (not important) to 4 (very important). The second 20 items were identically worded statements as the first 20 items but participant's indicated the extent to which each marker of adulthood currently applied to them (1, not true; 2, somewhat true; 3, Very true). Higher values indicated greater endorsement of each marker's importance and achievement, respectively. Markers were combined into 4 subscales as identified by Fosse and Toyokawa (2016): Role Transition (e.g. no longer living with parents), Normative Compliance (e.g. avoid drunk driving), Relational Maturity (e.g. develop greater consideration for others), and Independence (e.g. financially independent). Importance and achievement scores are separated so there should be two scores per subscale. According to Sharon (2015) the MoA is a reliable scale when considering all 20 items (Cronbach's $\alpha = 0.86$), with the internal consistency varying across the four subscales between .56 (insert subscales) and .80 (insert subscale).

Scoring for the importance and achievement subscales followed Sharon (2015). Specifically, for the importance questions responses of "very important" and "quite important" were combined and relabelled as 'important' and marked as 1. Responses of "slightly important" and "not at all important" were combined and relabelled as 'not important' and marked as 0. For achievement questions responses of "very true" and "somewhat true" were combined and marked as 1 to contrast with "not true" marked as 0 (Sharon, 2015).

To measure discrepancy, a fit score was also calculated between each participants' self-rated importance, and self-rated attainment for each marker. A score of +1 indicated participant considered the marker both important and at least partial achievement, whereas a score of -1 indicated importance of the marker but no achievement. The fit score was set to 0 for students

who indicated that that marker was not important, and had either marked achievement or no achievement. Finally, an overall average was computed across all 20 fit scores (Sharon, 2015).

2.3 Procedure

The current study received ethics approval from the *University of Adelaide Human Research Ethics Subcommittee* (Approval Number: 20/46). Prior to undertaking the study, participants were provided an information sheet outlining the aims of the research before consenting. The survey took about 30 minutes to complete but was not timed. First-year students provided RPS code that was used to recognise their participation and award course credit. Second-year students participated as part of an assessment piece but participation was neither assessed nor compulsory. Although the study was not expected to cause distress, contact details of researchers, ethics committee and counselling services were provided on the information sheet. Participants were informed that completion of the survey was voluntary, and they were free to withdraw at any time. Privacy of participants was ensured with no names or student ID numbers stored with the data. Feedback on the study was provided for those who requested to receive it.

CHAPTER 3

Results

3.1 Data Screening and analysis plan

Data were analysed using the statistical program (SPSS, Version 26.0). Descriptive statistics for the study variables are presented in Tables 2. As indicated, the Cronbach's alpha scores ranged from 0.41 to 0.88 for the scales which demonstrated good internal consistency. A Shapiro-Wilk test indicated some deviation from normality for 12 of the 14 scales, with only the BPNS autonomy and competence subscales meeting the assumption. However, given the large sample size ($n = 230$), and with minimal difference between the means and 5% trimmed means for each variable, data were considered appropriate for parametric statistics (Pallant, 2011). Descriptive statistics and Pearson correlations were used to address research aims 1, 2 and 3. Research aim 4 was addressed using multiple linear regression. The Shapiro-Wilk test demonstrated that the assumption of normality for residuals, linearity, homoscedasticity and multicollinearity for the variables were met (the histogram, P-P plot of regression standardised residual and scatter plot are shown in see Appendix A).

Table 2*Descriptive statistics for study variables*

Variable	Min	Max	Mean	SD	Cronbach's α
Wellbeing					
Life Satisfaction	5.00	35.00	22.73	6.60	0.87
Positive Affect	6.00	30.00	21.60	4.02	0.88
Basic Psychological Needs (BPNS)					
Autonomy	2.29	7.00	4.76	0.90	0.74
Relatedness	2.13	7.00	5.34	0.86	0.80
Competence	1.83	7.00	4.66	0.94	0.67
Identity Dimensions (IDEA)					
Identity Exploration	2.00	4.00	3.33	0.46	0.72
Experimentation	1.20	4.00	3.36	0.55	0.84
Instability	1.14	4.00	3.03	0.56	0.80
Self-focus	2.00	4.00	3.31	0.45	0.73
Feeling in-between	1.00	4.00	3.29	0.69	0.72
Markers of Adulthood (MoA) -					
Importance					
Independence	1.00	4.00	3.16	0.60	0.87
Norm compliance	1.00	4.00	3.03	0.80	0.76
Relational Maturity	1.25	4.00	3.12	0.61	0.57
Role transition	1.00	4.00	2.52	0.80	0.83

Markers of Adulthood (MoA) -

Achievement

Independence	1.00	3.00	1.91	0.44	0.76
Norm compliance	1.00	3.00	2.50	0.44	0.46
Relational Maturity	1.25	3.00	2.25	0.42	0.41
Role transition	1.00	3.00	1.39	0.49	0.82

3.2 Aim 1: Identifying which Markers of Adulthood are considered important for emerging adults

To examine markers considered to be important in the transition into adulthood, the extent to which importance was attributed to the various markers that made up the four MoA subscales and whether participants had at least partially reached those markers were examined. These are reported in Table 3. Broad agreement about whether markers were considered important was defined as being endorsed above 90%. Specific markers of independence were considered to be important by between 43% to 97% of participants. Broad agreement was found for three aspects of independence: taking responsibility for your actions, making independent decisions and being financially independent. For norm compliance, the percentage agreement ranged from 50% to 91% with avoiding drunk driving being the only item that scored above 90%. Similarly, relational maturity ranged from 49% to 92% agreement with developing greater consideration for others being the only item above 90%. Role transition agreement ranged from 24% to 71% indicating there was no consensus regarding the importance of specific markers within this domain. With respect to the achievement of the markers of adulthood, two markers of independence were each at least partially achieved by over 90% of participants (accepting responsibility and making independent decisions) along with one

marker of norm compliance (avoid drunk driving) and one of relational maturity (developing consideration for others). Lowest achievement scores across scales were for providing financial support and caring for children in the independence markers alongside all six of the role transition markers.

