



How ‘*Aql* and Neuropsychology Intersect in the Phenomenon of Quarter-Life Crisis? Systematic Literature Review

Nina Rosfianti¹ and Cindy Veronika Carolina²

¹ Islam and Middle East Study of School of Strategic and Global Studies of University of Indonesia, Jakarta, Indonesia

² Faculty of Law of University of Indonesia, Jakarta, Indonesia
nina.rosfianti@ui.ac.id

Abstract. In this review, the quarter-life crisis, a significant challenge in an individual's life, closely tied to personal experiences and existential concerns. The concept of ‘*aql*, as an internal strength and philosophical foundation as well as power of thinking and human spirit. Neuropsychology is a tool to identify relation between mind and human behavior in order to cope the issue of human health. The Preferred Reporting Items for Systematic Reviews and Interdisciplinary method was used for this research’s systematic review. We browsed a variety of academic studies that had been published in English-Indonesia language, published in Elsevier and Semantic Scholars that examine quarter life crisis, ‘*aql* and neuropsychology. The literature search generated a total of 4585 publications. After removing duplicates and screening titles, abstracts, and full-text evaluation, there were 56 articles were included in the final analysis. The results were validated and examined. There were possible integrating of the philosophical insights of ‘*aql* with the practical approaches of neuropsychology to develop a comprehensive strategy for navigating and mitigating the impacts of the quarter-life crisis.

Keywords: ‘*Aql*, Neuropsychology, Quarter-life crisis, Systematic Literature Review

1 Introduction

The quarter-life crisis has long been a worrying issue in the order of life because it concerns the survival of individuals. This problem is not only experienced by one specific part of the country or region, but spreads evenly to each individual and has even become an interesting theme for all researchers in the world including Indonesia, the Czech Republic, and England (Cirklová, 2020; Flynn, 2022; Henderson, 2019; Natalia et al., 2023). The issue of QLC is interesting because this crisis is a kind of virus that can cause instability in an individual's life psychologically and even physically and its scope is widespread.

Quarter-Life Crisis (QLC) is a phase where humans experience vulnerability and mental shock during the transition period from adolescence to adulthood. This phase is usually experienced by adult individuals aged 20-33 years. LinkedIn Corporate Communications found that around 75% of the 6014 people surveyed (spread across the United States, United Kingdom, India and Australia) surveyed by the polling method turned out to be experiencing a quarter-life crisis (Hasyim et al., 2024). The changes that occur can cause negative feelings and thoughts in each individual. Uncertainty, confusion, pressure, emotional crises, and self-confidence crises that occur in individuals in the quarter life crisis phase can cause stress, anxiety, and even depression responses (Ferani Amira Salsabila et al., 2023).

The American Psychological Association assures that quarter-life crises can have a significant impact on the emergence of sadness, anxiety, and post-traumatic disorders (Hasyim et al., 2024). Psychological disorders such as anxiety, feelings of distress, and sadness are often associated with impaired brain function that affects mood (Widiarni et al., 2022). This quarter-life crisis is a term related to an emotional disorder that affects the productivity and mindset of the sufferer. Every emotion experienced by every individual, including those who are experiencing a midlife crisis is a process of the thalamus' function as a carrier of information (Banich, 1997). In this context, the study of neuropsychology, as one of the disciplines that focuses attention on emotions defined as subjective experiences and neurovegetative activation (Calicchio, 2022) plays an important role in addressing the problem. Research in the field of neuropsychology helps identify how disturbances in brain function can affect emotions and mood, as well as how neuropsychology-based interventions can help individuals cope with and cope with the problems associated with quarter-life crises.

In addition, philosophical views are also important as an inner and mental guide in overcoming crises (Naufal Robbiqis Dwi Asta, 2023). In Islamic literacy, 'aql is seen as a means of understanding various forms of science and is associated with emotional and spiritual intelligence (Ramadhani & Khusnul Khotimah, 2023). According to al Attas in Rahmadi 'aql has the ability to penetrate visible and invisible dimensions (Rahmadi, 2022). 'Aql or in other words reason is a small organ in the body that triggers human behavior. 'Aql cannot stand alone, its essence is always connected to the soul dimension (nafs) which has the ability to regulate the body, the heart (qalb) which deals with the reception of intuitive knowledge, and the spirit (ruh) when dealing with abstract things (Rahmadi, 2022).

In this study, it will be discussed further how 'aql and neuropsychology in the phenomenon of quarter-life crisis. Will the neuropsychological and 'aql approaches be able to provide a deep understanding of emotional dynamics during a crisis and become a philosophical foundation for mitigating and improving mental health in the quarter-life crisis phase?

2 Methodology

2.1 Data Sources and Searches

The Publish or Perish app was used to identify relevant articles which were then extracted and screened with the help of Rayyan. The systematic review for this study was conducted using the Systematic Reviews guidelines and interdisciplinary methodology. This methodology entails the comprehensive review, classification, and categorization of extant evidence-based literature. Systematic searches were executed across multiple bibliographic databases, namely Elsevier and Semantic Scholar. Search terms included "quarter life crisis", "neuropsychology" and "concept of 'aql" along with their synonyms and closely related terms, employed both as index terms and free-text keywords. Additionally, references from the identified articles were scrutinized for further pertinent publications, unrelated outcome and duplicate entries were systematically excluded.

