# Meaning and Health: A Review on Ikigai

<sup>1</sup>Ping Chen, <sup>2</sup>Siyuan Liu, <sup>3</sup>Xuehong Tao, <sup>4</sup>Takayuki Ito

<sup>1</sup>School of Computer Science and Engineering, Nanyang Technological University, Singapore
 <sup>2</sup>Department of Computer Science, Swansea University, Swansea, UK
 <sup>3</sup>Department of Computer Science and Software Engineering, Swinburne University, Australia
 <sup>4</sup>Department of Social Informatics, Kyoto University, Japan

pchen005@e.ntu.edu.sg, siyuan.liu@swansea.ac.uk, xtao@swin.edu.au, ito.takayuki@nitech.ac.jp

## Abstract

*Ikigai* is a Japanese term that is commonly referred to as 'purpose in life' and 'meaning in life'. Different researchers may have different ways of defining the term. Measures and scales in English were validated to aid research in *ikigai* outside Japan. There are many health benefits related to *ikigai*. It is associated with longevity, lower all-cause, external-cause, and cardiovascular mortality. It helps improve people's wellbeing and quality of life. It helps people cope with difficult situations and negative emotions. It makes people more receptive to health messages. *Ikigai* can be enhanced through interventions.

Keyword: Ikigai, purpose in life, meaning in life, wellbeing.

# **I. Introduction**

*Ikigai* is a Japanese term that is considered to be an important factor in improving one's health and living a more satisfying life [37]. Japan's most authoritative dictionary describes it as 'joy and a sense of well-being from being alive' and 'realising the value of being alive' [47]. Dr. Kamiya, one of the earliest *ikigai* theorists, introduced the term to the public due to its uniqueness, which makes it is difficult to fully explain in other languages [16].

Dr. Kamiya treated leprosy patients in the late 1950s when the disease was considered fatal. She discovered that while some people can maintain their optimism in the face of adversity, others cannot. She discovered that *ikigai* distinguishes between patients who have hope and those who don't. Patients with *ikigai* were able to maintain hope and meaning in their lives. When confronted with a challenge, striving to find a deeper meaning rather than avoiding it is a form of *ikigai* [16].

There are numerous physical and mental advantages of having a stronger sense of *ikigai*. It is associated with longevity, wellbeing, and overall quality of life. This is especially beneficial to today's context, with the COVID-19 pandemic and the world's population aging. Experts suggested that pandemic-related feelings are akin grief [2], with people feeling empty and sad about the loss of their usual lifestyle, which can even lead to a loss of meaning in life. On the other hand, ageing is associated with a variety of distinct social problems, including an increased need for elderly care and support, as well as the associated financial and emotional burden [18]. Therefore, developing a sense of *ikigai* may help improve the situation.

This paper aims to provide a systematic review of on the concept of *ikigai*. It is organized as follows. Section II describes what is *ikigai*. Section III presents some existing English scales measuring one's level of *ikigai*. Section IV presents benefits of having sense of *ikigai*. Section V presents existing interventions about enhancing *ikigai*. Section VI presents challenges about research in the field. Section VII provides the final conclusion.

# II. What is *Ikigai*

The term *ikigai* is made up of two parts, '*iki*' which means 'life' and '*gai*' which means 'to be worthwhile' [10].

There is a lot of debate over which type of *ikigai* is best for each individual [34]. While some claim that *ikigai* can be found in the pursuit of one's personal dream, referring to it as a form of self-realisation, others confuse *ikigai* with a sense of oneness, arguing that true purpose in life can only be found through dedication to a group, such as family.

There are many different ways of translating and defining the term *ikigai* in English. Many refer *ikigai* as 'purpose in life', 'the sense that life is worth living' or 'a reason for living' [22, 29, 35, 37, 41]. Some refer it to the processes of 'realising' or 'gaining joy from' the purpose [54]. Researchers believe that *ikigai* should be viewed as a composite construct that encompasses life's meaning, motivations, and values [28, 55]. *Ikigai* has also been said to be similar to eudaimonic wellbeing i.e., the state of functioning and living well [25], rather than hedonic wellbeing.

