

"Exploring the Topics of Turning Points in Emerging Adults' Narratives"

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Author's Note:

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Abstract

This study employs a mixed-methods approach to investigate the experiences of emerging adults (N=145) and explores the potential of computer-based analysis, specifically topic modeling, to uncover new topics in their narratives. The analysis revealed seven distinct topics, including “Father's journey of growth and changes in family and work”, “Education, making decisions, and becoming a parent”, “Relationships and transitioning into a new life”, “Life experiences”, “Parenthood and family dynamics”, “Exploring beliefs” and “Realizations”. Remarkably, the study identified "Exploring beliefs" as a significant turning point, which has not been previously identified in the literature. Despite several limitations, the results have important implications for interventions and programs that aim to promote positive development during this stage of life. Future research should explore methods to effectively distinguish between transitions and turning points within narratives, consider a more diverse sample to capture a broader range of turning points, and increase the number of topics in the analysis.

(Word count: 152)

Keywords: turning points, topics, emerging adults, text mining, topic modeling, Latent Dirichlet Allocation, LDA, narratives.

Introduction

Emerging adulthood, a distinct phase between adolescence and adulthood (ages 18 to 25), is marked by significant changes, exploration, and identity formation (Arnett, 2000). This particular life stage is characterized by turning points, life events that foster personal growth and hold great significance during this phase (Arnett, 2000). These events have the potential

to shape an individual's future (Gelmi, 2020). To comprehensively understand the subjective experiences and transformative processes of emerging adults, narratives provide valuable insights (Arnett, 2000).

However, there is a limited understanding and identification of the different topics of turning points in emerging adults' narratives. While qualitative methods, such as hand-coding, have been used, their ability to capture all relevant topics remains unclear. To address this gap, the present study employed a computer-based text mining technique to analyze a large amount of text data efficiently, by employing narratives as a research methodology. There are two research objectives in this research: a) to analyze the text data by using a text mining technique (topic modeling), and b) to determine the most frequently discussed topics in turning points among emerging adults. Based on the aim and the objectives, the aim of this study is to answer the following research question: “What topics in turning points are commonly found in emerging adults’ narratives with the use of the computer?”

The structure of this work comprises examining narratives, differentiating turning points from transitions, providing an overview of the turning points, exploring emerging adulthood, and reviewing previous studies on the topic.

Narratives

Narrative is a way of understanding and expressing events, usually in the form of a story. In the social sciences, it is closely related to concepts like autobiography, history, storytelling, experience, interview, and research (Bryda, 2020). Erikson believed that our personal lives have a certain logic and that we are the authors of our own life stories (McAdams, 2018).

In 1985, McAdams suggested “the life story model of identity”, which proposes that a person's identity is expressed through the narrative of their life experiences (McAdams, 2018). Individual differences in narrative identities can be seen in the story's settings, plots,

characters, scenes, images, and themes (McAdams, 2018). The idea was that these elements together would create a personal myth that could situate a person in the world, integrate life in time, and provide meaning and purpose (McAdams, 2018).

Narrative identity can be identified as “*an individual’s internalized, developing, and integrative story of the self*” (McAdams, 2008, p. 242). These stories are formed in adolescence and young adulthood and continue to grow throughout adulthood as the individual reconciles their inner self with the external context of their family, community, workplace, etc. (McAdams, 2008). In general, people develop a life story which commonly has many elements, such as emotionally positive events (high points) and emotionally negative events (low points) (Cox et al., 2019). This study focuses on turning points in narratives of emerging adults.

Turning Points

Differentiating Turning Points and Transitions

Different terms, such as transitions, turning points, branching points, and life-markers, have been used to describe changes in the life course. These moments involve re-evaluating past decisions, facing new role expectations, and contemplating lifestyle changes (O'Shea, 2013). While transitions and turning points often coexist and involve changes in lifestyle, they have distinct characteristics.

Transitions are typically gradual and less dramatic. They result from a shift in perspective, lifestyle, or circumstances that occur over a period (Enz & Talarico, 2015). Transitions may not be linked to single events but can refer to a broader period of change. To identify a transition, one must compare the current period or event to the previous one and identify distinct changes (Enz & Talarico, 2015). For example, moving to a new town can bring about

changes in residence, social circle, and daily activities, altering one's life situation (Enz & Talarico, 2015).

In contrast to transitions, turning points are often sudden, unexpected, and dramatic (Reimer, 2014). They have the power to completely redirect the course of a person's life (Wethington, 2003). Turning points are characterized by their transformative nature and the profound impact they have on an individual's life trajectory (Enz & Talarico, 2015). These moments can arise from significant events or critical incidents that force individuals to re-evaluate their identity, beliefs, and goals (Fischer, 2012).

Transitions and turning points are not mutually exclusive concepts; there is an overlap between them. Transitions can serve as precursors to turning points, and turning points can initiate transitions (Enz & Talarico, 2015). A transition can lead to a sudden, unexpected change (turning point) that necessitates adjustments in one's life. Conversely, a turning point can act as a catalyst for a transition, bringing about gradual change and adjustment (Enz & Talarico, 2015; Reimer, 2014). When a transition holds personal significance and promotes personal change, it is often regarded as a turning point. The perception of a transition as a turning point depends on the individual's interpretation and the meaning they attribute to the experience (Tuval-Mashiach et al., 2014).

Certain conditions can enhance the likelihood of a transition becoming a turning point. These include experiencing a crisis concurrently or shortly after the transition, family conflict regarding individual needs, a transition occurring outside the typical age range, unforeseen negative outcomes, and significant difficulty in social adjustment (Hutchison, 2019). In conclusion, individuals experience various changes in their life course that involve re-evaluating past decisions, facing new role expectations, and contemplating lifestyle changes. Understanding the nature of turning points can provide valuable insights into the

transformative nature of personal experiences and their impact on individuals' life trajectories (Tuval-Mashiach et al., 2014).

The Nature of Turning Points

“Turning points are moments when lives are seen in new ways, when individuals leap off expected pathways and blaze new trails. Turning points are moments when the sky falls and chaos ensues; when revolution reigns and the world changes.” (Fischer, 2012, p.8)

These pivotal moments, referred to as "critical incidents" by Strauss, compel individuals to recognize that they have undergone profound personal changes (Fischer, 2012). The concept of turning points involves reflecting on the past to identify changes and transformations that shape a new personality (Höjer & Sjöblom, 2014). It represents a unique type of story that connects the past and the future, with an unexpected critical crossroad in the middle (Höjer & Sjöblom, 2014). This critical crossroad significantly impacts the actors involved, their purpose, and their behavior (Yair, 2009). Abbott suggests that turning points consist of three elements: an earlier steady state, a significant event, and the resulting trajectory (Yair, 2009).