Table 3

Importance and achievement, and fit indices for markers of adulthood

Item	Importance	Achievement	Fit	Frequency	Frequency	Frequency
	%	%	M (SD)	-1 %	0 %	+1 %
Independence						
Accept responsibility for your actions	96	99	0.95 (.23)	0.4	3.9	95.7
Make independent decisions	97	97	0.93 (.31)	1.7	3.0	95.2
Financially independent	90	59	0.19 (.93)	35.2	10.4	54.3
Capable of financially supporting a family	61	20	- 0.34 (.71)	47.8	38.7	13.5
Capable of caring for children	55	44	0.02 (.74)	26.5	45.2	28.3
Capable of supporting parents financially	43	22	-0.20 (.63)	31.7	57.0	11.3
Norm compliance						
Avoid drunk driving	91	96	0.87 (.40)	2.2	9.1	88.7
Use contraception	65	77	0.49 (.65)	8.3	34.8	57.0
Avoid illegal drugs	70	87	0.64 (.53)	2.6	30.4	67.0
Avoid becoming drunk	50	72	0.44 (.56)	3.0	50.0	47.0

Relational Maturity

Establish equal relationship with parents	84	88	0.73 (.56)	5.7	15.7	78.7
Develop greater consideration for others	92	97	0.90 (.32)	0.9	7.8	91.3
Always have good control of emotions	75	81	0.51 (.70)	11.7	25.2	63.0
Committed to long-term love relationship	49	49	0.11 (.69)	18.7	51.3	30.0

Role transition

No longer living in parents household	68	45	-0.03 (.82)	35.2	33.0	31.7
Employed full-time	71	30	-0.27 (.80)	48.7	29.1	22.2
Finished with education	57	24	-0.17 (.74)	37.0	43.0	20.0
Settled into a long-term career	59	23	-0.23 (.74)	40.9	40.9	18.3
Have at least one child	24	12	-0.13 (.48)	18.7	75.7	5.7
Married/de facto relationship	33	21	-0.16 (.56)	24.8	66.1	9.1

Note: Importance = % of participants indicating the marker was either very or quite important to achieving adulthood; Achievement = marker was very or somewhat true of the respondent; Fit = fit between importance and personal attainment of marker: , -1.0 (important but not true for self), 0 (not important, regardless of attainment) +1.0 (important and at least somewhat true for self).

A ranked version by importance can be found in Appendix B

Aim 2: Examining the relationships between wellbeing and the importance and achievement of markers of adulthood

Aim 2 was to partially replicate Sharon's (2015) findings on the relationships between wellbeing and the importance attributed to and attainment of various markers of adulthood. This was done by examining Pearson's correlations between the overall fit score and the Average fit scores for the 4 subscales of the MoA with the two wellbeing measures: life satisfaction and positive affect.

As can be seen from Table 4, for three the subscales - independence, norm compliance and role transition were not significantly correlated with either life-satisfaction or positive affect. This finding did not support Hypothesis 1 which hypothesised that the overall fit score between importance and achievement of markers of adulthood is positively correlated with subjective wellbeing. Our findings did, however, partially supported Hypothesis 2 that the markers over which emerging adults had more control (relational maturity and norm compliance), predict wellbeing. However, only relational maturity was significantly positively correlated with life satisfaction and positive affect, in both cases the relationship was weak. Findings were consistent with Hypothesis 3 that the markers over which emerging adults have less control (role transitions and independence) are not significantly related to wellbeing.

Note, table 4 shows that overall, the two scales on the experience of emerging adult – the MoA, assessing markers and the IDEA, assessing perceptions of the period, were not strongly related. Only 4 correlations between subscales were found to be statistically significant: these were weak, negative relationships between the MoA subscale norm compliance and experimentation; and between MoA role transitions subscale with, experimentation and feeling in-between; along with the weak positive relationship for MoA subscale relational maturity and self-focus.

Aim 3: Investigating the relationships between subjective wellbeing and psychological aspects of emerging adulthood. (BPNS and IDEA)

Aim 3 was addressed by examining Pearson's correlations reported in table 4. Results supported hypothesis 4 by demonstrating that there were significant, moderate positive relationships – between the BPNS subscales – Autonomy, relatedness, competence - and both of the wellbeing measures, such that emerging adults who scored highly on having their basic psychological needs met had higher life satisfaction and positive affect.

Of the five IDEA subscales, identity exploration was not significantly related to either life satisfaction or positive affect whereas the IDEA subscale feeling in-between correlated with life satisfaction but not positive affect. These findings partially supported Hypothesis 5, that dimensions of identity exploration, experimentation and self-focus are positively correlated with subjective wellbeing. Contrary to predictions, Hypothesis 6 that the IDEA dimensions of instability and feeling in-between will be negatively correlated with subjective wellbeing was not supported.

Table 4

Pearson Correlation Matrix between Measures of Wellbeing, BPNS, IDEA and MoA

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Life Satisfaction	—													
2. Positive Affect	.612**	—												
3. Autonomy	.527**	.468**	—											
4. Relatedness	.508**	.546**	.527**	—										
5. Competence	.588**	.623**	.580**	.564**	—									
6. Identity Exploration	.038	.098	.107	.141*	.086	—								
7. Experimentation	.335**	.315**	.281**	.364**	.320**	.559**	—							
8. Instability	-.288**	-.333**	-.352**	-.170**	-.390**	.111	-.066	—						
9. Self-Focus	.383**	.410**	.417**	.419**	.385**	.512**	.688**	-.156*	—					
10. Feeling In-between	.166*	.081	.064	.175**	-.039	.294**	.264**	.262**	.248**	—				
11. Independence	.092	.096	.213**	.098	.163*	-0.013	-.032	-.048	.068	-.075	—			
12. Norm compliance	-.095	-.083	-.085	-.160*	-.028	-.088	-.153*	.006	-.083	-.002	.099	—		
13. Relational Maturity	.262**	.265**	.241**	.173**	.208**	.01	-.005	-.075	.141*	.082	.357**	.324**	—	
14. Role transition	-.112	-.054	.02	-.018	-.002	-.079	-.147*	.002	-.078	-.135*	.609**	.088	.212**	—

Note: * $p < .05$ (two-tailed), ** $p < .001$ (two-tailed). Some of the variables did not meet the assumption of normality. We ran the analysis with Spearman's correlation and Pearson's correlation and the same pattern was found for both, therefore, Pearson's correlations were used.

Aim 4: Determining the extent to which BPNS, IDEA and MoA are independent predictors of subjective wellbeing

Two multiple linear regressions were conducted to investigate the extent to which subscales of the IDEA and BPNS, and the fit indices for MoA, made an independent contribution to subjective wellbeing measured by life satisfaction and positive affect. As past literature has supported BPNS constructs as predictors of wellbeing, but there is mixed and little systematic evidence for MoA and IDEA predictors, an exploratory approach was taken and therefore a forward entry method was appropriate. Previous variables that were significantly related to life satisfaction and positive affect, in Table 4 were included as predictors in each regression, respectively.

Three BPNS subscales - autonomy, relatedness, competence; four IDEA subscales - experimentation, instability, self-focus, feeling in-between; and MoA subscale relational maturity were included for life satisfaction. As shown in Table 5, the regression model was significant ($F(4,225)=44.13, p<.001$) accounting for 44% of the variance. The BPNS subscales, competence, autonomy, relatedness, and IDEA subscale - feeling in-between all made an independent contributions to life satisfaction. Competence was the strongest predictor followed by, autonomy, feeling in-between and relatedness.