According to Kamiya [17], seven needs are associated with *ikigai*: the need for a fulfilling existence, the need for change and growth, the need for future perspectives, the need for receiving responses, the need for freedom, the need for self-actualisation and the need for significance and value. People may have additional needs other than these seven, and the strength and combination of needs vary from person to person. At the same time, some needs may be merged with others. A single *ikigai* item can satisfy a variety of needs. According to her, beyond merely purpose and meaning in life, *ikigai* is linked to one's social value and role.

As a philosophical notion, *ikigai* specifies many areas that foster a sense of autonomy and selfawareness, both of which are considered crucial to determining one's life's meaning. *Ikigai*, according to Mathews [34], is the intersection of what you enjoy, what you are good at, what you can be paid for, and what the world needs. Kumano's study [27] shows that life-affirmation, goals/dreams, meaning of life, meaning of existence, sense of fulfillment, and commitment are important aspects of *ikigai*. Among these aspects, commitment makes *ikigai* distinctive to subjective well-being and psychological well-being [27]. While *ikigai* and subjective well-being commonly include personal satisfaction with both current and past life, *ikigai* also includes the good perception of one's future and social interaction [12].

Shirai et al. [49] refers *ikigai* 'as a comprehensive concept related to emotions including happiness and life satisfaction, as well as cognitive evaluation of one's meaning in life, self-esteem, and self-efficacy'.

#### **III. Scales ore Measurements**

#### A. Ikigai-9

The *ikigai*-9 [12] is a psychometric tool that consists of nine items measuring one's *ikigai* across three dimensions. The dimensions include 'optimistic and positive emotions toward life', 'active and positive attitudes towards one's future', and 'acknowledgement of the meaning of one's existence'. It is first proposed and validated in Japan in 2012. Fido et al. [6] translated the scale to English and validated it in the United Kingdom (UK). One needs to rate whether each of the nine statements applies to himself/herself on a five-point scale (1 = Does not apply to me, 5 =Applies to me a lot).

#### B. Four-Factor Ikigai Scale

Takeda [52] developed and validated a four-factor scale to measure *ikigai*. Self-esteem, purpose in life, personal energy, and life satisfaction are considered as the most appropriate factors to explain the concept of *ikigai*. Self-esteem is the deepest and unconscious level of *ikigai*; purpose in life is the most crucial and fundamental element of *ikigai*; personal energy is

the 'observable and tangible level of *ikigai*' that is based on the two aforementioned factors; life satisfaction is the result of the first three factors. Takeda finalised the five-point, 28-item *ikigai* Scale which has the four aforementioned factors.

# IV. Benefits of Having a sense of Ikigai

Despite the fact that *ikigai* is a term that originated in Japan, it may be applicable to non-Japanese cultures [33], and there are many benefits related to it.

#### A. Physical Health

Having a purpose in life or an *ikigai* has been considered as one of the keys to longevity [1, 3, 45].

Studies have shown that a strong sense of *ikigai* can reduce all-cause mortality [11, 39, 51, 53]. People who have a stronger sense of *ikigai* are less likely to suffer from stroke or die from a cardiovascular disease [21, 51, 57]. In addition, they have a significantly lower risk for external-cause mortality [53].

Having *ikigai* can be a modifiable health practice that prevents middle-aged and older persons from a deterioration in higher-level functional performance [40]. Mori et al. [37] found that people who have a stronger sense of ikigai have greater functional mobility and instrumental activities of daily living (IADL).

*Ikigai* may be associated with healthier habits. Study shows that the proportion of current smokers was lower for people with *ikigai* [53]. People with *ikigai* generally sleep more and exercise more frequently as compared to those without [53].

Stronger senses of meaning were linked to greater physical health, as well as behavioural characteristics that reduced the likelihood of bad health outcomes and increased the likelihood of positive health outcomes, according to the systematic review by Roepke et al. [42]. In the systematic review, some considered *ikigai* as one of the aspects of meaning in life while others don't. Those who had found meaning reaped a slew of benefits. For example, quicker recovery after knee surgery [50] and a lower risk of disability in old age [26].

According to a study by Zilioli et al. [58], those who have a stronger sense of purpose in life had lower levels of allostatic load, which is the physiological burden the body bears when reacting to external challenges like stress.

