

The Factors for The Life Meaninglessness among Japanese: The Categories of Meanings and The Number of Realized Meanings
(Faktor-Faktor Ketakbermaknaan Hidup Dalam Kalangan Masyarakat Jepun: Kategori Makna Dan Bilangan Makna Yang Direalisasikan)

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ABSTRACT

Meaning in life is subjective and important experience for the individual. Lack of meaning in life can lead to a negative feeling or evaluation about their life (i.e. life meaninglessness). Since accumulating evidence shows that Japanese are struggling to find meaning in life, it is possible that the life meaninglessness is widespread in Japan. Several scholars have tried to explain the relationship between the Japanese' life meaninglessness and meanings. However, evidence for such relationships is scarce. Moreover, traditional method used in Japanese studies on life meaninglessness have limitations in terms of validity. Thus, we investigated how meanings relate to life meaninglessness using a valid questionnaire to promote evidence-based discussion about life meaninglessness in Japan. Through a cross-sectional online survey ($N = 398$), we investigated how 1) pursuit of meanings of different categories and 2) the number of realized meanings respectively relate to life meaninglessness. Controlling for pursuit of other categories of meanings, pursuit of materialistic meanings (e.g. material possessions and status) positively predicted life meaninglessness. However, the proportion of variance explained by the model was small. Moreover, the number of realized meanings correlated with life meaninglessness negatively, but they had U-shaped relationship in which few or excessive number of realized meanings are related to intense life meaninglessness. This study is the first to examine the meanings-related factors for life meaninglessness among Japanese based on a previous philosophical discussion. In addition, this is the first study to show a non-linear relationship between the number of realized meanings and meaninglessness. It is also suggested that future studies should also investigate other possible factors such as approaches or motivations in the pursuit of meanings.

Keywords: Meaning In Life, Meaninglessness, Well-Being, Materialism

ABSTRAK

Makna hidup merupakan pengalaman subjektif yang penting bagi individu. Kekurangan makna hidup boleh membawa kepada perasaan atau penilaian negatif terhadap kehidupan seseorang (iaitu, ketakbermaknaan hidup). Memandangkan bukti yang semakin terkumpul menunjukkan bahawa orang Jepun bergelut untuk menemukan makna hidup, adalah mungkin bahawa ketakbermaknaan hidup tersebar luas di Jepun. Beberapa sarjana telah cuba menjelaskan hubungan antara ketakbermaknaan hidup dalam kalangan orang Jepun dan makna-makna. Walaubagaimanapun, bukti empirikal bagi hubungan tersebut masih terhad. Selain itu, kaedah tradisional yang digunakan dalam kajian Jepun mengenai ketakbermaknaan hidup mempunyai keterbatasan dari segi kesahan. Oleh itu, kami menyiasat bagaimana makna-makna berkaitan dengan ketakbermaknaan hidup dengan menggunakan soal selidik yang sah bagi menggalakkan perbincangan berasaskan bukti mengenai ketakbermaknaan hidup di Jepun. Melalui tinjauan dalam talian berbentuk keratan rentas ($N = 398$), kami menyiasat bagaimana 1) pencarian makna-makna daripada kategori yang berbeza dan 2) bilangan makna-makna yang direalisasikan masing-masing berkaitan dengan ketakbermaknaan hidup. Dengan mengawal pencarian kategori makna-makna yang lain, pencarian makna-makna materialistik (contohnya, pemilikan material dan status) meramalkan ketakbermaknaan secara positif. Walau bagaimanapun, perkadaran varians yang dijelaskan oleh model adalah kecil. Selain itu, bilangan makna-makna yang direalisasikan berkorelasi secara negatif dengan ketakbermaknaan hidup, namun hubungan tersebut berbentuk U, di mana bilangan makna-makna yang direalisasikan yang terlalu sedikit atau terlalu banyak berkaitan dengan ketakbermaknaan hidup yang lebih tinggi. Kajian ini merupakan yang pertama meneliti faktor-faktor berkaitan makna-makna bagi ketakbermaknaan hidup dalam kalangan orang

Jepun berdasarkan perbincangan falsafah terdahulu. Di samping itu, kajian ini juga merupakan yang pertama menunjukkan hubungan tidak linear antara bilangan makna-makna yang direalisasikan dan ketakbermaknaan. Hasil kajian ini turut mencadangkan bahawa penyelidikan masa hadapan perlu menyiasat faktor-faktor lain seperti pendekatan atau motivasi dalam pencarian makna-makna.