Three BPNS subscales - autonomy, relatedness, competence; four IDEA subscales - experimentation, instability, self-focus, feeling in-between; and MoA subscale relational maturity were included for predicting positive affect. Table 6 indicates that the model was significant ($F(5,224)=42.26, p<.001$) explaining 48.5% of the variance. In this model the two BPNS subscales - competence and relatedness; and two IDEA subscales – self-focus and instability; along with MoA – relational maturity made independent contributions. Note, only instability was negatively related.

Table 5

Multiple Regression Analyses predicting the extent to which BPNS, IDEA and MoA make independent contributions to Life Satisfaction

Predictor Variable^a	β	95% CI	<i>p</i>
Competence	.38	[1.76, 3.62]	<.001
Autonomy	.21	[0.65, 2.49]	.001
Feeling in-between	.14	[0.37, 2.32]	.007
Relatedness	.16	[0.21, 2.17]	.018
<i>R</i> ²	.44		
<i>F</i>	44.13		<.001

Note. CI = confidence interval

^aThe order of variables presented is equal to the order in which they were entered in the model

Table 6

Multiple Regression Analyses predicting the extent to which BPNS, IDEA and MoA make independent contributions to Positive Affect

Predictor Variable^a	β	95% CI	<i>p</i>
Competence	.36	[1.026, 2.10]	<.001
Relatedness	.25	[0.59, 1.70]	<.001
Self-focus	.13	[0.24, 2.13]	.015
Relational Maturity	.12	[0.28, 2.60]	.016
Instability	-.12	[-1.61, -0.13]	
<i>R</i> ²	.49		
<i>F</i>	42.26		<.001

Note. CI = confidence interval

^aThe order of variables presented is equal to the order in which they were entered in the model

CHAPTER 4

Discussion

4.1 Overview

Previous research has predominantly focused on the negative aspects of emerging adulthood, including risky behaviour and stress. The current study aimed to investigate the relationship between subjective wellbeing, and constructs derived from three different approaches to understanding psychosocial development during the period of emerging adulthood. Specifically, it focused on (1) the attainment of critical milestones of markers of adulthood (MoA) and (2) the importance of psychological dimensions (IDEA), including self-perceptions of experiences as well as (3) the extent to which basic psychological needs (BPNS) are met in this period. A summary of results, implications, limitations, and future research directions are discussed below.

4.2 Summary of findings

Aim 1: Identifying which Markers of Adulthood are considered important for emerging adults

In this study the overall pattern of markers considered important for identifying emerging adults was consistent with findings by Sharon (2015) and previous studies, which endorsed the importance of individualistic and psychological qualities often found in western cultures (Nelson & Luster, 2015; Wängqvist & Frisé 2015; Harvey et al., 2018). The first six markers were ordered in line with Sharon's study, which included the importance to accept responsibility for one's own actions and to make independent decisions and develop greater consideration for others. Similarly, the last two markers, such as having at least one child and being in a married/de facto relationship, also coincided with Sharon's findings but by

comparison the remaining markers varied in order. These variations may exist because of individual circumstances or the societies they are living in.

These findings also aligned with previous studies which highlighted independence, responsibility for one's self, autonomous decision-making, parental autonomy, and financial independence as some of the important criteria of adulthood (Arnett, 2001). MoA subscale norm compliance such as avoiding drunk driving, using contraception, avoiding illegal drugs, and avoiding being drunk was ranked highly by the majority as being important and was achieved. The high achievement of norm compliance is interesting considering that past literature often highlights the increase in risky behaviour during emerging adulthood (Schwartz & Petrova, 2019). However, it could also be taken that emerging adults in our sample are quite young, ranging from 18-20 years and thus did not capture the extent of risk-taking behaviour found during the period. Perhaps, it is a marker in which emerging adults have control over their achievement or that the emerging adults in our sample had a high sense of morality (Sharon, 2015). Subsequently, there may be bias in how the emerging adults in this sample answered the questions pertaining to MoA. Bias may come as a form of an expectation, or pressure to behave in an appropriate manner, since previous studies have determined the increased risk-taking behaviour in young people. As a result, it is possible that others may view them negatively if they did not follow norm compliance, thus, why respondents answered that they have achieved the marker.

Research to date has demonstrated that the assumption that people will accomplish certain milestones (traditional markers) by certain ages to attain adulthood, has become less important (Arnett, 2001; Sharon, 2015; Weier & Lee, 2015, 2016). The findings of the current study supported previous literature, as MoA role transitions which pertained to traditional marker, was where the responses for importance and achievement were most varied.

Aim 2: Examining the relationships between wellbeing and the importance and achievement of markers of adulthood

This study investigated the relationship between wellbeing, importance and achievement of various markers of adulthood, specifically whether the lack of fit between ideals and attainments would decrease emerging adults' sense of wellbeing. Contrary to hypothesis 1, which had hypothesised that the overall fit score between importance and achievement of markers of adulthood is positively correlated with subjective wellbeing - the current findings found no relationship, much like Sharon's (2015) study. This lack of association contrasts with Neugarten and Hagestad (1976) which had proposed that people who meet life events 'on time' tend to have positive outcomes, while individuals who do not follow the social clock, 'off-time', may not have more adverse experiences but tend to have more difficulties (Neugarten & Hagestad, 1976). Moreover, a discrepancy or lack of fit between ideal and attainment could cause individuals to feel stressed or judge themselves harshly for not living up to their family or societal expectations (Hoffnung et al., 2018).

When examining four MoA subscales - independence, norm compliance, relational maturity, and role transition fit separately, only relational maturity was correlated with wellbeing. This partially supported Sharon's (2015) findings and hypothesis 2 of the current study which hypothesised that the markers which emerging adults had more control over (relational maturity and norm compliance) would predict wellbeing. Indeed, relational maturity subscale marker may have correlated with wellbeing because of the types of questions that were asked in the subscale. Some of the questions pertained to establishing an equal relationship with parents and developing greater consideration to others, and wellbeing literature has demonstrated that having a strong relationship can contribute to better health outcomes and lower stress levels (Tan & Tay, 2020). On the other hand, norm compliance did

not predict wellbeing possibly because of conformity and an act of maintaining order was done so readily that it has minimal impact on satisfaction with life or happiness. However, it should be noted that a negative relationship with wellbeing may arise if it was something that emerging adults do not agree on, or that the majority who do confirm oust out those who do not stick to the norms.

Hypothesis 3 proposed that markers over which people have less control (role transitions and independence) are not related to wellbeing. This hypothesis was supported in this study with the MoA role transitions, recognised as a traditional milestone of adulthood but not as an important marker for achieving adulthood, and it was identified as the least important marker for wellbeing. These results differed from Reio and Sanders-Reio's (2020) study which found that role transition had a positive relationship with wellbeing. Their study, however, did show similar results to the current sample where MoA independence, and norm compliance had no correlation to wellbeing.