#### B. Mental Health

Study has shown that a strong sense of *ikigai* improves well-being or quality of life [5].

People who lack meaning or purpose in life may feel empty and anxious, which affects their subjective well-being [7, 17]. Studies also show that *ikigai* helps people better integrate difficult psychological situations from the past, present, and future with less conflict and uncertainty, and effectively cope with stress [13-16]. It was also found to be a protective factor in the treatment of stress, depression, anxiety, and other mental illnesses [9, 20]. People with a stronger feeling of *ikigai* are less likely to suffer from depression and receive more social support [37]. *Ikigai* has also been linked to a lower risk of psychological problems and a slower rate of age-related cognitive decline [11].

Maki [31] believes that *ikigai* interventions aid primary (intervene before adverse health effects occur), secondary (delay the development of the disease), and tertiary (slow or stop disease progression) prevention for dementia. Empirical evidence shows that having *ikigai* is a

significant factor in dementia prevention [31]. Since dementia diagnosis is frequently accompanied by negative emotions, which may contribute to the progression of dementia [30], continuing to modify *ikigai* may aid in overcoming the critical transitional stage by keeping one's sense of identity unchanged before and after onset [31]. As for tertiary prevention, support for *ikigai* is essential for rehabilitation in terms of tertiary prevention [32].

#### C. Decision Making

People with a sense of purpose in life may be more open to health messages [18].

Due to conflicting motivations, people may be reluctant to change when given health advice. On the one hand, motives for self-improvement drive people to take on helpful health advice [44]. On the other hand, motives for self-enhancement make people defensive and deny the self-relevance of such message, because admitting one's unhealthy behaviour may jeopardize their feeling of self-worth [4, 47].

Making healthy decisions may be less conflicting and thus easier for those who have a higher sense of purpose in life, according to [18].

# V. Ikigai Interventions

*Ikigai* can be enhanced via interventions. These interventions include career counseling, wellbeing training and clinical practice and can include self-help guides [10, 36] or more focused interventions like 'life crafting' which comprises reflecting on one's values, passions and goals, visualising one's best possible self, and goal attainment plans [43].

# **VI.** Challenges

Although there are numerous benefits that *ikigai* can provide to people, which may serve as a driving factor for further research in the field, it also faces many challenges.

It is difficult to review and summarize past research beyond Japanese people due to the plethora of terminology connected to *ikigai* in Western culture. As a result, there is currently no published empirical research investigating the presence of *ikigai* in Western populations [25].

Because of its complex, experiencing nature, *ikigai* is difficult to describe or operationalise, making it difficult to measure [34]. Some *ikigai* measures are constrained by limited responses, resulting in lower data variance [23]; some focus primarily on the leisure pursuit enjoyment, failing to capture the complete range of *ikigai* sources [24]; and some were only available in Japanese, with the English version validated years later [6], limiting research outside Japan.

Anecdotal evidence or cross-sectional data have dominated much of the available work on *ikigai* [25]. The dearth of empirical evidence around *ikigai* study has hindered the ability to draw causal conclusions.

### VII. Conclusion

In conclusion, *ikigai* is a complex concept. Although it may be difficult for researchers to agree on a precise definition and translation for *ikigai* due to the term's intricacy, it is something that people can relate to and have a rough notion about. It is similar to eudaimonic wellbeing and it is about one's purpose in life and things that make one's life worth living. It has many dimensions and sources of *ikigai* can vary from person to person. Research on *ikigai* has shown that it has positive associations with better physical and mental health, and it makes people to be more open to health advice. There are several ways of intervention. However, there exists many challenges.