Kata Kunci: Makna Dalam Kehidupan, Ketakbermaknaan, Kesejahteraan, Materialisme

INTRODUCTION

Meaning

“Meaning (in life)” is subjective and important experience for the individual (Vos, 2020; 2023). According to Vos (2020; 2023), meaning consists of multiple components. First, it involves motivation and commitment towards goals or directions in line with one’s values. In addition, as a prerequisite for pursuing a meaning, one needs to recognize self-worth and significance of their unique meaning. Finally, to realize the meaning, one needs goal regulation, self-regulation, understanding of self and world, and existential skills to cope with life’s difficulties and limitations. When these various components coexist, one may evaluate their life as “meaningful” (Vos, 2020). Although there are many specific meanings such as eating nice foods or taking care of others, many previous studies also refer to the general feeling or evaluation that one’s life has meaning as “meaning in life” (e.g. Heintzelman et al., 2020; Wissing et al., 2020). Thus, in the rest of this thesis, we will refer to such general sense of meaningfulness as “meaning in life” or “life meaningfulness” (uncountable noun) and distinguish it from specific experience(s) of “a meaning” or “meanings” (countable noun).

Meaning in life (i.e. general sense of meaningfulness) has been shown to be associated with various aspects of mental health and well-being. For example, it has been shown that meaning in life is positively associated with psychological and physical well-being, negatively associated with psychological distress, and serves as a protective factor against suicide and substance use (Dougherty et al., 2024; García-Alandete, 2015; He et al., 2023; Roepke et al., 2014; Wilchek-Aviad & Ne’eman-Haviv, 2016). Furthermore, meaning-centered therapies, which address meaning in life as their main aim, greatly improve quality of life and

psychological distress (Vos & Vitali, 2018). Therefore, meaning in life is also considered an important therapeutic factor in psychotherapy.

Previous research have also proposed various categories of meanings, along with demonstrating the relationship between each category and mental health and cultural differences regarding meanings (e.g., Schnell, 2009; Urata, 2013; Vos, 2020). In addition, the importance of distinguishing between “pursuit” of a meaning (i.e. extent to which a meaning is being pursued by a person) and “realization” of a meaning (i.e. extent to which a meaning has been / is being realized by a person) has been emphasized (Urata, 2013).

As a Japanese measure for assessing specific meanings and their categories, there is the Important Meaning Index (IMI) developed by Urata (2013). This scale can measure the “pursuit” and “realization” of the four categories of meanings. Specifically, it measures: “well-being and relatedness”, which involves experiencing enjoyment alone or with others; “self-actualization”, which involves employing or developing one’s abilities; “self-transcendence”, which involves engaging with purposes beyond one’s immediate desires, such as those related to religions or morality; and “secular benefits,” which involves acquiring social success, money, or material possessions (Schnell, 2009; Urata, 2013).

Meaninglessness

One of the clinically important phenomena related to meaning is (life) meaninglessness, which means that one negatively feels or evaluates their life due to a lack of meaningfulness. Different researchers describe this phenomenon in different terms such as “existential vacuum” or “crisis of meaning” (Schnell, 2009; Urata, 2013). Meaninglessness is negatively associated with meaning in life and positively associated with

indicators of mental ill-health such as anxiety and depression (Schnell, 2009). Furthermore, an interview study indicates that chronic sense of meaninglessness is accompanied by clinical symptoms such as depression and suicidal ideation (Cook, 2021).

Meaninglessness Among Japanese

Accumulating evidence suggests that meaninglessness may be a nationwide issue in Japan. First, multiple international surveys consistently show that Japanese people have lower levels of meaning in life compared to other nations (e.g., Heintzelman et al., 2020; OECD, 2019; VanderWeele et al., 2025; Japan ranked lowest in all cases).

Second, research on *ikigai*, a synonym for meaning in life (Shimai & Urata, 2025), also suggests a tendency among Japanese to have difficulty in finding meaning in life (or *ikigai*). A survey by Sony Life Insurance Co., Ltd. (2025) revealed that 93.3% of Japanese (aged 10 to 70) valued moments when they feel *ikigai*. However, only 61.1% reported experiencing such moments in daily lives, suggesting many may be dissatisfied with a lack of *ikigai*. Furthermore, according to longitudinal survey by Research Institute for Policies on Pension & Aging, the rate of Japanese office workers possessing *ikigai* has consistently declined since the second survey (1996), when it was 78.4%, reaching 39.9% in the seventh survey (2021) (Sugaya, 2022). To summarize, it appears difficult to find meaning in life (or *ikigai*) in contemporary Japan. Given the negative correlation between meaning in life and meaninglessness, it is likely that meaninglessness is widespread in Japan (although some people neither experience life meaningfulness nor meaninglessness; see Schnell, 2010).