Aim 3: Investigating the relationships between subjective wellbeing and psychological aspects of emerging adulthood. (BPNS and IDEA)

Our study observed a positive correlation between BPNS and wellbeing. This is consistent with previous literature which demonstrated that satisfying the three BPNS - competence, relatedness, and autonomy, directly affected subjective wellbeing and other health outcomes (Ryan & Deci, 2000, 2017; Reis et al., 2000).

There are theoretical and empirical grounds for proposing that specific dimensions of Arnett's (2003) IDEA approach are either positively or negatively related to wellbeing. This study demonstrated that the IDEA was associated with wellbeing. The findings partially

supported Hypothesis 4, which hypothesised that dimensions of identity exploration, experimentation and self-focus are positively correlated with subjective wellbeing. The IDEA saw that experimentation and self-focus are positively correlated with subjective wellbeing, but this study observed no correlation between the psychological characteristic of identity exploration and wellbeing. This finding contrasted with studies which suggested that young people who proactively take part in identity formation or development, through planning, exploration and experimentation of future possibilities have a better chance of transitioning to adulthood with fewer struggles, and in turn an increase in wellbeing (Edidin, 2010; Guardia, 2009). Previous studies showed that identity exploration is an important factor for wellbeing, results in this study may have differed due to the IDEA subscale, experimentation, that may possibly be eating up the variance of identity exploration. Identity exploration attempts to identify a set of goals, values, and beliefs to which one will commit to, while experimentation is the act of going out and seeking opportunities (Arnett, 2000a, 2004). Since the two constructs seem to go hand in hand, we would expect some overlap.

Hypothesis 5 proposed that the IDEA dimensions of instability and feeling in-between would negatively correlate with subjective wellbeing. This hypothesis was also partially supported by this study. Instability was found to be negatively correlated with wellbeing which is reasonable, however feeling in-between, was not. Sharon (2015) argued that the time spent suspended in 'in-between' status or lacking a clear social role, may cause distress and decrease wellbeing, whereas our study showed a positive relationship with the life satisfaction measure of wellbeing and no correlation with the positive affect measure. A possible explanation may be because the transitional period has less pressures, in terms of fewer obligations and more freedom compared to normative adulthood.

Aim 4: Determining the extent to which BPNS, IDEA and MoA are independent predictors of subjective wellbeing

The study results determined that the extent to which BPNS, IDEA and MoA made an independent contribution differed according to the type of wellbeing measure used: life satisfaction which measured the cognitive/judgement aspect of wellbeing and the emotional/affective component measured by positive affect.

For life satisfaction we found that BPNS subscales, competence, autonomy, relatedness, and the IDEA subscale - feeling in-between all made an independent contribution. Competence was the strongest predictor followed by, autonomy, feeling in-between and relatedness.

For positive affect we found that two BPNS subscales - competence and relatedness; and two IDEA subscales – self-focus and instability; along with MoA – relational maturity made independent contributions. Once again competence was the strongest predictor followed by relatedness, self-focus, relational maturity, and instability.

Finding that competence was the strongest predictor of wellbeing out of the three BPNS was consistent with other studies, (Hollifield & Conger 2015; Levesque et al., 2004; Inguglia et al., 2015; Reis et al., 2000) which generally found competence to be the most important basic psychological need for predicting wellbeing in young people. As for the remaining two BPNS – relatedness and autonomy, they were different predictors according to the aspect of wellbeing measured. Interestingly, autonomy was the second predictor of wellbeing measured by life satisfaction, but was not a significant predictor in positive affect. Therefore, the extent to which an emerging adult feels autonomous seems to be relevant to how they judge their life satisfaction. Relatedness was present as a predictor in both measures of wellbeing but the ordering of strength was different. This study supported past research, which found that

relatedness and autonomy varied as a predictor of wellbeing in young people (Hollifield & Conger 2015; Levesque et al., 2004; Inguglia et al., 2015; Reis et al., 2000).

Reasons for the feeling in-between being a predictor of life satisfaction may be due to the emerging adults in this sample judging the period as a satisfactory period and are therefore happy with their life so far. It could be argued that if emerging adults already felt like they were adults, but had not achieved markers they consider important for adulthood, then it is likely that those individuals would have lower wellbeing.

In conclusion, there are different predictors for two different aspect of wellbeing. MoA markers are not particularly useful which supports Baggio and colleagues (2017) study that shows MoA markers are less significant in predicting wellbeing compared to the psychological aspects (IDEA). However, to the extent that MoA is relevant, it is within the relational maturity field, an area which people do have control over.

4.3 Implications for investigating MoA, IDEA, BPNS and wellbeing in emerging adulthood

Looking at wellbeing in emerging adulthoods is important as every aspect of adulthood is influenced by our state of wellbeing. Although past research has recognised that emerging adulthood is a critical developmental period filled with greater opportunities for choice and exploration, at the same time there are societal expectations (Arnett, 2000a; Arnett et al., 2014). When societal expectations in the form of markers are not met, negative remarks may be made (Weier & Lee, 2016). Thus, how well emerging adults manage themselves during this period can influence their sense of worth and personal wellbeing. It is important to support, and empower emerging adults in the right area of their lives. For example, allowing flexibility to

reach goals, whether expanding opportunities of work, study, or even providing financial support when it is really needed can be beneficial (Vassallo et al., 2009). This study can be useful in demonstrating what elements really matter for successful transition to adulthood and wellbeing.

Today's rapidly changing society demands emerging adults to adapt to how they approach milestones and psychological experiences. Our study proposed that focusing or pressuring emerging adults to achieve certain milestones by a certain age does not lead to a good outcome for their wellbeing. Instead, research has demonstrated that having a sense of control over one's life is important for mental health. Emerging adults, in the same way, could construct their perception of adulthood in ways that would help maintain their wellbeing (Sharon, 2015). In this case, psychological wellbeing is associated with actively taking part in activities that people have personal meaning and value for. Therefore, focusing on the psychological dimension of adulthood seems to be a better way in understanding the mindset of emerging adults. Having basic psychological needs (BPNS) met is one approach that can help emerging adults achieve the psychological dimensions (IDEA) more successfully. It has also been demonstrated that this provides for better wellbeing during the transition stage and into adulthood, which in turn sees them successfully achieve the traditional markers/milestones that society has set for them.

4.4 Limitations and methodological considerations

One of the main limitations of the current study involves the methodological approach. Firstly, participants were first and second year psychology students, which provides a relatively narrow cross-section of participants and this may have reduced the external validity and reliability of outcomes. The majority were women of Caucasian ethnicity, and aged between 18 to 20, therefore not capturing the full experience of emerging adulthood, which normally spans from late adolescences into the late twenties. If future research is interested in exploring the predictors of subjective wellbeing in emerging adults in student samples, a recommendation would be to increase the diversity of student groups to determine if subjective wellbeing differs by course, or year of study. Likewise, research into other emerging adult cohorts outside of the university environment, for example those who left school before year 12, those who commenced trades or those who went straight into the workforce, would provide a broader understanding of this transition period and wellbeing for each of these cohorts.