The transformation process associated with turning points involves a profound change in an individual's central attitudes toward life (Reimer, 2014). These central attitudes encompass core beliefs, values, and perspectives that shape an individual's understanding of themselves and the world (Reimer, 2014). When these attitudes undergo a change, it often triggers a re-evaluation of one's identity, goals, and priorities (Reimer, 2014).

Additionally, turning points have a profound impact on an individual's self-identity, life significance, and self-concept (O'Shea, 2013). They offer valuable insights into problem-solving strategies, outlook on life, and relationships (Nelson et al., 2011). These transformative moments have the potential to affect multiple trajectories and can arise from both external life circumstances and personal internal experiences (Fischer, 2012; Ronka et al., 2003; Höjer & Sjöblom, 2014).

Turning points are subjectively experienced and acquire personal significance in retrospect (Dziallas & Fincher, 2016). Mishler's "double arrow of time" concept emphasizes the integral role of remembering and storytelling in recognizing turning points. These points are primarily individually constructed and hold personal meaning to the individuals who experience them (Dziallas & Fincher, 2016).

To classify an event as a turning point, Pickles and Rutter established two criteria: universality and long-term behavioral change (Liu, 2010). Universality refers to events that are universally experienced and must be identified independently of the individual, such as starting school or joining the military, while long-term behavioral change highlights the enduring impact of turning points on individuals (Liu, 2010). Additionally, Pickles and Rutter identified three subtypes of turning points: changes in the closest family relationships (such as marriage or divorce), alterations in patterns of living (such as having a first child), and changes caused by a geographical move (such as migration or immigration) (Liu, 2010).

Turning points can induce marked discontinuities and have a lasting influence on future development (Rutter, 1996, as cited in Höjer & Sjöblom, 2014). These transformative events often carry moral messages and reflect shifts in beliefs and perspectives (Höjer & Sjöblom, 2014). Turning points can have varying outcomes, ranging from positive to negative, and can vary in intensity and duration for each person. Positive turning points are associated with increased opportunities, self-esteem, and a healthier life path, while negative turning points may lead to loss and worsen situations (Tuval-Mashiach et al., 2014; Liu, 2010).

Understanding the nature and significance of turning points is particularly relevant when exploring the concept of emerging adulthood. The transition from adolescence to adulthood is a period marked by numerous turning points that shape individuals' identity, life choices, and future trajectories (Zarrett & Eccles, 2006). In the following section, we will delve into the concept of emerging adulthood.

Emerging Adulthood

Based on Erikson's theory, the stage after adolescence is "young adulthood," which is between the ages of 19 and 40 and focuses on the psychological task of 'isolation versus intimacy' (Cherry, 2023). However, to further elucidate the transitional phase between adolescence and adulthood, Arnett introduced the concept of emerging adulthood (Tribble, 2015). According to Arnett, emerging adulthood is a period from 18 to 25 years old (or even up to 29) characterized by a gradual transition to adulthood and the making of crucial life decisions (Tribble, 2015).

Due to changes in societal expectations, emerging adults are relatively independent from social roles and normative expectations, allowing them to explore different life directions (Arnett, 2000). This period also allows for the development of individuals' morality, providing more time to form their views (Danaher, 2010). Research has shown that emerging adults face the challenge of both making changes and establishing stability in their lives (Danaher, 2010).

Arnett supports that emerging adults possess five distinct characteristics: identity exploration (finding meaning in life through relationships, work, and beliefs), instability (constantly changing jobs, residences, and relationships), possibilities (an optimistic outlook on the future), self-focus (devoting more attention to personal development), and feeling in-between (not quite adolescent, not quite adult) (Syed, 2017). Although this stage of life is universal, its expression can vary across racial, cultural, and economic divides (Tribble, 2015).

On the other hand, James Côté's concept of 'psychological adulthood' suggests that the transition to adulthood is becoming more difficult, and traditional markers such as marriage and parenthood are no longer the only way for young people to reach adulthood (Cuzzocrea & Magaraggia, 2013). This reflects the trend of young people being required to juggle

multiple transitions and roles simultaneously (Cuzzocrea & Magaraggia, 2013). Similarly, Carles Feixa's concept of 'Adultescente' (kidult/adultescent) refers to adults that keep an adolescent lifestyle. These approaches show the need to challenge the rigid dichotomy between youth and adulthood and to consider other models that consider the high porosity of the boundaries between different stages of life (Cuzzocrea & Magaraggia, 2013).

Exploring Turning Points in Emerging Adulthood

While numerous studies have examined turning points in this developmental period, most have not exclusively focused on narratives. For example, romantic relationships have been extensively explored in existing literature (Shulman et al., 2013; Grant & Potenza, 2010; Halpern-Meekin et al., 2012), highlighting that they can act as turning points with significant impacts on psychosocial well-being and development (Norona, 2018; Tuval-Mashiach et al., 2014). The upcoming sections provide a summary of the most commonly discussed topics and delve into the experiences associated with these vital turning points in early adulthood.

Romantic Relationships

Romantic relationships in emerging adulthood are a significant aspect of development, with increasing importance during the transition into adulthood (Kansky & Allen, 2017). This period is marked by developmental changes and distinct turning points in romantic relationships (Norona, 2018). Emerging adults often delay long-term commitments as they balance various aspects of their lives, including career and personal goals (Norona, 2018).

The study conducted by Shulman et al. (2013) aimed to understand the factors influencing the development of romantic relationships during this period. The study involved a sample of emerging adults and examined psychosocial factors such as attachment style, self-esteem, social support, and personality traits. The findings revealed different patterns of romantic involvement among emerging adults, including early initiation, serial dating, long-term

commitment, and non-involvement, each associated with distinct psychosocial profiles (Shulman et al., 2013). Individuals with secure attachment styles tended to have more positive and stable romantic involvement patterns, while those with insecure attachment styles exhibited inconsistency or avoidance (Shulman et al., 2013). Additionally, higher levels of self-esteem and social support were linked to healthier romantic involvement patterns (Shulman et al., 2013).