Despite of the possibility that meaninglessness is a national issue, there is a lack of evidence-based discussion on the Japanese' life meaninglessness. Several scholars have argued that meaninglessness has been increasing among Japanese in contexts outside psychology, particularly in relation to specific meanings (e.g., Ueda, 2005; Yamada, 1999). However, such arguments are rather theoretical and not evidence-based. In addition, to the best of our knowledge, there is no past longitudinal data on meaninglessness with Japanese population as the population group. Thus, we cannot retrospectively verify the increase of the meaninglessness in Japan. Nevertheless, it is possible to investigate the extent to which Japanese are currently suffering from meaninglessness and verify the past arguments on the factors contributing for it. However, as will be discussed below, the studies answering such

questions with valid methods are lacking, too.

Limitations of Previous Studies

Previous studies on meaninglessness among Japanese individuals have primarily employed the Purpose in Life Test (PIL, Crumbaugh & Maholick, 1969; e.g., Nakai, 2010; Sato et al., 1993). However, this scale has issues such as being confounded with depression and its assumption of goal-oriented values (Dyck, 1987; Garfield, 1973). Considering these issues with the PIL, Urata (2013) developed the Existential Vacuum Scale (EVS) as a Japanese measure of meaninglessness. Furthermore, the PIL assigns paired words like “bored” and “enthusiastic” to opposite ends of its response options, failing to distinguish between positive and negative conceptual dimensions (Schnell, 2009). In contrast, the EVS is a standard Likert-category scale, making it more appropriate for capturing the dimension of meaninglessness (a negative concept).

However, previous studies examining meaninglessness using the EVS have all been limited to samples of adolescents or students (e.g., Urata, 2007; 2013). Therefore, it is important to examine meaninglessness among more diverse Japanese samples.

In addition, there are only two studies which empirically examined the relationship between meanings and meaninglessness among Japanese, which are Urata (2005; 2013) and Urata (2007; 2013). Furthermore, in these studies, the questionnaire items did not distinguish between the pursuit and realization of meanings. To promote evidence-based discussions on the potential issue of meaninglessness in Japan, not only in psychology but also in the disciplines such as sociology and philosophy, it is important to demonstrate the relationship between meanings and meaninglessness empirically.

Objective of This Study

Based on the discussion above, we conducted a web survey to clarify the relationship between the meanings and meaninglessness.

First, we hypothesized that individuals pursuing secular benefits would exhibit higher levels of meaninglessness (Hypothesis 1). Previous studies have shown that the sign and strength of correlations between categories of meanings and other specific variables differ between categories (e.g., Schnell, 2009; 2011; Vos, 2020). Therefore, meaninglessness may also have different relationships with each meaning categories. Yamada (1999), a human scientist, argued

that pursuit of material possession, power, and wealth (i.e. secular benefits) to satisfy one's desires ends up intensifying meaninglessness. Yamada (1999), drawing on V.E. Frankl's theory, argued that individuals can find a meaning in a state of consciousness where they forget themselves and feel unified with the experience (e.g. another person). Therefore, engaging with the world with awareness of one's own desires ("I will get so and so from the world to satisfy *my* desires.") does not lead to meanings and thus attempts to acquire and possess things (e.g. material possessions or power) leads to meaninglessness (Yamada, 1999). Indeed, a meta-analysis and an international survey indicate that individuals who emphasize materialistic meanings (i.e. secular benefits) like material possessions and visible success have worse mental health and lower life satisfaction (Vos, 2020; 2023). Considering the positive relationship between meaninglessness and mental ill-health, it is reasonable to assume that individuals pursuing secular benefits more intensely exhibit higher levels of meaninglessness.

Additionally, as a supplementary analysis, we examined the relationships between the pursuit of secular benefits and other potentially related well-being variables (cf. Vos, 2020; 2023). Specifically, we investigate the relationships between the pursuit of secular benefits and mental health and life satisfaction.

Furthermore, we hypothesized that individuals with fewer realized meanings would experience higher meaninglessness (Hypothesis 2). Schnell (2011) demonstrated that individuals with fewer realized meanings tend to report lower meaning in life. In addition, Urata (2005; 2013), while not distinguishing between pursuit and realization of meanings, demonstrated that individuals possessing only one meaning experience higher meaninglessness than those possessing multiple meanings. Based on the above, we expected that those with fewer realized meanings would experience higher meaninglessness.