Another possible limitation was related to the questionnaire. Since the questionnaire was a self-report survey it is possible that the reliability and validity of the responses may be compromised. There may have been some confusion with how to answer the questionnaire, particularly with the MoA questions, since it was administered twice, once for importance and once for achievement. Therefore, to avoid confusion, it would be better to set the questionnaire out differently, by providing both importance and achievement on the same page, separated into two columns.

Lastly, in terms of the measures used. The MoA scale wording for some of the statements can be ambiguous. For instance, the MoA item “capable for caring for children” is ambiguous given that the response could be interpreted as a task that requires one to look after children, such as a child carer or looking after younger siblings, rather than from a parent role

perspective. Therefore, it would have been better to adjust items for pragmatic or conceptual reasons.

This study used SPANE to capture the emotional or affective component of wellbeing. Although there were three ways in which SPANE could be calculated (SPANE-P, SPANE-N, SPANE-B) this study only used the positive affect (SPANE-P) to represent the affective component of wellbeing. This approach may not have been appropriate to capture the affective component of wellbeing, since positive affect only focused on feelings that were happy in nature (e.g, good, pleasant joyful). It may have been better to use the overall balance measure (SPANE-B) to capture both positive and negative affect of wellbeing.

4.5 Future Research Directions

Gender diversity

The current study lacks gender diversity, in the sense that the LGBT community was not represented. It would be interesting to focus on sexuality and gender identity, considering that there were some students who identified themselves as gender diverse from the current sample, but it was an insufficient sample ($n=4$) to allow for substantial exploration. Their experiences during adulthood should be an area for research, considering that there is yet to be research on this cohort. Previous research suggests the wellbeing of gender diverse people may be lower than that of the general population, which may be caused by stigma, social exclusion, discrimination, and bullying (Mustanski, Garofalo & Emerson, 2010). These added pressures impact on their wellbeing, may create difficulties for achieving certain adulthood milestones for people who identify as gender diverse.

Rural vs urban

There is yet to be extensive research conducted on the difference between emerging adults living in rural compared to urban environments. A study by Belz and Winskel (2017) used an Australian sample of 337 young people between the age 18-30 years to examine the conception of adulthood from emerging adults living in rural compared to urban environments. Belz and Winskel (2017) found that there was a difference between emerging adults living in urban and rural environments with students living in rural areas more likely to endorse role transitions (retaining traditional markers) than students living in urban environments. Given this, it would be interesting to investigate this study with relation to wellbeing.

Disability and transitions into adulthood

The current study did not control for groups of emerging adults who may have difficulty transitioning to adulthood, specifically for those that may have learning disabilities. In fact, there is little research examining how young people with disability see the transition into adulthood. Previous research looking at young people with learning disabilities has highlighted that they are more likely to remain dependent on their families or carers into adulthood. However, they are typically encouraged and supported in a way that make them feel in control of the decisions that affect their lives (Small et al, 2003). These young people can achieve the typical markers of adulthood, such as living independently and becoming employed, but these markers may be achieved at a later age than their age peers (Hudson, 2003). It would be interesting to see how this added barrier would influence their view in transitioning into adulthood from a psychological perspective, as well as, how it would influence their wellbeing.

4.6 Conclusion

This study compared three theoretical approaches to characterising the transition from adolescence to adulthood: traditional markers of adulthood, psychological characteristics of emerging adults and basic psychological needs as defined by self-determination theory, and examined how they predicted emerging adult's wellbeing. Sharon's (2015) study was replicated with the current study finding similar patterns, specifically where markers of adulthood that were personally meaningful and attainable, and markers over which people had more control correlating with wellbeing. Variations in responses given in this study for the value of importance and achievement of MoA role transitions demonstrated that achieving traditional markers of adulthood, such as having children or a long-term career, was of lower importance to wellbeing. By comparing traditional methods with the more recent approaches to assessing emerging adulthood, this study demonstrated that emerging adults consider psychological characteristics and basic psychological needs were more relevant to their conceptualisation of adulthood, however, how these factors relate to wellbeing varied based on the measure of wellbeing used.