2.2 Study Selection and Data Extraction

We used the Publish or Perish application to identify relevant articles. Rayyan was employed to screen the articles identified through the searches, with abstracts and irrelevant studies being discarded. Subsequently, the abstracts of the remaining studies were independently reviewed based on the inclusion criteria. A reference check was also conducted. Studies were included if they met the following criteria: (1) Published in English-language and Indonesian-language, peer-reviewed scientific journals, (2) Released between 2019 and 2024, (3) Indexed by Scopus and the Science and Technology Index, (4) Investigating the roles of neuropsychology and 'aql in human emotion and development, and (5) Exploring the causes and coping mechanisms of the quarter-life crisis.

Articles that discuss related to the topics of 'aql, neuropsychology and quarter life crisis are quite interesting to researchers. These three variables are basically similar in terms of discussion of human behavior, emotions, and mental health (although they are not directly related). So, the researcher intends to conduct a study on the intersection of 'aql and neuropsychology and its role in the quarter life crisis to find the intersection between the three entities, so that it can form a complementary integration for life progress and mental health. This study will try to look at the interconnectivity between three variables, namely quarter life crisis, neuropsychology and 'aql systematically through literature spread on databases that comply with the high standards of scientific journals. Based on eligibility requirements, the title, abstract, and keywords of the identified papers are investigated and selected. In addition to longitudinal studies that track the role of 'aql and neuropsychology in human health and survival, there are also quantitative-qualitative studies that discuss the causes and ways to overcome the quarter life crisis technically and philosophically. Papers are selected through a rigorous screening procedure that begins with a review of inclusion requirements. We are looking for publications from 2019–2024 because studies on all three variables have been done quite a lot, especially neuropsychology, so the range of the last 5 years to reach articles relating

to the crisis of quarter life, 'aql and neuropsychology is considered sufficient to highlight the latest updates of the literature.

2.3 Data Collection Process

The data collection process incorporated the following information: authors, keywords, journal titles, publication year, study methodology, results, abstracts, and discussions regarding the roles of neuropsychology and 'aql in human emotion and development, as well as the causes and coping mechanisms of the quarter-life crisis. Data was collected manually, via Publish or Perish and through the Rayyan tool. The researchers reviewed potentially relevant publications, which required full-text reading and data extraction for evaluation.

2.4 Data Items

Data for the subject themes in this systematic literature review were gathered from chosen primary research studies. Papers examining characteristics associated to midlife crisis, neuropsychology, and 'aql were identified using keywords, abstracts, and comments within the papers. This includes investigating the function of neuropsychology and 'aql, as well as the reasons and techniques for dealing with the midlife crisis.

3 Results

3.1 Selection and Inclusion of Studies

A literature search resulted in a total of 4585 publications using the keywords "concept of 'aql", "neuropsychology" and "quarter life crisis": 324 (294 Semantic and 30 Elsevier), 3150 (1000 Semantic and 2150 Elsevier) and 1111 (1000 Semantic and 111 Elsevier). After removing duplicates and filtering out titles and abstracts, 98 studies were selected for full-text evaluation. In the end, 56 studies were included in a systematic literature review. (see Figure 1).