It has been observed that young American adults often delay marriage, engage in premarital cohabitation, and experience relationship churning (Grant & Potenza, 2010; Halpern-Meekin et al., 2012). Cohabitation is common, with around two-thirds of emerging adults engaging in it (Arnett, 2000). Relationship churning, including reconnecting with ex-partners, is also prevalent during this period (Halpern-Meekin et al., 2012).

A research conducted by Tuval-Mashiach et al. (2014), found that negative or undefined turning points were associated with depressive symptoms and decreased investment in relationships, while positive or formal events contributed to stability and well-being (Tuval-Mashiach et al., 2014).

Breakups are common in emerging adulthood, with one-third of young people reporting ending relationships within the past two years (Norona, 2018). Although the length of relationships tends to increase with experience, breakups still occur frequently. Some emerging adults engage in on-again, off-again relationships, indicating that the development of romantic competence is an ongoing process during this period (Norona, 2018). Recent research has focused on the pre-breakup and post-breakup experiences of emerging adults, highlighting the distinct differences in how they perceive and navigate relationship dissolution (Norona, 2018).

Education

Exploring different educational paths and making decisions about future careers are central to emerging adulthood (Arnett, 2000). The process involves multiple turning points, such as choosing majors, changing directions, and pursuing higher education (Arnett, 2000). This exploration can extend into their early and mid-twenties, and graduate school offers a chance for them to change directions. Educational attainment in emerging adulthood serves as a foundation for future achievements and opportunities (Arnett, 2000).

Dropping Out of School

Dropping out of school during emerging adulthood can be a significant turning point with long-term consequences that are often challenging to accept. McDermott et al. (2018) highlight that this decision involves a rupture in social connections with peers and teachers, which can result in difficulties finding employment, social isolation, and feeling overwhelmed by the responsibilities of adulthood. Moreover, dropout and early school failure are generally associated with negative outcomes such as involvement in crime, substance abuse, and unsatisfactory personal relationships (McDermott et al., 2018). On the other hand, major life events such as marriage, parenting, or obtaining a satisfying job can act as turning points that lead to compliance and personal growth. These positive life events can provide a sense of stability, purpose, and motivation for emerging adults (Marcotte, 2008).

Achievements

Achievements serve as turning points that shape an individual's identity (McLean & Pratt, 2006). According to Schneider and Niklas (2017), these accomplishments indicate a significant improvement in an individual's performance on a task or measurement. McLean and Pratt (2006) provided a comprehensive definition of achievement turning points, describing them as moments of significant accomplishment and self-identification. These turning points can lead to changes in an individual's perception of themselves, personal values, goals, and understanding of their place in the world. Achievement turning points can

manifest as recognizable successes or milestones, such as job promotions, as well as periods of introspection and self-discovery that contribute to a deeper understanding of oneself and one's purpose (McLean & Pratt, 2006).

The process of meaning-making associated with achievement turning points involves a greater understanding of personal goals and values, as well as an increase in self-esteem and confidence (McLean & Pratt, 2006). These turning points have the potential to reshape an individual's identity and can be transformative in terms of personal growth and development (McLean & Pratt, 2006).

Work

Work experiences in emerging adulthood focus more on preparation for adult work roles, as well as the foundations for the jobs they may have during their adult life (Arnett, 2000).

Explorations at work sometimes result in not achieving the most desirable occupation or an inability to find a job that is a satisfying and fulfilling one (Arnett, 2000). Recent studies have shown that transitioning from school to work has the potential to be a turning point, with troubled adolescents possibly being able to turn their lives around if given the appropriate opportunities and tasks (Murphy et al., 2010).

Bereavement and Illness

A study by MacDonald and Shildrick (2012) found that bereavement or illness among young people can have a profound and disruptive effect on their educational and social development, often leading to social exclusion. These youths lacked knowledge of their rights and access to resources, resulting in their struggles to be compounded. This turning point had a lasting impact on their lives, causing the need for specialized interventions to help them navigate their transitions and cope with the loss or illness.

Jones and Martini (2021) reported that emerging adults who have experienced parental loss show a higher level of self-awareness and a clearer understanding of their place in the world,

which could lead to lower levels of depression and increased resilience in the face of grief. Furthermore, these individuals may become more open to change and take risks, resulting in a greater sense of self-efficacy and well-being. These findings suggest that self-awareness, depression, and adaptation to grief serve as turning points in the lives of emerging adults who have suffered parental loss.

Parenthood and Leaving Home

Based on previous studies, around 40% of emerging adults move out of their parental home to live independently and work full time (Arnett, 2000). Goldscheider et al. (2014) carried out a study that provided valuable insights into the effects of parenthood on the turning points of leaving home and the pathways of young adulthood. The study suggests that parenthood may influence the timing and likelihood of leaving home, with variations observed across gender and race (Goldscheider et al., 2014).

Returning home

On the other hand, a turning point can be also considered the period known as the “boomerang period”, in which young adults return to the home of their parents after experiencing higher education or leaving home for a period (Stone et al., 2013). During this boomerang period, young people face the challenge of balancing their newfound independence with the expectations of their parents. This period is seen as a turning point, as it can have a lasting impact on the individual's sense of self and their future relationships (Stone et al., 2013).

Overall, the exploration of turning points in emerging adults' encompassing various facets (such as romantic relationships, bereavement and illness), has yielded valuable insights into the complexities of this life phase. However, a deeper exploration of these experiences is required to uncover hidden dimensions. To address this gap, this study attempts to employ a computer-based technique that is described below.

Text Mining: Topic Modeling & LDA

The utilization of computers and the internet has caused a dramatic increase in the volume of digital data available (Fedushko, 2016). Text mining is an artificial intelligence and natural language processing technique used to convert unstructured text into structured data for automated analysis. It is an interdisciplinary field that relies on advanced statistical, machine learning, and linguistic techniques (Haagen, 2022). In this study, text mining will be used to potentially uncover new themes that are common in the turning points of emerging adults' narratives.

Topic modeling is an unsupervised text mining technique used to discover patterns in a set of documents by clustering related words and expressions (Bryda, 2020). In unsupervised learning, the algorithm is not provided with labeled data during the training process. Instead, it autonomously identifies patterns and structures within the data, without any external guidance or predefined categories (Bryda, 2020). It is a type of exploratory data analysis which allows uncovering hidden topics in a corpus (Bryda, 2020). It involves a series of steps including corpus collection and definition, pre-processing of the corpus, topic modeling, topic model validation and finally topic model analysis (Piepenbrink & Gaur, 2017). It identifies related clusters of words, known as "topics", from an array of documents and it involves constructing a three-layer network composed of documents (D), words (W), and topics (T) (Min & Park, 2019). This process seeks to find topics from the data that is composed of documents and words. Research has shown that topic modeling is successful in discovering word sets that match the way humans understand groups of texts, as well as its practical applications for word sense induction (Min & Park, 2019).