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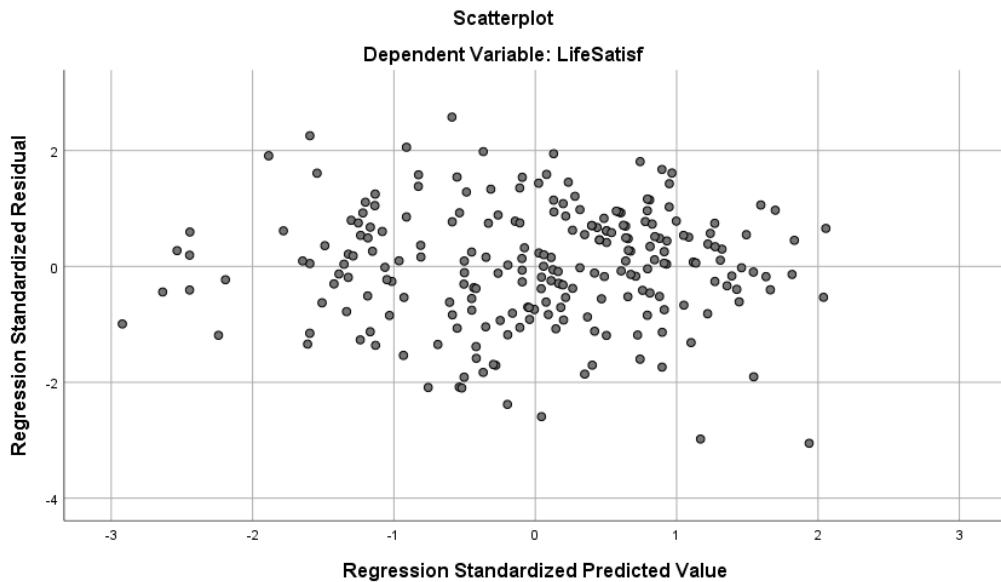
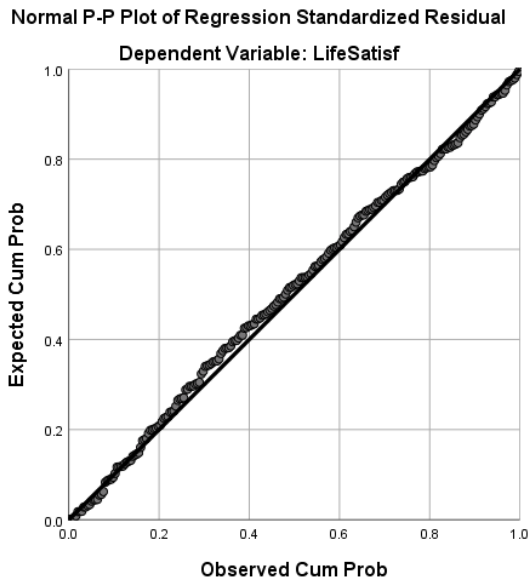
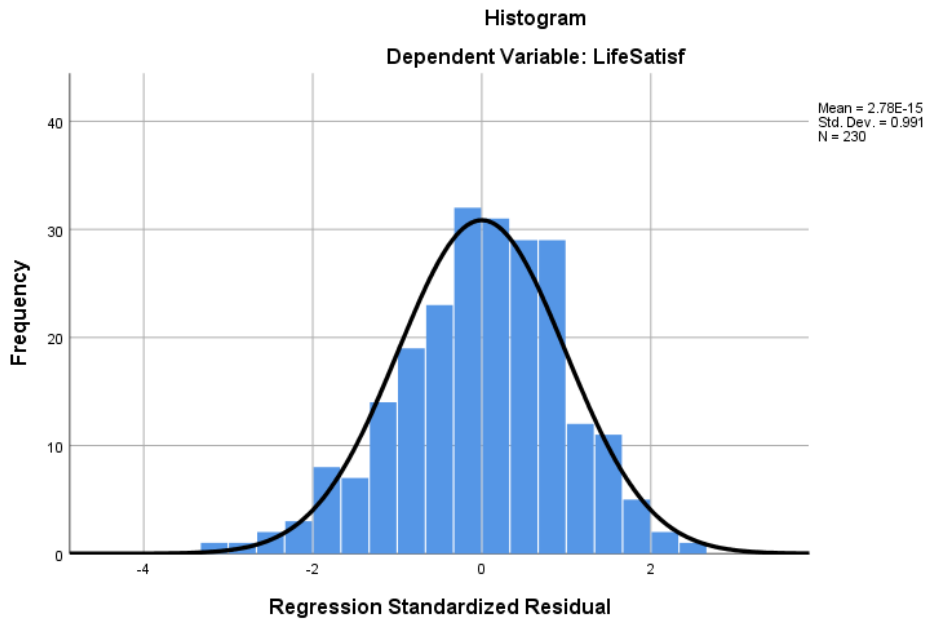
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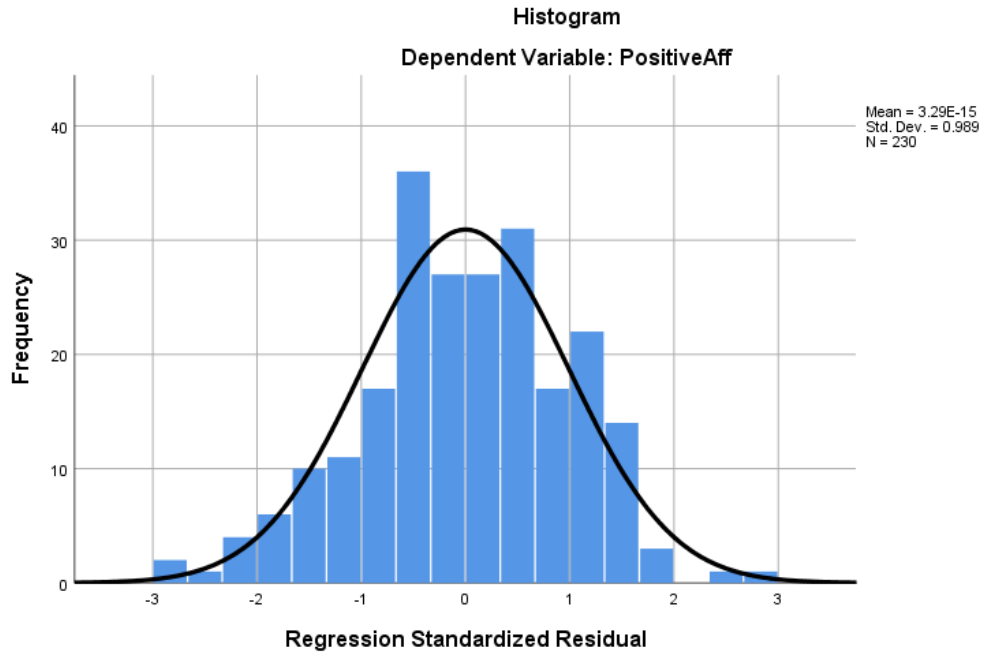
Appendices

Appendix A

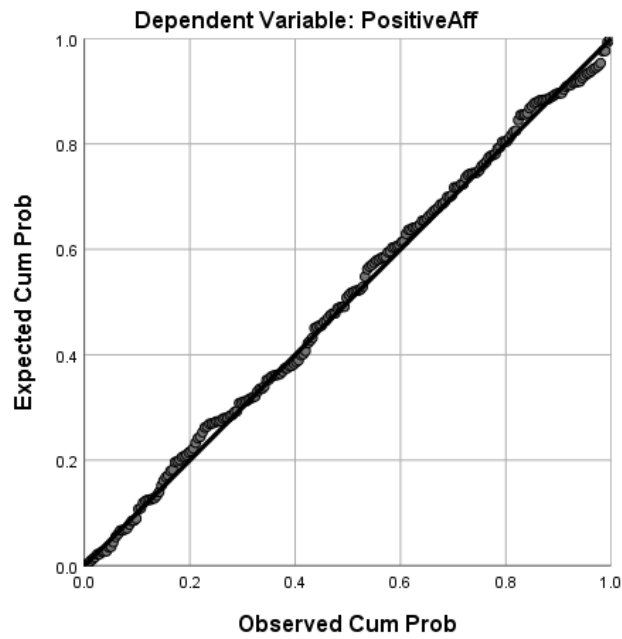
Life satisfaction



Positive affect



Normal P-P Plot of Regression Standardized Residual



Scatterplot

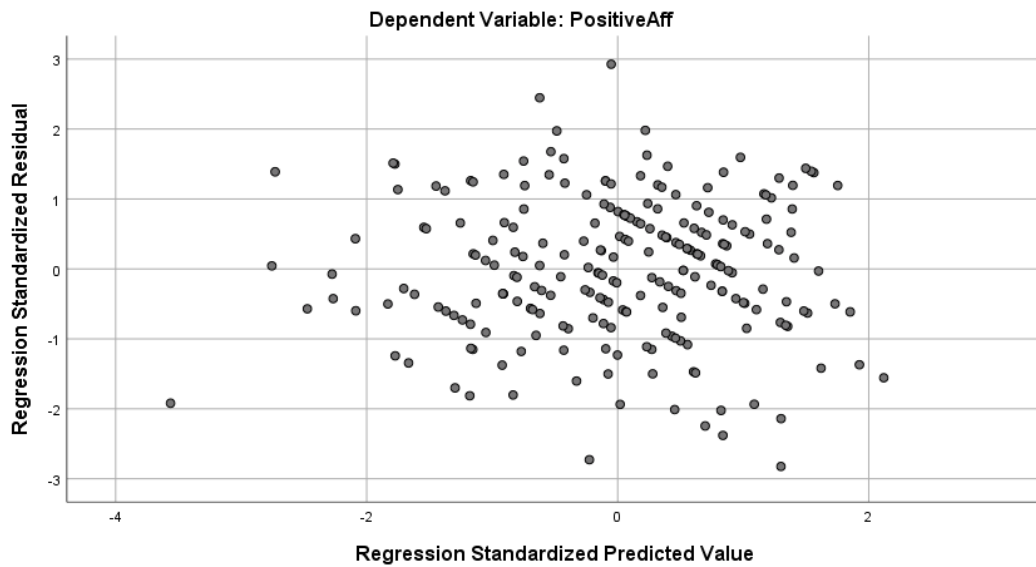


Table 3

Importance and achievement, and fit indices for markers of adulthood ranked by importance