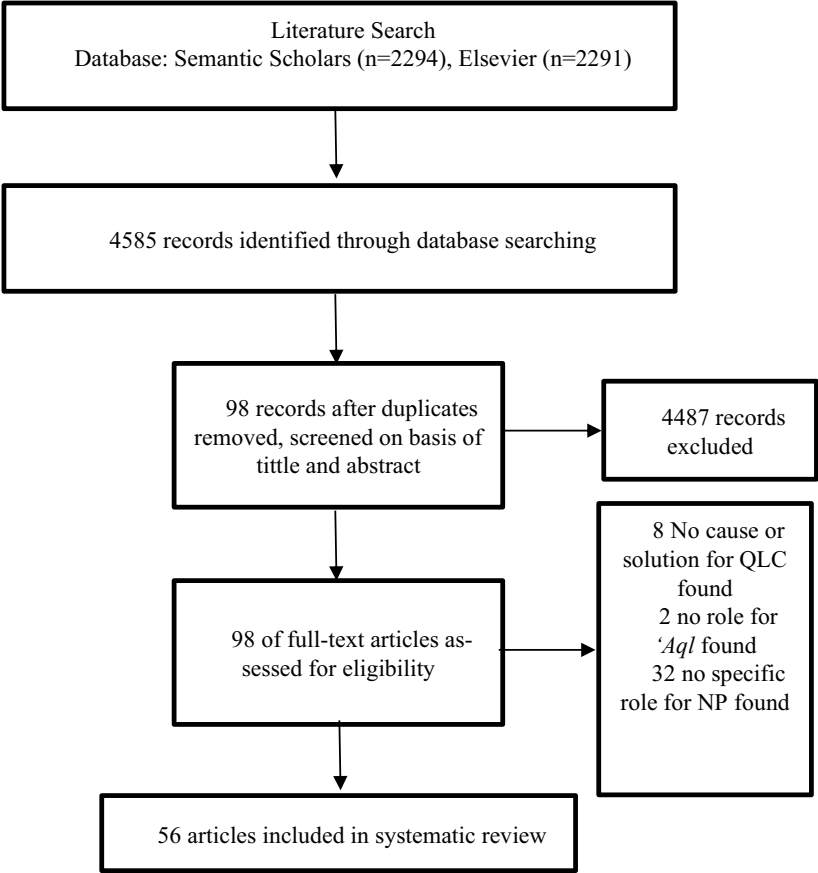


Fig. 1. Article screening process flowchart

3.2 Demographic Overview of Selected Articles

This section provides a comprehensive overview of the demographic data from the 56 articles selected for this review. The analysis reveals significant insights into the roles of 'aql and neuropsychology in relation to the quarter-life crisis. Specifically, the studies highlight how both 'aql and neuropsychology contribute to understanding the causes of the quarter-life crisis and their interconnections through their respective functions. Table 1 presents detailed information on the authors, publication years, titles, countries of origin, and the functions of 'aql as identified in the reviewed studies. Table 2 provides similar details for neuropsychology, including authors, publication years, titles, countries of origin, and the functions associated with neuropsychology. Table 3 summarizes the causes of the quarter-life crisis and coping strategies as discussed in the articles, including the authors, publication years, titles, and countries of origin. This structured presentation ensures a clear and systematic understanding of the demographic characteristics and thematic contributions of the selected studies.

3.3 Result of Concept of 'Aql, Neuropsychology and Quarter-life Crisis: Analysis of functions, cause and coping

Below is a comprehensive analysis of the functions, causes and coping strategies identified in the research. This includes details such as year of publication, title, country of origin, as well as the role of 'aql and neuropsychology. The analysis also includes the causes of quarter-life crisis and strategies to overcome them. This effort aims to illustrate the mapping of 'aql and neuropsychology in understanding the phenomenon of quarter-life crisis.

3.4 Results of Interconnectivity between 'Aql and Neuropsychology

In conducting a systematic literature review, a total of 56 papers were meticulously selected based on specific inclusion criteria established by the researchers. These criteria are designed to ensure a comprehensive and relevant collection of studies. The selected papers are published between 2019 and 2024, ensuring that the review includes the most current research available within this timeframe. Additionally, the papers are indexed by both Scopus and SINTA (Science and Technology Index), which are international and national reputable databases known for their rigorous indexing standards. This indexing provides assurance of the quality and credibility of the included research.

This research is an interdisciplinary study that focuses on the existence of an integral relationship between 'aql and neuropsychology. Based on 56 papers researched using systematic review, it was found that there were 17 papers that discussed the function of 'aql and 9 papers that discussed the function of neuropsychology. Based on 17 papers that talk about the function of 'aql, researchers found that 'aql is not only known as a differentiator between animals and humans but also as a human spirit (Mudin & Desnafitri, 2020), discovering and increasing knowledge (Abdelali & Tarshany, 2020; Ali Rama, 2019; Bohang & Sohaimi, 2023; Fitriah & Apriliani, 2021; Jailani et al., 2023; Meliani et al., 2023; Napitupulu, 2019; Shaari & Matore, 2019), a tool for deep thinking

(Akbar et al., 2024; Rahmawati & Khudori Soleh, 2024; Suyadi, 2019), self-control devices (al Wasim, 2019; Suyadi & Jailani, 2022), the differentiator between good and bad (Mazhar & Pakeeza, 2020), stability and well-being of life (Ali Rama, 2019; Bohang & Sohaimi, 2023; Rahmadi, 2022). ‘*aql*’ is a force used to express all forms of emotions, knowledge, personality and speech (Jailani et al., 2023). Meanwhile, 9 papers discussing the role of neuropsychology, researchers found that neuropsychology functions as a test for behavioral control mechanisms in the world of education or in daily-life (Díaz-Santos et al., 2023; Howieson, 2019; Nobre & Van Ede, 2020; Pluck et al., 2019; Teng & Chen, 2019), as well as controlling mental, mind and emotional health (Fisher et al., 2021; Nobre & Van Ede, 2020; Teng & Chen, 2019; Woods, 2021) for a better individual life. Thus, both ‘*aql*’ and neuropsychology have similar roles in creating a better individual's life.

In the last five years, research on ‘*aql*’ and neuropsychology has remained a relevant topic in the context of the contemporary era. However, the distribution of research on ‘*aql*’ and neuropsychology has not been evenly distributed. Research on ‘*aql*’ tends to be found in Muslim-majority countries, such as Indonesia, Malaysia, and Pakistan. Meanwhile, research on neuropsychology is more developed in developed countries, such as China, the United States, the United Kingdom, and Australia.