METHODOLOGY

Design and Procedure

A web survey was conducted using Yahoo! Crowdsourcing (<http://crowdsourcing.yahoo.co.jp/>). Participants began the task by proceeding from the recruitment page to Google Forms (<https://docs.google.com/forms/>). Participation requirements were native Japanese language proficiency and age between 18 and 69 years old. Respondents could earn reward by entering a 4-digit code displayed on the page after

submitting their responses into the task page.

The response fields were organized in a grid format. To enhance visibility of response options, questions within each scale were presented across multiple grids. Additionally, the order of questions was randomized within each scale besides for IMI (explained in the "Measures" section). To reduce careless or inattentive responses, a commitment statement to carefully answer was requested at the beginning of the Google Form (Geisen, 2022). It was explicitly stated that participants could receive the reward even if they did not give a commitment statement. As a result, however, all respondents made a commitment statement. Furthermore, to detect individuals prone to careless or inattentive responses, we included items requiring specific answers (Instructed Response Items, IRI; Muszyński, 2023) in several grids.

Although the correspondence author's email address was described both on the recruitment page and Google Form, there were no questions or reports of issues regarding the survey content.

Measures

Demographic Variables- We asked participants' gender, age, employment/educational status, and marital status. Regarding marital status, it was explicitly stated that common-law marriage is considered equivalent to marriage.

Meanings- To measure the degree of pursuit and realization of meanings, the IMI (Urata, 2013) was used. The IMI is a Japanese scale measuring the degree of "pursuit" and "realization" for 34 meanings, comprising 68 items in total. For "pursuit," items are statements rated on a 7-point scale ranging from "I pursue it very much" to "I do not pursue it at all." For "realization," items are statements rated on a 7-point scale ranging from "I have fully realized / been realizing it" to "I have not realized it at all." The IMI has four categories of meanings based on the factor structure of "pursuit": "well-being and relatedness", "self-actualization", "self-transcendence", and "secular benefits". Total scores are calculated for both "pursuit" and "realization" within each category. The reliability coefficients for "pursuit" in each category were all acceptable (respectively, $\alpha = .89, .93, .79, .88$).

Note that in the original version of this scale, the response fields for "pursuit" and "realization" are presented side-by-side for each meaning. However, due to limitation of Google Form, this study presented the "pursuit" and "realization" response fields in separate sections. Furthermore, only for IMI, we randomized the order of items within each subscale (i.e. "pursuit"

and “realization”), not across the entire scale. Except for IRI, item order was identical within both “pursuit” and “realization” sections. Meaninglessness- Life meaninglessness was measured using the “feeling of existential vacuum” subscale (8 items) from the EVS (EVS_A; Urata, 2013). The items are statements rated on a 5-point scale ranging from “not true” to “true,” and total scores were calculated. The reliability coefficient was good ($\alpha = .88$).

Psychological Distress- As a mental health indicator, the frequency of psychological distress in the past 30 days was measured using the Japanese version of the Kessler Psychological Distress Scale (K6; 6 items; Furukawa et al., 2003). Items are statements rated on a 5-point scale ranging from “none of the time” to “all of the time”. The reliability coefficient was excellent ($\alpha = .92$).

Life Satisfaction- Life satisfaction was measured using the Japanese version of the Satisfaction With Life Scale (SWLS; 5 items; Oishi, 2009). Items are statements rated on a 7-point scale ranging from “strongly disagree” to “strongly agree”. The reliability coefficient showed good value ($\alpha = .89$).

Participants

398 people in total have completed the task. Data with missing values, two or more incorrect responses to the IRI, or identical responses across all items within each scale (i.e. straight line) were excluded. However, for the IMI, since “pursuit” and “realization” were on separate pages, the presence of straight line was examined for each subscale. Furthermore, all K6 items had extremely low mean values (within the range of 1 ± 0.3). Therefore, considering the possibility that many mentally healthy individuals might have answered “Not at all” for all items, straight line was not used as an exclusion criterion for K6. In the end, data from the remaining 251 participants were used for further analysis.

After screening, 69.3% of respondents were male, 29.5% were female, 0% identified as other, and 1.2% declined to tell their gender. The age range was 24 to 69 years ($M = 50.64$, $SD = 8.93$). Regarding employment/education status: 1.6% were in high school, 8.4% in university, 1.2% in graduate school, 0.4% in other schools; 14.3% were self-employed; 34.3% were full-time employees; 15.5% were part-time / casual workers (excluding student part-time jobs); and 24.3% had chosen “other”. Regarding marital status, 53.4% were unmarried, 39.8% were married, 1.6% were widowed, and 5.2% were divorced.