Its methods, such as Latent Dirichlet Allocation (LDA) are generative, unsupervised methods of uncovering hidden patterns in enormous collections of natural language text

(Rhody, 2012). These models generate new data that accurately describe the corpus without changing it and use a form of probability to build the model with no metadata. The algorithm searches for trends in language by performing word-by-word calculations, rather than searching for pre-defined structural features (Rhody, 2012). LDA has quickly become one of the most popular probabilistic text modelling techniques in machine learning (Fedushko, 2016).

In this study, the choice of Topic Modeling with LDA is made due to its ability to provide an efficient and data-driven computational approach to quickly analyze the thematic structure of large amounts of text documents (Maier et al., 2018). This technique is particularly suitable for this project, as it can provide an understanding of the underlying topics of the data without requiring any prior knowledge. It also ensures that the topics are statistically meaningful, making the results more reliable (Maier et al., 2018).

Methods

The study employed a mixed-methods approach, incorporating both quantitative and qualitative data analysis to examine the primary's study data (Cox et al., 2019). The research implemented a narrative approach, aligning with the first type of narrative analysis proposed by Polkinghorne, which involves the creation of themes and taxonomies from stories (Creswell et al., 2007). The primary goal of this research was to enhance understanding of the experiences of emerging adults and investigate the potential of computer use in revealing new topics in emerging (student) adults' narratives.

Sample

The sample for this study consisted of 145 college students who were recruited in 2010 for a study conducted by Bauer and McAdams (Cox et al., 2019). The sample was

disproportionately female (74-77%) and ranged in age from 18 to 23 ($M = 19.7$). Participants had varied background: 69.7% identified as White, 18.6% as Asian American, 4.8% as African American, 2.1% as Hispanic, and 4.8% as 'other' (Cox et al., 2019).

Life Story Episodes

Participants were instructed to engage in a guided autobiography exercise where they were asked to select and convey critical events or episodes from their life story (Cox et al., 2019). The booklet provided prompts for eight different critical events, but for this study, the focus was solely on the turning points. The instructions for this exercise were: *“For each of the eight key events we will consider, I ask that you describe in detail what happened, when and where it happened, who was involved, and what you were thinking and feeling in the event. In addition, I ask that you tell me why you think this particular scene is important or significant in your life. What does the scene say about you as a person? Please be specific”* (McAdams, 2007, p. 2). For the specific turning point episodes, participants were asked to identify a particular episode in their life story that they now see as a turning point. If they were unable to identify a clear turning point, they were instructed to describe an event in their life where they underwent an important change (McAdams, 2007).

Procedure

The data collection for this study involved administering self-report questionnaires and life story prompts to participants. Participants were instructed to complete these measures at their leisure (Cox et al., 2019). The current study employed text mining analysis as the data analysis strategy, which involved using quantitative methods to identify the most discussed topics of turning points from the primary study.

Materials. The primary data for this study consisted of anonymous transcripts of turning points in an Excel format. These turning points were obtained through the life story prompts given to participants, along with other study measures and self-report questionnaires (Cox et al., 2019). The Excel format allowed for systematic organization and analysis of the turning point data.

Analysis

The structure of a topic modeling analysis typically involves several key steps, which are designed to extract meaningful topics from a collection of documents and uncover hidden patterns and semantic structures within the data. The steps carried out in this research are presented below:

Data preparation

Data preparation is the first step in the process of the text analysis. It involves the collection and pre-processing of textual data. In this study, with the use of the Orange platform, the primary data were loaded in the Corpus widget (corpus is a collection of text documents, typically comprising numerous documents, often of different types, formats, and/or languages (Haagen, 2022)). Afterwards, the Corpus Viewer widget was linked to the Corpus, allowing the visualization of the textual data.

The pre-processing process transforms raw textual data into a form that is more suitable for use with text mining algorithms (Haagen, 2022). This is an important step in the text mining process and is essential for producing reliable and accurate results (Haagen, 2022; Piepenbrink & Gaur, 2017). The choices of pre-processing that applied in the current study were:

Tokenization. Tokenization is used to break a sentence or string into individual pieces, referred to as tokens. Tokens can be words, phrases, or other elements (Bioinformatics

the	of	and	in	to	by	on	for
it	at	from	with	an	is	as	this
his	he	so	no	one	that	or	if
when	we	not	there	but	after	their	they
what	be	its	our	these	my	before	do
then	under	who	where	upon	those	will	are
her	which	more	was	you	yet	have	had
among	about	without	having	though	being	she	were
through	why	out	any	between	whether	would	should
your	however	has	up	did	within	am	over
me	shall	him	into	could	besides	although	whatever
above	against	down	us	whose	than	whom	them
himself	towards	off	along	been	below	behind	throughout
around	itself	themselves	across	myself	thee	whilst	amongst
ourselves	herself	all	some	how	now	here	such
every	thus	while	mrs	yours	ours	go	make
think	would	one	get	know	like	want	come
could	see	take	thing	much	never	first	say
I	time	day	people	life	year	feel	point
turn	really	high	find	good	tell	many	back
also	begin	person	always	way	since	give	something
night	still	talk	look	lot	two	away	better
happen	even	well	need	month	important	right	situation
able	long	world	event	ever	around	hard	major
last	week	try	though	put	another	finally	every

- To obtain the conditional probability of the word receiving a topic in each topic, both topic and word frequencies were multiplied. The subject with the highest conditional probability was then selected (Rabindranath, 2022).

(3) Repeating the same for all words, and lastly

(4) Iterating the same process (Rabindranath, 2022).

Number of topics

The initial step to Topic Modelling is to determine the most suitable amount of topics (Wisdom, 2017). This step was done by plotting the coherence scores. Coherence scores assess the semantic similarity of words within a single topic, allowing evaluators to differentiate between topics which are semantically meaningful and those which are simply the result of statistical inference (Stevens et al., 2012). A topic coherence metric is used to evaluate how well a set of words, known as a topic, is supported by a text set which is used as a reference corpus. This metric relies on various statistics and probabilities from the reference corpus, particularly taking into account the context of the words, to produce a coherence score. This demonstrates that the topic coherence measures are not only based on the topic itself, but also on the dataset used as reference (Stevens et al., 2012).