Item	Importance	Achievement	Fit	Frequency	Frequency	Frequency
	%	%	M (SD)	-1 %	0 %	+1 %
Make independent decisions ^a	97	97	0.93 (.310)	1.7	3.0	95.2
Accept responsibility for your actions ^a	96	99	0.95 (.233)	0.4	3.9	95.7
Develop greater consideration for others ^c	92	97	0.90 (.323)	0.9	7.8	91.3
Avoid drunk driving ^b	91	96	0.87 (.401)	2.2	9.1	88.7
Financially independent ^a	90	59	0.19 (.929)	35.2	10.4	54.3
Establish equal relationship with parents ^c	84	88	0.73 (.558)	5.7	15.7	78.7
Always have good control of emotions ^c	75	81	0.51 (.698)	11.7	25.2	63.0
Employed full-time ^d	71	30	-0.27 (.801)	48.7	29.1	22.2
Avoid illegal drugs ^b	70	87	0.64 (.532)	2.6	30.4	67.0
No longer living in parents household ^d	68	45	-0.03 (.819)	35.2	33.0	31.7
Use contraception ^b	65	77	0.49 (.646)	8.3	34.8	57.0

Capable of financially supporting a family ^a	61	20	- 0.34 (.705)	47.8	38.7	13.5
Settled into a long-term career ^d	59	23	-0.23 (.737)	40.9	40.9	18.3
Finished with education ^d	57	24	-0.17 (.737)	37.0	43.0	20.0
Capable of caring for children ^a	55	44	0.02 (.742)	26.5	45.2	28.3
Avoid becoming drunk ^b	50	72	0.44 (.555)	3.0	50.0	47.0
Committed to long-term love relationship ^c	49	49	0.11 (.690)	18.7	51.3	30.0
Capable of supporting parents financially ^a	43	22	-0.20 (.625)	31.7	57.0	11.3
Married/de facto relationship ^d	33	21	-0.16 (.562)	24.8	66.1	9.1
Have at least one child ^d	24	12	-0.13 (.477)	18.7	75.7	5.7

Importance = % of participants indicating the marker was either very or quite important to achieving adulthood; Achievement = marker was very or somewhat true of the respondent; Fit = fit between importance and personal attainment of marker: -1.0 (important but not true for self), 0 (not important, regardless of attainment) +1.0 (important and at least somewhat true for self).

^aIndependence.

^bNorm Compliance

^cRelational Maturity

^dRole Transition

Appendix C

Examining subjective well-being in emerging adulthood

Start of Block: Consent

RESEARCH PARTICIPANT INFORMATION PROJECT TITLE: Examining subjective well-being in emerging adulthood

HUMAN RESEARCH ETHICS COMMITTEE APPROVAL NUMBER: 20/46

PRINCIPAL INVESTIGATOR: XXXX XXXX

STUDENT RESEARCHER: XXXX XXXX

STUDENT'S DEGREE: Honours Degree of Psychological Science

Dear Student,

You are invited to participate in this research project on predictors of well-being in emerging adulthood. Please read the information below before proceeding to the survey.

What is the project about?

This project will look at the relationship between things considered necessary for achieving adulthood, psychological identity processes, the extent to which needs for competence, autonomy, and psychological relatedness are met and the subjective well-being of adults aged between 18 and 29 years.

Who is undertaking the project?

This research is an Honours project being undertaken by XXXX XXXX , under the supervision of XXXX XXXX as part of the Bachelor of Psychological Science (Honours) at the University of Adelaide.

Why am I being invited to participate?

You are being invited to participate, as you are a first-year Psychology student. You can take part if you are aged between 18 – 29 years.

What am I being invited to do?

You are being invited to complete a survey that will ask a number of questions about your background and your well-being, as well how important you consider some markers of adulthood to be and whether you feel you have met them, how you see this period of your life and whether you feel your psychological needs are being met.

How much time will my involvement in the project take?

The questionnaire will take approximately 30 minutes to complete.

Are there any risks associated with participating in this project?

There are no foreseeable risks in this project. If experience mild discomfort reflecting on your experiences you can stop the survey at any time and if you want to talk to someone about this

you can call Lifeline 131 141 or visit the counselling services at the University of Adelaide (8313 5663).

What are the potential benefits of the research project?

Apart from receiving course credit there will be no immediate benefits to you beyond that of the insights and interest gained from participation in psychological research.

Can I withdraw from the project?

Participation in this project is voluntary. You can withdraw from the study at any time

What will happen to my information?

Your responses to the survey will be confidential. As a first-year Psychology student you will have to provide your student research participation number in order to obtain course credit. The data will be de-identified for analyses and only summary statistics provided.

Students who wish to receive the results of the study will have the option to click yes or no

The information and project records will be stored securely for 5 years according to the National Statement on Ethical Conduct in Human Research. Your data will be analysed and presented as part of an Honours dissertation and, if appropriate, will be prepared for submission to an academic journal.

You are asked to give consent to your deidentified data being used by the named researchers for this project and for it to be made available for a future research project or extension of the data analysis that may be conducted by the primary researcher. Ethical clearance will be sought for any such study.

Your data will only be used as described in this participant information sheet and it will only be disclosed according to the consent provided, except as required by law.

Who do I contact if I have questions about the project?

If you have any questions or concerns about the project, you can contact:

Principal Supervisor

XXXX XXXX

Email: XXXX XXXX

Student researcher

XXXX XXXX

Email: XXXX XXXX

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number: 20/46). This research project will be conducted according to the

NHMRC National Statement on Ethical Conduct in Human Research 2007 (Updated 2018). If you have questions or problems associated with the practical aspects of your participation in the project, or wish to raise a concern or complaint about the project, then you should consult the Principal Investigator. If you wish to speak with an independent person regarding concerns or a complaint, the University's policy on research involving human participants, or your rights as a participant, please contact the Human Research Ethics Committee's Secretariat on:

Phone: +61 8 8313 6028

Email: hrec@adelaide.edu.au

Post: Level 4, Rundle Mall Plaza, 50 Rundle Mall, ADELAIDE SA 5000

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If I want to participate, what do I do?