Ethical Considerations

The research was conducted in accordance with the principles of the Declaration of Helsinki. On the recruitment page, it was clearly stated that participation in the survey and suspension of responses were voluntary; that no disadvantage would result from response content; that participants could refuse to answer any item they did not wish to respond to; that data would not be disclosed in a form that individuals could be identified; and that the survey involved no invasive procedures, physical pain, or danger. Additionally, on the same page it was clearly stated that due to the anonymous nature of the survey, consent for participation cannot be withdrawn after submission of responses, and that one cannot receive compensation if they suspended responses.

Analytic Strategy

Analysis Environment- All statistical analyses were performed using statistical processing software R (ver. 4.4.0) and R Studio (ver. 2025.05.1+513). The operating system of the PC used was Windows 11 Home. The R packages used for analysis were as follows. The *psych* package (2.4.6.26; Revelle, 2024) was used for the test of no correlation. The *performance* package (0.12.2; Lüdtke et al., 2021) was used to check for multicollinearity and heteroscedasticity, linearity, and normality of residuals in the multiple regression analyses. The *lm.beta* package (1.7.2; Behrendt, 2023) was used to output the results of the multiple regression analyses. The *dplyr* package (1.1.4; Wickham et al., 2023) and *tidyr* package (1.3.1; Wickham et al., 2024) were used for data manipulation. The *ggplot2* package (3.5.2; Wickham, 2016) was used to generate scatter plots and graphs. The *apaTables* package (2.0.8; Stanley, 2021) was used to output tables displaying correlation coefficients and descriptive statistics.

Pursuit of Secular Benefits and Meaninglessness- We conducted a multiple regression analysis predicting meaninglessness by the pursuit of secular benefits. However, there were significant correlations among the pursuit of secular benefits, meaninglessness, and the pursuit of other meaning categories (Table 1). Therefore, to control for confounding effects, we included the pursuit of other meaning categories as control variables.

Pursuit of Secular Benefits and Well-Being- We also analyzed the relationship between the pursuit of secular benefits and psychological distress or

life satisfaction using the same method as above. Specifically, we conducted multiple regression analyses explaining psychological distress and life satisfaction by the pursuit of secular benefits. Confounding effects of the pursuit of other meaning categories were observed in both cases (Table 1). Therefore, in each model, we included pursuit of other other meaning categories as control variables.

Number of Realized Meanings and Meaninglessness- For each person, we counted the number of items scored $\geq 1SD$ from the population mean, defining this as the number of realized meanings (Schnell, 2011). The data of those who had extreme outliers were excluded ($n = 2$). We then conducted a one-tailed test of no correlation with the alternative hypothesis that the number of realized meanings would negatively correlate with meaninglessness. Additionally, following Schnell (2011), we exploratively examined a curvilinear relationship. Among the polynomial models ranging from linear to quintic functions, the one with the highest R^2_{adj} was adopted.

RESULTS & DISCUSSION

Meaninglessness

Before testing the hypotheses, we first checked whether meaninglessness in our sample was extremely high or not. The group-level mean was 23.24 ($SD = 6.77$, the possible maximum value is 40) and skewness was -0.16. Thus, it was neither extremely high in average nor extremely skewed toward high value.

A previous study with students' sample also showed similar results (Urata, 2007). Although neither our sample nor that of Urata (2007) represents whole Japanese population, it might be the case that meaninglessness among Japanese is, at least, not extremely high. Even if it is true, it does neither contradict to the evidence for lack of meaning in life in Japan (e.g., Heintzelman et al., 2020; OECD, 2019) nor indicate that it is not problematic. According to previous studies, there are many "existentially indifferent" people who neither experience meaningfulness nor meaninglessness (Damásio & Koller; Schnell, 2010). Thus, it is possible that majority of Japanese are existentially indifferent rather than suffering from meaninglessness. However, previous studies showed that well-being indicators of existentially indifferent people were lower than those who are living meaningful lives, although their mental health indicators did not significantly differ (Schnell, 2010). Therefore, although many Japanese might not feel distress because their

lives are not meaningful, they may see it problematic if they want to live a more satisfactory life.