Table 1. the functions of ‘*aql*’

Author	Year	Origin of Country	Title	Roles of ‘ <i>Aql</i> ’
Moh. Isom Mudin & Andin Desnafitri	2019	Indonesia	Al-Attas on Intellect and It's Relevance to The Islamization of Knowledge; Sufism Philosophical Approach	Human spirit, theoretical and practical intelligence, place of inspiration and emotion
Ali Rama dan Burhanuddin Yusuf	2019	Indonesia	Construction of Islamic Human Development Index	Intellect is the distinguishing characteristic of a human being and needs to be enriched continually to improve the knowledge and technological base to promote development and human well-being
Dedi sahputra Napitulu	2019	Indonesia	Elemen-Elemen Psikologi dalam Alquran Studi Tentang Nafs, ‘ <i>Aql</i> ’, Qalb, Ruh, dan Fitrah	‘ <i>Aql</i> ’ is the power to gain knowledge because the mind has the power to abstract objects captured by the five senses.
Syuzianti Shaari and Mohd Effendi Ewan Mohd Matore	2019	Malaysia	Emphasizing the Concept of Spiritual Intelligence from Islamic and Western Perspectives on Multiple Intelligence	Discerning intellectual, experimental intellectual, speculative intellectual
Suyadi	2019	Indonesia	Hybridization of Islamic Education and Neuroscience: Transdisciplinary Studies of ‘ <i>Aql</i> ’ in the Quran and the Brain in Neuroscience	Thinking power

Arif al-Wasim	2019	Indonesia	Maqashid Syari'ah Menjawab Tantangan Post-Truth Era: Urgensi Hizf Al-'Aql sebagai Penyaring Informasi	Reason as a director, guide and controller for rationality ('Aqlaniyah)
Shumaila Mazhar & Shahzadi Pakeeza	2020	Pakistan	Insights into the Deepest Re-cesses of Human Mind: A Comparative Analysis of Ghazalian Aq'l and Freudian Ego	As a tool in assessing good and bad
Muhammad Faiz Rofldi dan Suyadi	2020	Indonesia	TAFSIR AYAT - AYAT NEUROSAINS (Aql Dalam Al-Quran dan Relevansinya terhadap Pengembangan Berpikir Kritis dalam Pendidikan Islam)	A theological normative foundation in the development of critical, creative and innovative thinking in Islamic education.
Bey Zekkoub Abdelali and Yasser Mohamed Tarshany	2020	Malaysia	The Concept of Intellect in the Noble Quran and the Ways of Preserve It: A Quranic Study	Aql as a human power can discover knowledge and use it, as a basis for understanding, knowledge and measurement.
Lalilatul Fitriah dan Wella Ayu Apriliani	2021	Indonesia	Kepribadian menurut Tokoh Tasawuf Abu Hamid Muhammad	Aql as a function of cognition to find the nature of the human being.
Suyadi dan Mohammad Jailani	2021	Indonesia	The Concept of 'Aql and Brain in The Quran and Neuroscience: A Concept Analysis of Nāsiyah in Sal-man's Tafsir	Aql to control attitude, truth-lie
Muhammad Alif Rahmadi	2022	Indonesia	Theory of Mind on Ghazali and Ibn Qayyim Al Jauzi Perspective: Analysis Model on Islamic Psychology	Determinants of quality of life
Siti Aisyah Muirah Bohang & Norhania Sohaimi	2023	Malaysia	An Overview on the Alignment of Radiation Protection in Computed Tomography with Maqasid al-Shari'ah in the Context of al-Dharuriyat	Intellect allows human beings to think, learn, reason, as well as remember to conduct daily activities and to have better life.
Mohammad Jailani, et.al	2023	Indonesia	Critical Analysis of 'Aql and Brain in the Paradigm of the Qur'an and Neuroscience and Its Contribution to the Development of Islamic Education	As the ability to apply in various mental processes, such as memory in memory, emotional feelings, intelligence, communication, and behavior or personality
Fitri Meliani, Nurwadjah Ahmad dan Andewi Suhartini	2023	Indonesia	Optimizing Human Potentials in Islamic Education: Senses, Aql, and Qalb	Aql as problem-solving capacity, the power to acquire knowledge
Abdul Azim Akbar, et.al	2024	Malaysia	Critical Factors in Developing Asnaf Faqir's Career Path According to Al-Ghazali	Al-'Aql (Mind) cognitive processes – including analytical thinking, problem-solving, decision-making, goal setting, and self-reflection – all play vital roles in the career decision-making process
Rizkia Amalia Rahmawati dan Achmad Khudori Soleh	2024	Indonesia	Konsep Jiwa, Kesehatan Mental dan Psikoterapi Ibn Zakaria Al-Razi	Thinking