# References

- [1] Aliya Alimujiang, Ashley Wiensch, Jonathan Boss, Nancy L Fleischer, Alison M Mondul, Karen McLean, Bhramar Mukherjee, and Celeste Leigh Pearce. 2019. Association between life purpose and mortality among US adults older than 50 years. JAMA network open 2, 5 (2019), e194270–e194270.
- [2] Scott Berinato. 2020. That discomfort you're feeling is grief. Harvard Business Review 23, 03 (2020), 2020.
- [3] Dan Buettner. 2012. The blue zones: 9 lessons for living longer from the people who've lived the longest. National Geographic Books.
- [4] Geoffrey L Cohen and David K Sherman. 2014. The psychology of change: Self-affirmation and social psychological intervention. Annual review of psychology 65 (2014), 333–371.
- [5] Shinichi Demura, Hidetsugu Kobayashi, and Tamotsu Kitabayashi. 2005. QOL models constructed for the community-dwelling elderly with ikigai (purpose in life) as a composition factor, and the effect of habitual exercise. Journal of physiological anthropology and applied human science 24, 5 (2005), 525–533.
- [6] Dean Fido, Yasuhiro Kotera, and Kenichi Asano. 2020. English translation and validation of the Ikigai-9 in a UK sample. International Journal of Mental Health and Addiction 18, 5 (2020), 1352–1359.
- [7] Viktor E Frankl. 1972. The feeling of meaninglessness: A challenge to psychotherapy. The American Journal of Psychoanalysis 32, 1 (1972), 85–89.
- [8] Laura Fratiglioni, Stephanie Paillard-Borg, and Bengt Winblad. 2004. An active and socially integrated lifestyle in late life might protect against dementia. The Lancet Neurology 3, 6 (2004), 343–353.

- [9] Kenneth E Freedland. 2019. The Behavioral Medicine Research Council: Its origins, mission, and methods. Health Psychology 38, 4 (2019), 277.
- [10] Héctor García and Francesc Miralles. 2017. Ikigai: The Japanese secret to a long and happy life. Penguin.
- [11] Samantha J Heintzelman, Jason Trent, and Laura A King. 2013. Encounters with objective coherence and the experience of meaning in life. Psychological science 24, 6 (2013), 991– 998.
- T Imai, H Osada, and Y Nishimura. 2009. The structure of IKIGAI concept for retirees over 60 years old, The difference between IKIGAI and Subjective Well-Being. Jpn J Geron 31, 3 (2009), 366–77.
- [13] Riichiro Ishida. 2008. Correlations between purpose in life (ikigai) and state anxiety in schizoid temperament with considerations of early life, youth, and adulthood experiences.
  Acta Medica et Biologica 56, 1 (2008), 27.
- [14] Riichiro Ishida. 2011. Enormous earthquake in Japan: Coping with stress using purpose-inlife/ikigai. Psychology 2, 8(2011), 773.
- [15] Riichiro Ishida and Masahiko Okada. 2006. Effects of a firm purpose in life on anxiety and sympathetic nervous activity caused by emotional stress: assessment by psychophysiological method. Stress and health: Journal of the International Society for the Investigation of Stress 22, 4 (2006), 275–281.
- [16] Riichiro Ishida, Masahiko Okada, et al. 2011. Factors influencing the development of "Purpose in Life" and its relationship to coping with mental stress. Psychology 2, 01 (2011), 29.
- [17] Mieko Kamiya. 1966. Ikigai ni tsuite (About ikigai). Tokyo, Japan: Misuzu-shobo (1966).
- [18] Yoona Kang, Victor J Strecher, Eric Kim, and Emily B Falk. 2019. Purpose in life and conflict-related neural responses during health decision-making. Health Psychology 38, 6 (2019), 545.