Given the probabilistic nature of an LDA topic model, running the script multiple times can yield slightly different outputs. Consequently, simply selecting the model with the highest coherence score may not be the most appropriate approach (Haagen, 2022). Instead, it is more meaningful to assess the average coherence scores for various topic numbers (k) and identify the point where the decrease in coherence score becomes negligible, indicating diminishing returns on increasing k (Haagen, 2022). This point is commonly referred to as the "elbow" of the plot. Research findings suggest that models with a smaller number of topics are generally easier for humans to interpret (Haagen, 2022). Considering this, the

present study explored three topic numbers (k): k = 5, k = 7 and k = 10. By analyzing the visual representation of the coherence scores, the researcher identified the most interpretable model to be the one with 7 topics, obtaining a coherence score of 0.41476. This choice aimed to balance coherence and interpretability, ensuring that the identified topics are meaningful and easily comprehensible.

Visualization

The researcher utilized LDAvis, an Orange implementation of pyLDAvis, to visualize topics and their keywords in LDA topic models (Bioinformatics Laboratory). This visualization aided in exploring the models by adjusting the importance of top-ranked topic words. The parameter relevance allowed the researcher to adjust word weights based on frequency and lift (Bioinformatics Laboratory). After using LDAvis for visualization, the next steps of interpretation and labeling were carried out to gain insights from the topic models.

Topic Interpretation and Labeling

In the process of interpreting and labeling the identified topics, the aim was to provide a comprehensive and meaningful understanding of these topics and their associated themes. To accomplish this, the researcher employed a systematic approach that involved carefully selecting examples or prompts and leveraging the LDAvis tool for topic labeling.

For the selection of examples (narratives), the researcher conducted a thorough search through the dataset, which was conveniently available in Excel format. This search enabled the identification of narratives that were strongly correlated with each theme, ensuring that the chosen examples would effectively represent the underlying topics. For instance, the

Topic 2: “Education, making decisions, and becoming a parent” (following in the results section) is a representative example that illustrates this theme is as follows: *“As a junior in high school, I began to seriously address the issue of what career to choose. I took the interest inventory tests and spoke to guidance counselors and professionals in the areas I was considering. I kept coming back to the same choice - medicine. I decided to pursue a career as a physician after eating lunch one day. My friends and I had been talking about the future over lunch. Walking to class afterward, I decided I was going to be a doctor. I felt like a weight had been taken off my shoulders. I had concrete direction for my future.”*. This example captures the essence of the topic, focusing on education and decision-making processes. The decision to pursue a career in medicine demonstrates the significance of decision-making during this phase, as it shapes one's career path and future trajectory (Amreen, 2019).

The labeling of the topics in this study was performed by using the LDAvis tool, which was integrated with the Topic Modeling widget. This tool allowed us to visualize the topics, their associated words, and the distribution of topics across the documents (Sievert & Shirley, 2014). By leveraging the LDAvis tool, we gained valuable insights into the main themes present in the text corpus and the relationships between topics (Sievert & Shirley, 2014).

To label the topics, the researcher interpreted the tags generated by the LDAvis tool, which summarized the content represented by each topic. Specifically, the focus was on the keywords associated with each topic that were generated by the LDA model. These keywords represent the terms with the highest probability within each topic. Meaningful labels were assigned to the topics by examining the keywords and their semantic coherence. These labels described the main themes or concepts captured by each topic, enhancing the interpretability of the topic modeling results.

Results

The results of the Latent Dirichlet Allocation (LDA) analysis are presented below (see Table 2). The researcher employed LDA with a specific number of topics, and the subsequent table demonstrates these topics along with their associated keywords:

Table 2

The outcome of the Latent Dirichlet Allocation (LDA) analysis: Chosen number of topics and their keywords

Topics	Keywords
Topic 1	Father, realize, learn, remember, family, work, grow, become, change, different
Topic 2	School, college, decision, home, start, decide, self, friend, become, parent
Topic 3	Friend, love, new, school, decide, grow, job, start, live, become
Topic 4	Experience, change, child, work, family, become, leave, live, home, learn
Topic 5	Parent, family, mother, realize, old, friend, decide, live, relationship, leave
Topic 6	Believe, relationship, move, change, live, decide, work, college, new, learn
Topic 7	Realize, school, friend, work, college, become, change, experience, child, old

Based on these findings, seven common topics were identified, labeled and interpreted as follows:

Topic 1: Father's journey of growth and changes in family and work.

This topic highlights the importance of father-child relationships and how they influence personal growth. Participants in this theme discussed experiences with fathers, such as the

loss of a father, reflections on parenting roles, and transformations within the context of family and work. These turning points shed light on the profound influence of family dynamics and career aspirations in shaping the life trajectories of emerging adults during this critical stage. Following are some presentative narrative examples.

“I believe the death of my father comes closest to a turning point in my life. I realized, at that point, that whether I chose to rely on him or not, it was no longer my choosing; the option had been removed. I also realized that I had to deal with my mother directly and without choice. I would be the one she would turn to for everything. Most of this epiphany came to me over the several days from his death to his burial, and generally when I had time alone to think. Otherwise, I was very occupied with the business of death and caring for my mother and the rest of my family.”

“The turning point in my life was when my first child, a son, recognized me as more important to him than his father. I realized that I was the pivot point in our household, the law giver, mediator, etc, and that I had much more influence on our son than did (and still does) my husband. By my actions and example, rather than by shooting my mouth off, I had become my family’s backbone. I was taken aback, then pleased. Now we have a daughter, too, and I am still the Rock of Gibraltar.”

“As a child I was certain I would be a doctor when I grew up. I was smart, good at science and math, and everyone assumed I would be a doctor because my dad is one. I never questioned this plan until middle school. In sixth or seventh grade we had a new science teacher. At first I was excited to work in a lab and do experiments, but this man destroyed any interest in science I ever had. There are many instances of his horrible teaching, but the one I remember best was when he wasn’t even there. This teacher had occasionally instructed us to alter our data to get the right answer we wanted. I didn’t realize he did this

in everything. One day while he as gone for the day, we got a test back that he had graded. The assistant let the class in comparing answers, asking the students what they wrote. As we compared answers, we realized that our teacher had marked some answers wrong when they were corrected and had missed some incorrect answers. We also noted that his trial was correlated with his opinions of us. He marked students down that he didn't like and gave students he like high grades even though they made mistakes. While this didn't effect my grade, I was appalled. My complete abhorrence of this teacher was solidified. I didn't understand this then or for many years, but this one man totally changed my opinion of science. It went from being something I loved to something I still dislike to this day. I now realize that it is slightly irrational to make such a decision based on one experience. However, it was a long and dreadful experience (I had the teacher for three years), and no science class I have taken since then has changed my opinion. I don't know if I would have become a doctor had this not happened, but I know that my years with this man changed my life goal. I no longer wanted to be a teacher, much to my father's chagrin, and to this day I'm still searching for a career."