Table 2. The functions of Neuropsychology

Author		Tahun	Negara	Judul	Peran NP
Graham et.al	Pluck,	2019	USA	Response Suppression, Strategy Application, and Working Memory in the Prediction of Academic Performance and Classroom Misbehavior: A Neuropsychological Approach	Neuropsychological tests of such behavioral control mechanisms may predict real-world performance of healthy people, such as success or misbehavior in educational contexts.
T.W.Teng dan J.Y. Chen		2019	China	The Performance Space Measurement of Regional Innovation System based on Neuropsychology	Neuropsychology neither interprets the human brain's own physiological activity as simple as neurophysiology, nor analyzes the behavior or mental activity as simple as psychology
Anna Nobre, et.al	Christina	2020	UK	Under the Mind's Hood:What We Have Learned by Watching the Brain at Work	The foundations for our understanding of how mental functions are organized in the human brain come from neuropsychological studies based on observations of behavioral impairments and dissociations following naturally occurring brain lesions
Steven Woods	Paul	2021	USA	Introduction to the Special Issue on the Neuropsychology of Daily Life	Complex intersections linking brain, cognition, and daily life. Our ambition is to understand these complexities in ways that ultimately benefit the health, independence, and well-being of person with eurocognitive disorders and their care providers. To do so will require our best available minds, models, and methods.
Yulia et.al	Solovieva,	2021	Mexico	Neuropsychological Assessment of Difficulties in Reading Spanish: A Cultural-Historical Approach	The neuropsychological factors responsible: Programming, regulation, and control. The objective of neuropsychology is to understand these obstacles better in order to propose and organize the method for overcoming such obstacles.
Caroline A. Fisher, et.al		2021	Australia	Neuropsychology and Family Violence: A National Survey of Training and Knowledge Levels in Clinical Neuropsychologists	Neuropsychologists need to be equipped and adequately trained to support people experiencing family violence by providing a supportive response to disclosures, understanding risk assessment and safety planning, and being aware of available health or community services to refer clients to
M.K.Colvin, et.al		2022	USA	Neuropsychology Consultation to Identify Learning Disorders in Children and Adolescents: A Proposal Based on Lessons Learned during the COVID-19 pandemic	Further neuropsychological evaluation is recommended when: significant emotional or social concerns have emerged and are primarily related to school, or there are more significant concerns regarding academic functioning, especially a failure to make expected progress

Mirella Diaz Santos, et.al	2023	USA	Re-Engaging Individuals & Societies for Structural Evolution: A Brain Health Equity Neuropsychology Research Framework	Interpretation of neuropsychological tools contributes to systemic disparities, and there is a need for a clear conceptual framework for disentangling the direct and indirect impact of social determinants of health (SDH) on brain behavior relationships and neuropsychological performance.
Diane Howieson	2023	Italia	Current Limitations of Neuropsychological Tests and Assessment Procedures	Neuropsychological tests are used for a wide variety of purposes: assessing basic cognitive abilities or disabilities; determining cognitive patterns associated with brain disorders or injury; exploring brain-behavior relationships; and, in some cases, addressing psycho-legal issues

3.5 Results of Quarter-life Crisis: Causes and How to Overcome It So Far

Based on 56 papers, researchers found 31 studies that discussed the causes and ways to overcome the quarter-life crisis over the past five years. The causes of this crisis are motivated by various factors, namely the economy, career and employment (Alfaruqy & Indrawati, 2023; Balqis et al., 2023; Henderson, 2019; Itsnaini & Riyono, 2024; Jihan Fahira et al., 2023; Nabilah Fettiani et al., 2024; Natalia et al., 2023; Riza et al., 2023; Setiawan & Pramadi, 2023; Suyono et al., 2021; Wardhani & Widati, 2023; Yolanda & Primanita, 2023). In addition, factors in the self and mind also cause emotional crises such as confusion, worry, feeling alone, hopeless, and unconfident (Cirklová, 2020; Fikra, 2022; Lestari et al., 2022; Muhajir & Tulic, 2022; Natalia et al., 2023; Naufal Robbiqis Dwi Asta, 2023; Rachmania & Zakiyyatul Fuadah, 2023; Rahadi et al., 2022; Wijaya & Saprowi, 2022). In the 31 studies, there are also ways to overcome the crisis of a quarter of a century both internally and externally, including empowering spiritual intelligence (Fikra, 2022; Huda, 2023; Naufal Robbiqis Dwi Asta, 2023; Sakai et al., 2023), psychotherapy or self-therapy and counseling (Nabilah Fettiani et al., 2024; Rachmania & Zakiyyatul Fuadah, 2023; Sahrah et al., 2023; Suyono et al., 2021) and social support from peers and/or family (Henderson, 2019; Melalondo & Sarajar, 2024; Wijaya & Saprowi, 2022).