Pursuit of Secular Benefits and Meaninglessness (Hypothesis 1)

Multiple regression analysis predicting meaninglessness by pursuit of meaning categories yielded a significant model (Table 2, $F(4, 246) = 5.16$, $p < .001$, $R^2_{adj} = .06$). No multicollinearity was detected in the model, and homoscedasticity, linearity, and normality of residuals were confirmed. The pursuit of secular benefits positively predicted the dependent variable, supporting Hypothesis 1 ($\beta = 0.203$, $p = .043$). This finding aligns with Yamada (1999)'s argument that pursuing secular benefits increases meaninglessness. However, the model explained only 6% of the variance in meaninglessness. Thus, even if categories of meanings are factors that increase or decrease meaninglessness, their influence may be limited. It should also be noted that the model used here was not intended to verify the causation. Yamada's (1999) theory, which served as the premise for our hypothesis, posits a sequence as follows: (a) pursuing material possessions, wealth, or power, (b) achieving them and experiencing temporary satisfaction, (c) the satisfaction fading and meaninglessness intensifying, and (d) pursuing these meanings harder to distract oneself from that feeling. This model is causal, long-term, and loop structured. On the other hand, the above result stems from multiple regression analysis of cross-sectional data. Therefore, the result is not strong evidence for that theory.

Furthermore, the pursuit of well-being and relatedness negatively predicted the dependent variable ($\beta = -0.414$, $p < .001$), while the effects of the pursuit of self-actualization ($p = .936$) and self-transcendence ($p = .887$) were not significant. It is difficult to interpret the effect of "well-being and relatedness" because this factor includes both items related to hedonic well-being (e.g., eating) and items related to interpersonal relationships (i.e. relatedness). Beyond the IMI, another measure of meanings where well-being and relatedness form a single factor is the Sources of Meaning and Meaningfulness of life Questionnaire (SoMe; Schnell, 2009). Schnell (2009) proposed two interpretations for why these form a single factor. One interpretation is that this factor reflects the general tendency for interpersonal relationships to be a source of one's hedonic well-being. The other interpretation is that it reflects the people's tendency to love "one's neighbor as oneself" (p. 488; i.e. to value others' happiness as highly as one's own). Thus, there are two possible motivations: one's own happiness and the happiness of others. In the context

of this study, since Japanese people tend to pursue happiness through relationships (Uchida & Hagiwara, 2012), the “well-being and relatedness” factor based on Japanese data may more strongly reflect the former motivation. However, it is not possible to conclusively determine the interpretation of the factor.

Pursuit of Secular Benefits and Well-Being

Multiple regression analysis predicting life satisfaction by pursuit of meaning categories yielded a significant model (Table 3, $F(4, 246) = 11.510$, $p < .001$, $R^2_{adj} = .144$). Only the pursuit of well-being and relatedness positively predicted the dependent variable ($\beta = 0.317$, $p = .007$), while the effects of self-actualization ($p = .264$), self-transcendence ($p = .074$), and secular benefits ($p = .603$) were not significant.

Furthermore, when predicting psychological distress from the pursuit of each category of meanings using multiple regression analysis, the overall model was significant (Table 4, $F(4, 246) = 5.187$, p

$< .001$, $R^2_{adj} = .063$). Only the pursuit of well-being and relatedness negatively predicted the dependent variable ($\beta = -0.333$, $p = .006$), while the effects of self-actualization ($p = .331$), self-transcendence ($p = .289$), and the pursuit of secular benefits ($p = .235$) were not significant.

These results are contrary to the previous studies showing that those who emphasize materialistic meanings (i.e. secular benefits) have lower life satisfaction and worse mental health (e.g. Vos, 2020; 2023). On the other hand, another study showed no relationship between such meanings and mental health (Tunç et al., 2024). Note that we cannot directly compare the results of these studies, including the current study, due to the methodological differences (i.e. differences in questionnaires and analytic strategies). Nevertheless, we can argue that, at least, the relationship between secular benefits and well-being may depend on some trait variables. Firstly, regarding social status, there are both healthy and unhealthy ways to achieve it. The unhealthy way is called dominance, in which force, fear, or threat are used to achieve status (Knight, 2022). The healthy one is prestige, in which status is achieved by being deemed competent, cooperative, and who facilitates goodwill among group members (Knight, 2022). Knight (2022) showed that trait dominance was associated with poorer mental health and life satisfaction and higher trait prestige was associated with better mental health and life satisfaction. Secondly, pursuit of material possessions may not be related to well-being per se, too. Jaspers et al. (2023) reanalyzed the data from Górník-Durose (2020) and showed

that the negative relationship between materialism and subjective well-being became nonsignificant when controlling for neuroticism. To summarize, it is possible that relationship between secular-benefits pursuit and well-being differs according to traits such as trait dominance, trait prestige and neuroticism. For example, in our sample, all K6 items had extremely low mean values (within the range of 1 ± 0.3), suggesting the participants tended not to experience psychological distress (i.e. low neuroticism).