- [19] Iza Kavedžija. 2016. The age of decline? Anxieties about ageing in Japan. Ethnos 81, 2 (2016), 214–237.
- [20] Eric S Kim, Victor J Strecher, and Carol D Ryff. 2014. Purpose in life and use of preventive health care services. Proceedings of the National Academy of Sciences 111, 46 (2014), 16331–16336.
- [21] Megumi Koizumi, Hiroshi Ito, Yoshihiro Kaneko, and Yutaka Motohashi. 2008. Effect of having a sense of purpose in life on the risk of death from cardiovascular diseases. Journal of epidemiology (2008), 0808270028–0808270028.
- [22] Ineko Kondo and Fumi Takano. 1993. Shoeakukan puroeuresshibu waei chuiiten (2nd ed.)(Shogakukan progressive Japanese-English dictionary). Shogakkan.
- [23] T Kondo and J Kamada. 2003. Construction of 'the KI scale for the feeling that life is worth living among the aged'and the definition of this feeling. Jpn J Soc Welfare 43 (2003), 93–101.
- [24] Shintaro Kono, Gordon J Walker, Eiji Ito, and Yumiko Hagi. 2019. Theorizing leisure's roles in the pursuit of ikigai (life worthiness): a mixed-methods approach. Leisure Sciences 41, 4 (2019), 237–259.
- [25] Yasuhiro Kotera, Greta Kaluzeviciute, Garip Gulcan, Kirsten McEwan, and Katy Chamberlain. 2021. Health Benefits of Ikigai: A Review of Literature. (2021).
- [26] Neal Krause and R David Hayward. 2012. Religion, meaning in life, and change in physical functioning during late adulthood. Journal of Adult Development 19, 3 (2012), 158–169.
- [27] M Kumano. 2006. The structure of ikigai and similar concepts. Japanese Journal of Health Psychology 19, 1 (2006), 56–66.
- [28] M Kumano. 2012. Ikigai-keisei-no-shinrigaku [A psychology of ikigai development]. Tokyo, Japan: Kazamashobo (2012).

- [29] Tim Lomas. 2016. Towards a positive cross-cultural lexicography: Enriching our emotional landscape through 216 'untranslatable'words pertaining to well-being. The Journal of Positive Psychology 11, 5 (2016), 546–558.
- [30] Lina Ma. 2020. Depression, anxiety, and apathy in mild cognitive impairment: current perspectives. Frontiers in aging neuroscience 12 (2020), 9.
- [31] Yohko Maki. 2021. Ikigai interventions for primary, secondary, and tertiary prevention of dementia. Aging and Health Research (2021), 100026.
- [32] Yohko Maki, Takashi Sakurai, Jiro Okochi, Haruyasu Yamaguchi, and Kenji Toba. 2018.
  Rehabilitation to live better with dementia. Geriatrics & gerontology international 18, 11 (2018), 1529–1536.
- [33] Frank Martela and Michael F Steger. 2016. The three meanings of meaning in life:
  Distinguishing coherence, purpose, and significance. The Journal of Positive Psychology 11, 5 (2016), 531–545.
- [34] Gordon Mathews. 1996. The Stuff of Dreams, Fading: Ikigai and" The Japanese Self".Ethos 24, 4 (1996), 718–747.
- [35] Gordon Mathews. 1996. What makes life worth living?: How Japanese and Americans make sense of their worlds. Univ of California Press.
- [36] Ken Mogi. 2017. The Little Book of Ikigai: The secret Japanese way to live a happy and long life. Quercus Publishing.
- [37] Kentaro Mori, Yu Kaiho, Yasutake Tomata, Mamoru Narita, Fumiya Tanji, Kemmyo Sugiyama, Yumi Sugawara, and Ichiro Tsuji. 2017. Sense of life worth living (ikigai) and incident functional disability in elderly Japanese: The Tsurugaya Project. Journal of psychosomatic research 95 (2017), 62–67.
- [38] NORIYUKI Nakanishi. 1999. 'Ikigai'in older Japanese people. Age and ageing 28, 3 (1999), 323–324.