Table 3. The causes of the quarter-life crisis and coping strategies

Author	Year	Origin of Count	Title	Causes of QLC	How to Overcome QLC
Morag Henderson	2019	UK	The Quarter Life Crisis? Precarious Labour Market Status and Mental Health Among 25 year olds in England	The economic recession caused a lot of unemployment and irregular work cons, making millennials experience mental stress.	Support for vulnerable groups is needed, and investment in adolescents' mental health for a stable future.
Mgr Jitka Cirklova	2021	Republik Ceko	Coping with the QLC the Buddhist way in the Czech Republic.	Lifestyle demands, isolation, employment, long-term living with parents.	Joining like-minded groups, meditation, self-control with spiritual teachings and values in Buddhism (interconnectedness, moderation and empathy)
Tsana A Suyono, Asteria, Efi.	2021	Indonesia	Hubungan Quarter-Life Crisis dan Subjective Well-Being pada Individu Dewasa Muda	QLC is common among individuals who have just graduated from college, due to the demands of academics, the job they want to pursue.	Provide education and counseling guidance
Ahmad Muhajir	2022	Indonesia	Al Quran Solution in the QLC Phase to Anxiety	Sadness, alienation, and fear of failure.	Reducing the potential negative consequences that can occur.

Dzikiria Alfiah Primala Wijaya, Fadhiyah Sofiyanto Noor	2022	Indonesia	Analisis Dimensi Dukungan sosial dan Krisis Usia Seperempat Abad pada Emerging Adulthood Dimensional Analysis, Social Support dan QLC in Emerging Adulthood.	Confusion and fear in making major decisions	Social support from family and closest friends.
Luluk Masluchah, Wardatul Mufidah, Uti Lestari	2022	Indonesia	Konsep Diri dalam Menghadapi QLC	Indecision, feeling hopeless, negative self-assessment, being stuck in a difficult situation.	Recognizing self, be able to control their emotions, able to accept the conditions currently experienced, and able to control themselves well.
Hidayatul Fikri	2022	Indonesia	Peran Kecerdasan Spiritual Pribadi Muslim dalam Menghadapi Quarter Life Crisis	Emotional crisis	Spiritual intelligence
Panji Firman Rahadi, et.al	2022	Indonesia	Perancangan Buku Interaktif sebagai Media Manajemen Stres pada Fase QLC	A crisis of confidence in one's own ability to live life	There is a need for socialization activities from various parties to the community and also knowledge about QLC as one of the stress management efforts.
Ignatia Ria Natalia, Missilana Riasnugrahani, Robert Oloan Rajagukguk	2023	Indonesia	Efektivitas Acceptance dan Commitment Therapy dalam Memoderasi QLC pada Lulusan Baru Salah Satu Perguruan Tinggi Swasta di Bandung.	Uncertainty about the future, the pressures of work, relationships, expectations of being a successful adult, and difficulties in regulating emotions.	It is important to pay attention to the uniqueness of each subject's mindset and make adjustments to methods or materials according to individual characteristics. Acceptance and Commitment Therapy (ACT) can reduce scores of indecisiveness, desperation, negative self-judgment, being stuck in a tough situation, anxiety, depression, and concerns about interpersonal relationships.
Diana Rachmania, Dina Zakiiyatul	2023	Indonesia	Emotional Self Awareness and QLC in Final Year of Undergraduate Nursing Students	Emotional crisis with fear and worry about the future including career, relationships, and social life.	Control emotions well and have good self-awareness.
Muhammad Zulfa Alfauqy, Endang Sri Indrawati	2023	Indonesia	Experience Rising from QLC a Phenomenology Study	High pressure from their parents, failure to achieve success in work is also a factor of QLC, the last is the factor of failed relationships with lovers.	Parental, social and professional support are important factors in the recovery process from QLC.
Naufal Robbiquis Dwi Asta	2023	Indonesia	Filsafat Taoisme dan QLC: Menggali Relevansi Pemikiran Filsafat Taoisme sebagai Upaya Mencegah Permasalahan QLC	Indecisiveness in decision-making, hopelessness, negative self-appraisal, being stuck in a difficult situation, feelings of anxiety, distress and worry about the interpersonal relationships that are being and will be built.	Taoist philosophy in an effort to prevent QLC problems is at least an effort to prevent by recognizing and evaluating oneself to become a better human being. Rise up and recognize yourself
Jihan Fahira, Muh. Daud, Dian Novita Siswanti	2023	Indonesia	Hubungan antara Efikasi Diri dengan QLC pada Alumni dari 3 Perguruan Tinggi di Kota Makassar	Feeling indecisive in making decisions related to the future, worrying about his future because of the lack of available jobs, feeling confused about finding productive activities, feeling anxious when thinking about a future career, feeling confused when thinking about a future career, feeling worried when thinking about a future life partner.	Self-efficacy
Restha Karmita Lani, Wahyuni Kristinawati	2023	Indonesia	Hubungan antara Sense of Humor dengan Resiliensi pada Individu yang mengalami QLC.	The phase of instability and constant change faced by young adults leads to feelings of anxiety, panic and helplessness. Sense of humor is thought to influence individual resilience in dealing with QLC.	Interventions to increase sense of humor as a way to increase resilience in individuals experiencing QLC.
Anggia Afri Yolanda, Rida Yanna Pilmanita	2023	Indonesia	Hubungan Self Awareness dan QLC pada Mahasiswa Akhir Psikologi UNP	high pressure from their parents, failure to achieve success in work is also a factor of QLC, the last is the factor of failed relationships with lovers.	Increase motivation in making choices and getting through college well.
Miftahul Huda	2023	Indonesia	Kontrol diri dan Tawakal terhadap QLC pada Santri di Pesantren	The onset of despair is characterized by helplessness, ignorance, doubt, fear of choices - the various choices in life.	Strengthening the relationship with spirituality or beliefs, developing an attitude of acceptance and surrender to fate, and seeking support from a community or environment that supports the values of tawakal.
Audita Izza Balqis, et.al	2023	Indonesia	Quarter-life crisis: Personal growth initiative as a moderator of uncertainty intolerance in psychological distress	Uncertainty, confusion, or frustration about their career, pressure to get married or have children, or inability to achieve their desired salary.	Need to build skills in self-growth initiatives to adapt effectively to uncertain conditions.
Melitya Christy Melakondo, Dewita Karema	2023	Indonesia	Loneliness dan QLC pada Mahasiswa Perantau Tingkat Akhir yang Berasal dari Luar Pulau Jawa	The demands faced by students, especially when entering the final year	Multiplying relationships with others, taking care and effort in improving the quality of relationships that are established both in the family environment, relationships, friendships.