In addition, the relationships between pursuit of “well-being and relatedness” and well-being variables further indicate the importance of this meaning category for Japanese. However, it is unclear how the factor contributes to well-being. Interpersonal relationships can serve as a source of hedonic well-being per se, while it can enhance well-being through empathy for others’ happiness, too.

Number of Realized Meanings and Meaninglessness (Hypothesis 2)

There was a significant negative correlation between the number of realized meanings and Meaninglessness, supporting Hypothesis 2 ($r = -.23$, $p < .001$). However, even though a negative correlation exists between two variables, it does not necessarily imply a linear relationship where fewer realized meanings correspond to higher meaninglessness. Therefore, following Schnell (2011), we explored the curvilinear relationship between the two variables. A quadratic function provided the highest explanatory power ($R^2_{adj} = .07$). The graph exhibited U-shape, with meaninglessness decreasing until the number of realized meanings reaches approximately 15 (Figure 1). However, beyond approximately 15 realizations, meaninglessness increases again (Figure 1).

Thus, the hypothesis that those with fewer realized meanings would experience higher meaninglessness was partially supported. Previous research has also shown a curvilinear relationship between the number of realized meanings and life meaningfulness (Schnell, 2011). Specifically, the relationship resembling a *positive* logarithmic function was observed: the more meanings realized, the greater the life meaningfulness, but this increase plateaued around the point where the number of realized meanings exceeded 5. Naively inferring from this result, one might expect the relationship between the realized-meanings count and meaninglessness to resemble a *negative* logarithmic function. On the contrary, this study did not reveal such a relationship. Specifically, the model that best fits the data showed a U-shaped relationship:

meaninglessness decreased until the realized-meanings count reached 15 but then increased beyond that point. However, the result of this study does not contradict that of Schnell (2011) because it is not necessarily true that the lower the life meaningfulness, the higher the life meaninglessness (Schnell, 2009; 2010).

The result may have been explained by approaches to meaning in life. According to Vos (2020), an approach utilizing one's intuition and critical thinking is crucial for discovering authentic meanings (i.e., meaning that intuitively feels meaningful). This is called critical-intuitive approach (Vos, 2020; 2024). However, people may, for example, simply conform to social expectations or unconsciously follow social messages (e.g. government propaganda promoting capitalist values; Vos, 2020; 2024). Those who do not rely on critical-intuitive approach so much may pursue inauthentic meanings yet even realizing them may not lead to much sense of meaningfulness (Vos, 2020; 2024). Consequently, once most conceivable meanings are realized, a sense of helplessness may arise (i.e. the recognition that no matter what one does, life cannot be meaningful; cf. Maier & Seligman, 1976), potentially heightening meaninglessness. Although there is apparently no study investigated the approaches to meaning in life among Japanese, there is a possibility that critical-intuitive approach is lacking among Japanese. According to Ueda (2005), a cultural anthropologist, Japanese culture is hindering Japanese from finding what they feel is meaningful. According to him, Japanese culture emphasizes maximizing “numbers” (e.g. income or academic achievements) and avoiding *haji* (i.e. trying not to be devalued by majorities). Motivation to avoid *haji* leads people to conform to major values and thus try to maximize “numbers” such as income and academic achievement, instead of finding out what they feel is truly meaningful (Ueda, 2005). To make matters worse, this tendency has been exacerbated by neoliberal policies which demand that people be efficient and competent workers (Ueda, 2005). If they are inefficient, they will lose not only esteem but also financial security because they will lose competition in the market. Thus, Japanese workers must try their best to efficiently maximize their performance and achievement instead of seeking for what they truly feel meaningful (Ueda, 2005).

Strengths and Limitations

As far as we know, this is the first study investigated the relationship between meanings-related variables and meaninglessness while explicitly differentiating pursuit and realization of meanings. As a result, it was

suggested that the relationship between the realized-meanings count and the meaninglessness is not mere reversal of the relationship between the realized-meanings count and the life meaningfulness.

In addition, as far as we know, this is the first empirical study based on a philosophical discussion about specific meanings' relationship with Japanese' life meaninglessness (Yamada, 1999). As a result, we showed preliminary evidence supporting it. Although current study is preliminary and merely one of the first examples of such research, we consider such studies important for promoting evidence-based discussion not only in psychology but also in other disciplines (e.g. sociology and philosophy).