- [39] Noriyuki Nakanishi, Kozo Tatara, Toshio Tatatorige, Shigeki Murakami, and Fumiaki Shinsho. 1997. Effects of preventive health services on survival of the elderly living in a community in Osaka, Japan. Journal of Epidemiology & Community Health 51, 2 (1997), 199–204.
- [40] Rei Otsuka, Yukiko Nishita, Chikako Tange, Makiko Tomida, Yuki Kato, Mariko Nakamoto, Fujiko Ando, Hiroshi Shimokata, and Takao Suzuki. 2017. The effect of modifiable healthy practices on higher-level functional capacity decline among Japanese community dwellers. Preventive medicine reports 5 (2017), 205–209.
- [41] Yoosung Park. 2015. Sense of "Ikigai"(reason for living) and social support in the Asia-Pacific region. Behaviormetrika 42, 2 (2015), 191–208.
- [42] Ann Marie Roepke, Eranda Jayawickreme, and Olivia M Riffle. 2014. Meaning and health:A systematic review. Applied Research in Quality of Life 9, 4 (2014), 1055–1079.
- [43] Michaéla C Schippers and Niklas Ziegler. 2019. Life crafting as a way to find purpose and meaning in life. Frontiers in Psychology 10 (2019), 2778.
- [44] Constantine Sedikides and Erica GD Hepper. 2009. Self-improvement. Social and Personality Psychology Compass 3, 6 (2009), 899–917.
- [45] Nao SEKI. 2001. Relationships between Walking Hours, Sleeping Hours, Meaningfulness of Life (Ikigai) and Mortality in the Elderly Prospective Cohort Study. Nippon Eiseigaku Zasshi (Japanese Journal of Hygiene) 56, 2 (2001), 535–540.
- [46] Kazuki Seko and Michiyo Hirano. 2021. Predictors and Importance of Social Aspects in Ikigai among Older Women. International journal of environmental research and public health 18, 16 (2021), 8718.
- [47] David K Sherman and Geoffrey L Cohen. 2006. The psychology of self-defense: Self-affirmation theory. Advances in experimental social psychology 38 (2006), 183–242.
- [48] Izuru Shinmura. 1987. Kojien (Japanese Dictionary), third ed. Tokyo: Iwanami-Shoten (1987).

- [49] Kokoro Shirai, Hiroyasu Iso, Hideki Fukuda, Yasuhiro Toyoda, Toshio Takatorige, and Kozo Tatara. 2006. Factors associated with" Ikigai" among members of a public temporary employment agency for seniors (Silver Human Resources Centre) in Japan; gender differences. Health and quality of life outcomes 4, 1 (2006), 1–6.
- [50] Bruce W Smith and Alex J Zautra. 2004. The role of purpose in life in recovery from knee surgery. International journal of behavioral medicine 11, 4 (2004), 197–202.
- [51] Toshimasa Sone, Naoki Nakaya, Kaori Ohmori, Taichi Shimazu, Mizuka Higashiguchi, Masako Kakizaki, Nobutaka Kikuchi, Shinichi Kuriyama, and Ichiro Tsuji. 2008. Sense of life worth living (ikigai) and mortality in Japan: Ohsaki Study. Psychosomatic medicine 70, 6 (2008), 709–715.
- [52] Akenori Takeda. 2000. Meaning in life among Japanese elders: Development and validation of a four-factor Ikigai scale. The University of Tennessee.
- [53] Kozo Tanno, Kiyomi Sakata, Masaki Ohsawa, Toshiyuki Onoda, Kazuyoshi Itai, Yumi Yaegashi, Akiko Tamakoshi, JACC Study Group, et al. 2009. Associations of ikigai as a positive psychological factor with all-cause mortality and cause-specific mortality among middle-aged and elderly Japanese people: findings from the Japan Collaborative Cohort Study. Journal of psychosomatic research 67, 1 (2009), 67–75.
- [54] Toshir o Watanabe, Edmund Robert Skrzypczak, Paul Snowden, et al. 2003. Kenky usha shin Wa-Ei daijiten (segawas o)=. (2003).
- [55] Robert S Weiss, Scott A Bass, Harley K Heimovitz, and Masato Oka. 2005. Japan's silver human resource centers and participant well-being. Journal of Cross-Cultural Gerontology 20, 1 (2005), 47–66.
- [56] Noriko Yamamoto-Mitani and Margaret I Wallhagen. 2002. Pursuit of psychological wellbeing (ikigai) and the evolution of self-understanding in the context of caregiving in Japan. Culture, Medicine and Psychiatry 26, 4 (2002), 399–417.

- [57] Sumiyo Yasukawa, Eri Eguchi, Keiki Ogino, Akiko Tamakoshi, and Hiroyasu Iso. 2018.
  "Ikigai", Subjective Wellbeing, as a Modifier of the Parity-Cardiovascular Mortality Association—The Japan Collaborative Cohort Study—. Circulation Journal 82, 5 (2018), 1302–1308.
- [58] Samuele Zilioli, Richard B Slatcher, Anthony D Ong, and Tara L Gruenewald. 2015.
  Purpose in life predicts allostatic load ten years later. Journal of Psychosomatic Research 79, 5 (2015), 451–457