Topic 2: Education, making decisions, and becoming a parent.

This topic is focused on education and decision-making. Starting college marks a critical period of intellectual and personal development, allowing individuals to explore new ideas and acquire knowledge (Blimling, 2010). The decision-making aspect is crucial during this phase, as it shapes career paths and life trajectories (Amreen, 2019). Moreover, becoming a parent while studying is a crucial life event that leads to substantial changes in responsibilities, priorities, and self-perception (Powell & Gaines, 2021). The following narratives underscore the challenges some individuals face when starting college, particularly if they lack prior family experience in higher education. On the other hand, making decisive

career choices can bring a sense of clarity and direction, setting the stage for an individual's professional journey. Both education and parenthood are transformative life events that shape an individual's sense of self and future aspirations. Below are some narrative examples that are representative.

“I would have to say that upon my entrance into college, in the year of '94, I underwent an important transition with respect to my understanding of myself. I grew up in a very close knit family ----- very close to my relatives. Therefore when I had to leave home and take care of myself, for the most part, it was a rather unexpected slap in the face with reality. This may have been so significant because I was the first to go to college in my family and I had no idea of what to expect. I remember feeling like I was extremely different from my peers because I was raised by my grandparents and education was not highly valued in my immediate family. I remember thinking that I was not as serious about college as my peers were and it made me very fearful about my future success in college.”

“As a junior in high school, I began to seriously address the issue of what career to choose. I took the interest inventory tests and spoke to guidance counselors and professionals in the areas I was considering. I kept coming back to the same choice- medicine. I decided to pursue a career as a physician after eating lunch one day. My friends + I had been talking about the future over lunch. Walking to class afterward, I decided I was going to be a doctor. I felt like a weight had been taken off my shoulders. I had concrete direction for my future.”

Topic 3: Relationships and transitioning into a new life.

The focus of this topic is on relationships, particularly friendships and romantic relationships, and their impact on personal growth and development. Transitioning into a new life, such as moving to a new school, city or starting a new job, often leads to the formation of new relationships and the re-evaluation of existing ones. These experiences facilitate

personal growth, as individuals navigate challenges, develop greater independence, and learn to trust and rely on others. The following are some examples of participants' narratives.

“The turning pint in my life occurred after six grade, which was the worst school year that I experienced, I moved to a college prep school and was able to start new again. That year I met new friends and loved my teachers. I felt welcomed for the first time in a long time. The kids didn't make fun of me and I didn't feel like an outsider. I felt comfortable at the school. All the teachers were friendly and the student especially were congenial. This point in my life, I felt like I was beginning to grow emotionally. I felt more confident in myself and was beginning to voice my thoughts, feelings, and beliefs. I felt like I was becoming more like I am today.”

“During high school I found out that a few of my friends were talking about me behind my back. It was after this that I made a break with friends. But it turned out to be a positive situation because I became closer to friends which I could trust. But at the time, I felt betrayed. But the situation helped make me a more independent person.”

Topic 4: Life experiences

This topic is focused on life experiences and the impact they have on personal growth. Participants shared stories of significant experiences that shaped their understanding of themselves and the world around them. The narratives indicate that diverse experiences, such as sexual experiences, can serve as turning points. These experiences challenge existing beliefs and perspectives, forcing individuals to adapt and learn. Some participants' narratives are provided below as examples.

“I believe that growing up result of turning point. I was blessed in experiences many life-changing, self-understanding events growing up, in terms of the values and truths of

education, friendship, family, love and living. Another episode during the summer of 1995 was a peace/facilitation camp I went to...asked to be one of 5 American counselors to facilitate Arab, Israeli, Bosnian, and Croatian kids, who in actuality were only 2 to 3 years younger than me. It was a heart wrenching 5 weeks because not only did I act out the role of a regular summer camp type counselor, I many times had to step into the role of sister, ally, educator, even mother. Although I've done a lot of facilitating/peer training in my community activism, this was definitely an eye-opening event. I found parallelisms of the kids' agony of going to war and religious strife like the gang bangers who talked about "territories" and gang fights, of those having no home as wandering Palestinian and former Yugoslavian refugees like the Mexican and Southeast Asian kids I talked to and tutored in my community. Toward the end of the program, I noticed these 2 girls, one African American, the other Caucasian giving each other hard stares and refusing to talk to each other. I sensed a problem by the negative vibe they were sending each other and to the other kids around them. So I decided to have them settle their differences by taking them back to my room and for the next few hours, I had them talking and explaining each other's hatred, why there were miscommunications. And though I was only 2 years older than them, I felt that at the moment I could've facilitated an argument between two adults, from that day on I felt different and looked at the world with so many different lenses, I know I wanted to work on the counseling gift I had, to take that mentality to any career or life situation I may encounter later on."

"A turning point in my life occurred when I was 15. I was convinced that I was attracted to men & knew about this for a long time, but I realized then just how these feelings would affect the rest of my life. I had my first sexual experience with a man that in my mind seemed "legitimate." I realized that it was entirely comfortable for me & that it felt more appropriate than my experiences with women. I suppose you could say that I realized that I was gay. I

was finally able to act out these feelings that I had been denying for so many years. The result was a feeling of freedom and awakening.”