Simply complete the online survey.

Yours sincerely,

XXXX XXXX **and** XX XXXX XXXX

Participant Consent

By completing and submitting this survey I have read and understood all the information about the study has been provided for me.

I understand the potential risks and burdens associated with participation in this study and I am aware of the recommended actions to take should I experience discomfort or distress at any time during this study.

I am aware that I can withdraw from the project at any time and this will not affect your study at the University, now or in the future.

I am aware that the result and information from this study will form part of an Honours thesis and may be published.

I understand that I will not be identified and that my personal results will not be divulged.

I am aware that I have the opportunity to ask any question about the study and have had them answered to my satisfaction.

I give consent to my de-identified data being made available for a future research project for which ethical clearance has been obtained

If you agree with the above statements please click 'next'

End of Block: Consent

Start of Block: Demographic information

What is your Research Participation Number for SONA/Research Participation System (RPS)?

What is your University student ID (e.g., a1234567)

Q1 What is your age? (In whole number)

Q2 What is your gender?

- Male
 - Female
 - I don't identify with either of the above
 - Prefer not to specify
-

Q3 Ethnicity background (please specify)

Q4 Living arrangements

- With a parent/caregiver
- With a roommate
- With a partner/spouse
- By yourself
- Other. (please specify) _____

Q5 Study status

- Domestic student full-time
 - Domestic student part-time
 - International student full-time
 - International student part-time
-

Q6 Work status: Do you typically work?

- Full-time
 - Part-time
 - Not working
 - Other (please specify) _____
-

Q7 Marital Status

- Single
- De facto
- Married
- Other (please specify) _____

End of Block: Demographic information

Start of Block: Basic Psychological Needs Scale (BPNS)

Q8 Basic Psychological Need Satisfaction in General

Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you.

	Not at all true (1)	2 (2)	3 (3)	Somewhat true (4)	5 (5)	6 (6)	Very true (7)
I feel like I am free to decide for myself how to live my life. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really like the people I interact with. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Often, I do not feel very competent. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel pressured in my life. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People I know tell me I am good at what I do. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get along with people I come into contact with. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I pretty much keep to myself and don't have a lot of social contacts. (7)

I generally feel free to express my ideas and opinions. (8)

I consider the people I regularly interact with to be my friends. (9)

I have been able to learn interesting new skills recently. (10)

In my daily life, I frequently have to do what I am told. (11)

People in my life care about me. (12)

Most days I feel a sense of accomplishment from what I do. (13)

People I interact with on a daily basis tend to take my feelings into consideration. (14)

In my life I do not get much of a chance to show how capable I am. (15)

There are not many people that I am close to. (16)

I feel like I can pretty much be myself in my daily situations. (17)

The people I interact with regularly do not seem to like me much. (18)

I often do not feel very capable. (19)

There is not much opportunity for me to decide for myself how to do things in my daily life. (20)

People are generally pretty friendly towards me. (21)

End of Block: Basic Psychological Needs Scale (BPNS)

Start of Block: Satisfaction With Life Scale (SWLS)

Q9 Satisfaction with Life

Below are five statements that you may agree or disagree with. Please indicate your agreement with each item.

	Strongly disagree (1)	Disagree (2)	Slightly disagree (3)	Neither agree nor disagree (4)	Slightly agree (5)	Agree (6)	Strongly agree (7)
In most ways my life is close to my ideal. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my life. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far I have gotten the important things I want in life. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Satisfaction with Life Scale (SWLS)

Start of Block: Scale of Positive and Negative Experience Scale (SPANE)

Q10 Scale of Positive and Negative Experience

Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings.

	Very Rarely or Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Very Often or Always (5)
Positive (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negative (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bad (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleasant (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unpleasant (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happy (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sad (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joyful (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Angry (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contented (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Scale of Positive and Negative Experience Scale (SPANE)

Start of Block: Inventory of the Dimensions of Emerging Adulthood (IDEA)

Q11 Inventory of the Dimensions of Emerging Adulthood

First, please think about this time in your life. By “time in your life,” we are referring to the present time, plus the last few years that have gone by, and the next few years to come, as you see them. You should think about roughly a five-year period, with the present time right in the middle.

For each phrase shown below, please indicate the degree to which you agree or disagree that the phrase describes this time in your life.

	Strongly Disagree (1)	Somewhat Disagree (2)	Somewhat Agree (3)	Strongly Agree (4)
Time of many possibilities? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of exploration? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of confusion? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of experimentation? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of personal freedom? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of feeling restricted? (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of responsibility for yourself? (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of feeling stressed out? (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of instability? (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of optimism? (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Time of high pressure? (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of finding out who you are? (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of settling down? (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of responsibility for others? (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of independence? (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of open choices? (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of unpredictability? (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of commitments to others? (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of self-sufficiency? (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of many worries? (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of trying out new things? (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of focusing on yourself? (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of separating from parents? (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of defining yourself? (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of planning for the future? (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of seeking a sense of meaning? (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Time of deciding on your own beliefs and values? (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of learning to think for yourself? (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of feeling adult in some ways but not others? (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of gradually becoming an adult? (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time of being not sure whether you have reached full adulthood? (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Inventory of the Dimensions of Emerging Adulthood (IDEA)

Start of Block: Markers of Adulthood (MoA) importance scale

Q12 Markers of Adulthood (MoA) importance

Please indicate the degree in which each milestone is important in achieving adulthood

	Not important (1)	Slightly important (2)	Moderately important (3)	Very important (4)
Accept responsibility for your actions (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make independent decisions (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financially independent (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid drunk driving (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish equal relationship with parents (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Develop greater consideration for others (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No longer living in parents household (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employed full-time (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable of financially supporting a family (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable of caring for children (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Always have good control of emotions (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use contraception (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid illegal drugs (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finished with education (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Settled into a long-term career (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid becoming drunk (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committed to long-term love relationship (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable of supporting parents financially (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have at least one child (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Married/de facto
relationship (20)

End of Block: Markers of Adulthood (MoA) importance scale

Start of Block: Markers of Adulthood (MoA) importance scale

Q13 Markers of Adulthood (MoA) importance (cont.)

This time please indicate the extent to which each marker of adulthood currently applies to your circumstance

	Not true (1)	Somewhat true (2)	Very true (3)
Accept responsibility for your own actions (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make independent decisions (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financially independent (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid drunk driving (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish equal relationship with parents (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop greater consideration for others (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No longer living in parents household (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employed full-time (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable of financially supporting a family (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable of caring for children (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Always have good control of emotions (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use contraception (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid illegal drugs (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finished with education (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Settled into a long-term career (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid becoming drunk (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committed to long-term love relationship (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable of supporting parents financially (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have at least one child (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Married/de facto relationship (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Markers of Adulthood (MoA) importance scale

Start of Block: Summary option

Q14 Do you wish to receive a summary of the overall research findings

Yes

No

End of Block: Summary option