Yuan Yovita Setiawan, Andrian Pramadi	2023	Indonesia	Mindfulness Based Cognitive Therapy untuk Menurunkan Kecemasan dalam Masa QL	Dealing with events such as relationship breakups, being trapped in an unfulfilling career and relationship problems with parents.	The community is expected to adjust to the characteristics in the Mindfulness - based Cognitive Therapy development module.
Alimatus Sahrah, et.al.	2023	Indonesia	Improvement of Spiritual Well-Being in Students Experiencing Quarter Life Crisis through Solution-Focus Brief Therapy	Determining the future, making decisions and managing their lives independently.	Students experiencing QLC can find out the extent of the problem that can be intervened with solution-focused brief therapy.
Nasytha Tristie Wardhani, Sri Widati	2023	Indonesia	Perbandingan Efektivitas Podcast dan Musik dalam Pengetahuan QLC pada Mahasiswa UNAIR Surabaya	Get a lot of assignment or work problems from lectures and social problems in the student environment	Improving knowledge related to quarter-life crisis through podcast content
Ekli Sakal, et.al	2023	Indonesia	Quarter Life Crisis dari Sudut Pandang Teologi Bibliska Matius 6:25-34	Anxiety about an uncertain future and emotional tensions around goals, self-worth and identity for early adults.	Spiritual
Jean Michelle Madeline Sallata, Arthur Huwae.	2023	Indonesia	Resiliensi dan QLC pada Mahasiswa Tingkat Akhir	Dreams, hopes, challenges in academia, religion and spirituality are also aspects that can shape quarter life crisis.	Resiliensi berpengaruh 12% kepada quarter-life crisis
Nola Marsela Gendolang, Krismi Diah Ambarwati	2023	Indonesia	Self Efficacy and Quarter Life Crisis pada Mahasiswa Rantau dari Luar Pulau Jawa	Demands from parents on what steps to take in the future, stress due to academic problems.	Must have high self-efficacy, because when you have low self-efficacy, you will be prone to having a high quarter life crisis.
Wina Lova Riza, et.al	2023	Indonesia	Self Esteem and Attachment as Predictors of Resilience in Early Adults Experiencing Quarter Life Crisis	Worried about the future	External support, inner strength, fortitude and others.
Ferani Amira, et.al	2023	Indonesia	The Dynamics of Quarter Life Crisis and Coping Strategies for Final Year Undergraduate Students	The changes that arise during the QLC period will cause responses such as stress, anxiety, and even depression.	Can obtain professional assistance
Wiwik Suatin, et.al	2024	Indonesia	Konsep Islam sebagai Problem Solving dalam Menghadapi QLC di Era Millenial	Lack of self-confidence, dissatisfaction with their lives, feeling that they have no skills, unclear future orientation, worrying about the future, dissatisfied with their own achievements.	The need for awareness and vigilance in ourselves
Yalimurni Ndraha, et.al	2024	Indonesia	Makna QLC: Studi Fenomologi Pemuda Gereja Kristus Gunung Putri	Incongruence and lack of fluidity of desire will potentially lead to a developmental crisis in the emerging adulthood phase.	Understand yourself well, know about your abilities and needs.
Nabilah Fettiani, et.al	2024	Indonesia	The Influence of Solution-Focused Therapy on Quarter-Life Crisis in Early Adult Women	Pressure of personal and social obligations, difficulties such as starting a career, establishing lasting relationships, and adjusting to new social roles.	Future-focused and solution-focused therapy is one type of psychotherapy.
Nur Rohmah Itsnaini, Bagus Riyono	2024	Indonesia	The role of Personality Orientation in Predicting Quarter-life Crisis in Emerging Adulthood: an Anchor Personality Approach	Over-dependence on others; career, relationships, and finances are also one of the causes of this	Reducing excessive dependence on others, balancing material orientation with other aspects of life, ;

The focus of the review is to analyze studies that explore the roles of neuropsychology and ‘aql (a concept referring to intellect or rationality) in understanding human emotion and development. This includes examining how these fields contribute to the comprehension of emotional processes and developmental trajectories. Furthermore, the review aims to address the causes and coping mechanisms associated with the quarter-life crisis a critical phase of transition and self-exploration typically occurring in young adulthood.