“I can’t think of a turning point in my understanding of myself per se—rather it’s more like I understand I had to get away and live alone if I wanted to make it. It was after high school. I had to choose a field of study at the university (rather than in the US where you choose a university or college then a major). Having been at boarding school for 9 years and having see the disastrous effect living at home had on my brother and sister (my brother had started college in our hometown and was living at home. My sister was the last one to go to boarding school and I had seen her grow at home). I intuitively knew that I had to find a way not to go to my hometown’s college. I knew I could not bear it at home, I knew I would not be able to concentrate on my studies and I wanted to make it. I wanted to avoid failure and be successful. I this chose a field of study which was not offered by the college and started my studies in Brussels where I was very successful (I later obtained 2 fellowships to study in the US). I am aware that this is not really a turning point in my understanding of myself though it is because I knew I did not have the strength to make it inside the family chaos, that I had to put some things on the back burner. To a certain extend I know that I am somewhat emotionally crippled. However from that point on I accumulated positive experiences—first academic success, then my fellowship which forced me to open myself to a new world, then I opened myself to relationships—my husband, etc... I have stopped my Ph.D. for I could no longer continue building on a negative choice, but I am back in school studying what I always wanted to go. I am taking my premed class and preparing for the MCAT. I credit my later development and success to that gut feeling and that decision to flee the family situation.”

Topic 5: Parenthood and family dynamics

This topic revolves around family relationships, particularly with parents, as well as their experience with their parenting role. The participants shared various experiences related to divorce, immigration, and the realization of their relationship dynamics. The narratives indicate that understanding one's relationship with parents and accepting past disappointments can be transformative turning points in one's life. Examples of participants' narratives are given below.

“When I was 9 years old, my parents decided to get a divorce. I had lived in Canada all my life up till then, but my mother decided that after the divorce she would move to Taiwan. I have a younger brother of 3 years. One day before lunch time, my dad came to school and wanted to take me out to eat. I sensed something was wrong at that moment. He told me about the divorce situation- how I would have to choose whether to stay with my mom or dad. He said a lawyer (or judge) will ask me my opinion. He started crying. He wanted me to tell the lawyer that I wanted to stay with him. He told me to try to get my friend’s parents to persuade the judge. As a 9 year old, I suddenly felt this huge decision that would affect the rest of my life was actually in my own hands. I was also very conflicted cuz I loved both mom and dad- how could I make a decision? I’m the type of person that doesn’t want to hurt others (feelings) and this situation came extremely difficult to me. I’m also a thinking person, analyzing a lot. Even as a 9 year old I thought about all these consequences of living with one parent or the other. “

“Between junior and senior years in high school I attended Stanford Summer School. This was my first experience being away from my parents and having to live on my own. I didn’t believe I could do it, but after returning home, I had so much self confidence that it restructured my life. I was more self sufficient and knew how much I could do and what I couldn’t do. It set the stage for me to come to school away from home.”

“It’s hard to think of specific turning points. What I think of is coming to understanding of my relationship with my parents, how my behavior is shaped by my development and to have insight into and control over my day-to-day behavior. One turning point was in the gradual realization that I would always have the history of having been disappointed with my parents and that my ability to be successful in the world and loved by others is not tied to that history changing but tied to my accepting that history.”

Topic 6: Exploring beliefs

This topic focuses on personal beliefs and experiences with religion. Participants shared stories of encounters with religious beliefs, the importance of developing a relationship with a higher power. Religion provides a framework for individuals to explore questions of meaning, purpose, and values (Barry & Nelson, 2011). It offers a sense of guidance and structure during a time when many emerging adults are navigating new responsibilities, relationships, and life choices (Barry & Nelson, 2011). Religious beliefs and practices can give individuals a sense of belonging, community, and support, which can be particularly important during this developmental period (Barry & Nelson, 2011). Reassessing moral values and beliefs can act as a turning point, prompting individuals to question their assumptions and adopt new perspectives. The following are a few examples of participants' stories.

“I had recently become Christian, so I was still very uncertain about what Christianity involved and who God was. I was involved in this thing called an accountability group, where we basically got together to study a book written about Christianity and to also pray for each other. It was not until our first actual meeting, when one of the five girls in the group, started talking about one of her experiences and just how God had changed her. It

was at that moment, after the meeting, when I finally understood why it was so important to meet with God, why it was so important to form this close relationship with him. Before I knew I believed Him, but I didn't really understand until this day. That day I felt a warm glow surrounding my heart, knowing that God would be with me wherever I went. This is significant because suddenly changing my focus to a Godly one was a big thing. I think this indicates that I just seek to know the truth."

"A major turning point in my life occurred this year, around late March 1997. I had pledged a fraternity earlier that quarter, in early January, and I was excited because I had known and been friends with many of the guys for about a year and a half. However, during this pledge period, I realized that being a "pledge" was very different than being the friend I had been before. All of a sudden, we were treated with utter contempt, like we were the worst things possible. After hearing other pledges complain of the treatment we were receiving, which many felt was more than necessary, I felt like I needed to take action. I had brought up the topic once, but nothing had been done. After one especially cruel night, I felt like I needed to take action. I had felt like we had put up with enough and decided the next day to call the national headquarters to report what was going on. The vice-president came out and questioned all of the pledges and many of the actives, and finally came a decision on their punishment. This whole time, nobody knew who had called except for a national, and there was a lot of anger and frustration through the chapter. The day after the announcement of our punishment came out, I decided that I would be best to admit to my actions and face whatever consequences resulted. I wrote a letter to the whole fraternity stating what I had done and why I had done it. Hours later, I was confronted by many actives and pledges who were very angry with me. During the next few days, I was ostracized from the house and had many people coming to me to convince me not to activate. In short, these men who I thought had been my friends for a year and a half suddenly hated me more than anything else in the

world, and it felt terrible. I was miserable as a result, and looked to friends for support. All of them told me that I had done the right thing and that I should stand up for myself. The reason this was such a significant event and something that was a turning point was because I realized for the first time in my life that I really had control over my own life and what I was willing to put up with. For years past, I had put up with an unhappy family life and felt like there was nothing I could do, but this was an example to myself that I didn't have to be unhappy. I also took the opportunity to reexamine my morals and beliefs and realize who I was and what I believed in. As a result, I really feel like I know and understand myself better."

Topic 7: Realizations

The narratives in this topic focus on personal realizations and growth, encompassing various aspects of life, such as education, relationships, work, and the transformative experiences of aging. The narratives shared by participants indicate that realizations can act as turning points that shape a person's future path and outlook on life. Below are two samples of the stories shared by participants.

"A major turning point in my life occurred when I got alcohol poisoning and threw up all over the Sears Tower at my dorm formal. My friends and I all drank too much before we got on the bus to leave, and suddenly the room started spinning and I couldn't stand up. I remember thinking that I had to stay in control and not make a fool of myself, but I just couldn't function. This experience was significant in that I finally realized that I have a problem with substance abuse and am now actively seeking treatment. I realized that I never believed I could have a good time without alcohol and need help to overcome this problem."