By adhering to these criteria, the review ensures a robust and focused exploration of the intersection between neuropsychology, 'aql, and the quarter-life crisis. This methodological approach not only highlights the latest developments in the field but also provides a nuanced understanding of how these factors influence emotional well-being and personal growth during a pivotal life stage.

4 Discussion

The phenomenon of the quarter-life crisis is influenced by various factors closely related to an individual's personal life. Its causes are linked to thoughts, family, friends, work, and career. Negative thinking, which leads to unstable emotions, impacts the individual's condition, behavior, and emotions, causing them to perceive themselves as facing significant problems (Lestari et al., 2022; Muhajir & Tulic, 2022; Rachmania & Zakiyyatul Fuadah, 2023). Individuals become aware of being in a problem. These issues are often self-generated, exacerbated by external factors such as workplace pressure, lack of family support, uncertainties regarding career and future, and the transition from adolescence to adulthood (Alfaruqy & Indrawati, 2023; Lestari et al., 2022; Muhajir & Tulic, 2022; Naufal Robbiqis Dwi Asta, 2023).

To address the quarter-life crisis, a range of approaches is employed, including self-therapy, psychotherapy (Nabilah Fettiani et al., 2024; Sahrah et al., 2023), spiritual methods based on the Qur'an, Buddhist values, and Biblical theology, particularly from the Gospel of Matthew (Cirklová, 2020; Muhajir & Tulic, 2022; Sakai et al., 2023). Seeking the support of peers and family is also one way to overcome the crisis (Alfaruqy & Indrawati, 2023; Melalondo & Sarajar, 2024; Wijaya & Saprowi, 2022). These proposed solutions for addressing the quarter-life crisis are generally effective over a certain period but may not provide long-term relief. It would be beneficial if these solutions could be integrated into a cohesive and sustainable approach.

The potential of 'aql, a concept long explored by former Muslim scholars such as al-Ghazali and Ibn Zakaria al-Razi, encompasses cognitive processes including analytical thinking, problem-solving, decision-making, goal setting, and self-reflection that are crucial in the career decision-making process (Akbar et al., 2024; Rahmawati & Khudori Soleh, 2024). The concept of 'aql is also integral to the human spirit, comprising a component of the broader concept of human nature, which includes ruh (soul), 'aql (intellect), nafs (self), and qalb (heart). This understanding positions 'aql as a form of spiritual power (Mudin & Desnafitri, 2020). The capacity of 'aql as an internal strength can serve as a philosophical foundation for addressing the quarter-life crisis.

Neuropsychology emphasizes the brain's connection to human psychological conditions. Neuropsychology explores the intersection between brain function, cognition, and daily life. The goal is to comprehend these complexities in ways that enhance the health, autonomy, and overall well-being of individuals (Colvin et al., 2022; Teng & Chen, 2019; Woods, 2021). Achieving this will necessitate the application of the most advanced expertise, models, and methodologies available. Through assessments that have been developed by neuropsychologists, it can be a practical solution to the problem of quarter-life crisis. The role of neuropsychology is to understand the obstacles

that arise as a result of quarter life-crisis to be better in order to propose and organize the method for overcoming such obstacles (Fisher et al., 2021; Pluck et al., 2019; Solovieva et al., n.d.).

Both 'aql and neuropsychology provide benefits for managing emotions and detecting emotions, self-control and behavioral control tools, therefore both play a role in improving the health of individuals who are experiencing a quarter-life crisis. Neuropsychology can contribute to overcoming the quarter-life crisis with a basic standard examination that is also supported by the function of 'aql as a philosophical foundation.

Conclusion

The quarter-life crisis represents a significant challenge in an individual's life, closely tied to personal experiences and existential concerns. This phenomenon is shaped by a range of factors related to personal circumstances, including thoughts, relationships, and career issues. The concept of 'aql, as an internal strength and philosophical foundation, offers valuable insights into managing this life stage by fostering cognitive processes such as analytical thinking and self-reflection. Concurrently, neuropsychology provides a framework for understanding the interplay between brain function, cognition, and daily life, aiming to improve individuals' health, autonomy, and overall well-being. By integrating the philosophical insights of 'aql with the practical approaches of neuropsychology, it is possible to develop a comprehensive strategy for navigating and mitigating the impacts of the quarter-life crisis.

Acknowledgments. The authors would like to thank their appreciation to Lembaga Pengelola Dana Pendidikan (LPDP) for aiding us in the publication process and for publishing this paper

Disclosure of Interests. The authors have no competing interests to declare that are relevant to the content of this article.

References

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