"The turning point in my life was when my father died, I was 11 eleven years old. Although I probably didn't realize at the time, experience over the next few years helped me realize that

if any help was going to come, it would have to come from ourselves. A feeling of finding work at a very early age gave me a feeling of independence and accomplishment and a determination to help my family, and mother, who was ill at the time, my sister and brother, and I shared many good times with very little money. At age 15 I felt like a very mature adult.”

Discussion

This study employed a mixed-methods approach to gain a better understanding of the experiences of emerging adults and explored whether the use of a computer can uncover new topics that were not previously identified in emerging adults' narratives. By analyzing text data and employing text mining techniques, the research objectives were successfully met, revealing the most frequently discussed topics in turning points.

Based on the coherence scores of the analysis, the researcher identified seven topics that were identified as: “Father's journey of growth and changes in family and work”, “Education, making decisions, and becoming a parent”, “Relationships and transitioning into a new life”, “Life experiences”, “Parenthood and family dynamics”, “Exploring beliefs” and “Realizations”. The identified topics usually touch on different facets of people's lives, such as their relationships, education, personal beliefs, and experiences.

It is noteworthy that some of the identified themes, such as "Father's journey of growth and changes in family and work,"; "Education, making decisions, and becoming a parent," and "Parenthood and family dynamics," share similar words and concepts. This suggests the interconnectedness and interplay of these themes in the narratives of emerging adults. For instance, the word "father" may signify both the loss of a father figure and the experiences of fatherhood. Similarly, the word "family" can encompass family dynamics, parenting roles, experiences related to divorce or immigration, and the realization of relationship dynamics.

While these themes may share common words, their specific focus and context give rise to unique aspects within each theme. For example, the theme "Father's journey of growth and changes in family and work" explores a father's experiences, challenges, and transformations in both family and workplace. This ability to discern the subtle differences in meaning and context adds a valuable layer of complexity to the analysis, providing a more nuanced understanding of the transformative moments in the lives of individuals during the emerging adulthood period. By recognizing both the similarities and differences among the themes, the study gains a more holistic view of how these themes collectively contribute to the transformative experiences of emerging adults.

The identification of topics such as relationships, education, personal beliefs, and life experiences is consistent with previous studies that employed hand-coding methods. For example, Kansky and Allen (2017), Norona (2018), and Shulman et al. (2013) all found relationships to be a significant theme in the narratives of emerging adults. The overlap in findings between the current research and previous studies strengthens the validity of the present study's results and indicates the importance of these themes in the narratives of emerging adults during turning points.

While Pickles and Rutter's criteria (as cited in Liu, 2010) were not formally tested in this study, their incorporation into the analysis provides a robust framework for evaluating the importance and validity of the themes. For example, the criteria universality and long-term behavioral change, are applicable to the second topic "Education, making decisions, and becoming a parent." Starting college, a universally experienced event, marks a critical period of personal and intellectual growth (Blimling, 2010). Decision-making during this phase has a long-term impact on career paths and life trajectories (Amreen, 2019). Becoming a parent while studying leads to substantial changes in responsibilities and self-perception (Powell & Gaines, 2021), illustrating the enduring behavioral change associated with turning points.

What sets this study apart is the computer-based technique. A remarkable strength of this study lies in its attempt to identify the most common topics of turning points in emerging adults' narratives, making it an innovative approach in the existing literature. This approach led to the identification of an additional theme, "Exploring beliefs," which had not been previously mentioned in prior literature as a turning point in the narratives of emerging adults. In a study conducted by Barry and Nelson (2005), the researchers investigated the role of religion in the transition to adulthood among young emerging adults. However, it is important to note that this study did not explore or examine narratives or turning points. Consequently, the present study contributes significantly to advancing our understanding of the transformative experiences and themes present in the narratives of emerging adults, adding valuable insights to the field of emerging adulthood research.

Regardless of the valuable insights gained from this study, several limitations should be acknowledged. Firstly, the previous studies mentioned in this discussion did not explicitly utilize narratives or computer-based techniques, limiting the ability to make direct comparisons. The lack of narratives and computer use in these studies underscores the novelty of the present study's approach. Secondly, the methodology employed in the primary study, where participants were asked to identify a turning point or an event of important change, introduces the possibility that some identified themes may be more closely associated with transitions rather than distinct turning points. This highlights the challenge of precisely differentiating between transitions and turning points within narratives.

Additionally, the present study did not find certain negative turning points, such as dropping out of school or illness and bereavement, as distinct topics. Several factors could contribute to this finding. Firstly, the researcher interpreted only 7 topics. By limiting the number of topics, it is possible that some specific negative turning points were missed or were overshadowed by other themes. Secondly, the sample for this study consisted of 145

college students. As a result, the study's findings may be more reflective in a college setting. For instance, some negative turning points, such as dropping out of school, might be more prevalent in other contexts, such as public schools. Furthermore, the participants were asked to write about turning points without specific prompts for positive or negative events. This open-ended approach might have encouraged a greater emphasis on positive or neutral turning points rather than negative ones.

Future research should focus on exploring methods and techniques that can effectively distinguish between transitions and turning points within narratives. One way to achieve this is by incorporating additional prompts or specific criteria during data collection. By explicitly asking participants to recall both transitions and turning points, researchers can encourage a more nuanced reflection on these two phenomena. External coders or observers could also be employed to analyze the narratives from multiple perspectives. Their independent assessments of the identified themes as either transitions or turning points could add objectivity and reliability to the analysis. Another valuable approach is the use of questionnaires designed to facilitate the distinguish between transitions and turning points within narratives. Moreover, future research should consider the inclusion of a more diverse sample to capture a broader range of turning points. Additionally, increasing the number of topics in the analysis might reveal hidden patterns and themes, particularly concerning negative turning points like dropping out of school, illness and bereavement. These approaches and methodologies can help researchers attain a more complete comprehension of the full spectrum of the topics related to turning points in emerging adults' narratives.

Nevertheless, the findings of the current study can contribute to a more comprehensive understanding of this critical stage, which can inform interventions and programmes aimed at promoting positive development during this period, providing targeted support, resources and guidance to help emerging adults navigate their lives more successfully. For example,

professionals in counselling can utilize this knowledge to tailor therapeutic approaches to address the specific themes discussed by emerging adults. In educational settings, educators can incorporate the identified themes into curriculum development and instructional strategies. This can involve creating opportunities for reflection, facilitating discussions on personal beliefs and values, and fostering supportive relationships within educational environments.

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