However, there are several limitations in our study, too. First, the sample in this study was biased. Since data were collected via crowdsourcing, it is possible that respondents' personalities were biased (Majima et al., 2017). Additionally, there was a noticeable bias in the age of respondents ($M = 50.64$, $SD = 8.93$). Future research should replicate these findings with more diverse samples.

Second, as this study is cross-sectional, we could not identify specific psychological processes, such as causal relationships between meanings, meaninglessness, and well-being, or the mechanisms underlying their correlations. Previous papers on meaning in life have already proposed various explanations for the relationships between specific meanings and well-being or mental health, as well as the mechanisms underlying these relationships (e.g., Deci & Ryan, 2000; Sagiv & Schwartz, 2000). However, there might be culture-specific psychological processes within Japanese context. It is important to investigate such processes through longitudinal studies and experiments in the future.

Finally, while we examined the number of realized meanings and categories of pursued meanings, we did not examine other meaning-related variables such as motivations or approaches in pursuit of meanings (cf. Vos, 2024; Wissing et al., 2020). While neither pursued meaning categories nor realized-meanings count alone explained the variance of meaninglessness so much in this study, considering other meaning-related variables might yield more explanatory models. Notably, specific approach has been suggested as a potential factor contributing to the mental health crisis in Western countries (Vos, 2020). Although speculative, usage of approaches to meaning in life might be a factor contributing to low meaning in life and poor mental health in Japan, too (Ueda, 2005; VanderWeele et al., 2025).

TABLE 1. Descriptive statistics and Pearson correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. age	50.64	8.93													
2. IMI_p_WB	54.40	10.19	-.14*												
			[-.26, -.02]												
3. IMI_p_SA	46.42	11.41	-.15*	.82**											
			[-.27, -.03]	[.77, .86]											
4. IMI_p_ST	21.79	5.42	-.01	.75**	.75**										
			[-.13, .12]	[.69, .80]	[.69, .80]										
5. IMI_p_SB	17.87	5.28	-.23**	.76**	.74**	.67**									
			[-.34, -.10]	[.70, .81]	[.68, .79]	[.60, .74]									
6. IMI_r_WB	51.02	11.37	-.08	.85**	.70**	.67**	.66**								
			[-.20, .04]	[.81, .88]	[.63, .76]	[.59, .73]	[.59, .73]								
7. IMI_r_SA	43.44	11.54	-.07	.78**	.87**	.71**	.68**	.85**							
			[-.19, .06]	[.72, .82]	[.84, .90]	[.64, .77]	[.62, .75]	[.81, .88]							
8. IMI_r_ST	20.84	6.05	.03	.67**	.64**	.85**	.59**	.74**	.76**						
			[-.10, .15]	[.59, .73]	[.56, .71]	[.81, .88]	[.50, .66]	[.68, .79]	[.70, .81]						
9. IMI_r_SB	16.74	5.53	-.10	.67**	.67**	.61**	.77**	.79**	.82**	.71**					
			[-.22, .02]	[.60, .73]	[.60, .73]	[.53, .69]	[.72, .82]	[.74, .83]	[.78, .86]	[.65, .77]					
10. IMI_p	140.48	29.44	-.15*	.94**	.94**	.86**	.85**	.81**	.86**	.74**	.74**				
			[-.27, -.03]	[.92, .95]	[.93, .95]	[.82, .89]	[.81, .88]	[.76, .85]	[.83, .89]	[.68, .79]	[.68, .79]				
11. IMI_r	132.03	31.81	-.07	.83**	.81**	.76**	.73**	.94**	.95**	.85**	.89**	.87**			
			[-.19, .06]	[.78, .86]	[.76, .84]	[.71, .81]	[.67, .79]	[.93, .95]	[.94, .96]	[.82, .88]	[.86, .91]	[.84, .90]			
12. EVS_A	23.24	6.77	-.21**	-.24**	-.17**	-.15*	-.09	-.39**	-.27**	-.26**	-.31**	-.19**	-.34**		
			[-.32, -.09]	[-.36, -.12]	[-.29, -.05]	[-.27, -.03]	[-.22, .03]	[-.49, -.28]	[-.38, -.15]	[-.37, -.14]	[-.41, -.19]	[-.31, -.07]	[-.44, -.23]		
13. K6	6.54	5.65	-.15*	-.26**	-.22**	-.15*	-.15*	-.43**	-.31**	-.24**	-.33**	-.23**	-.37**	.64**	
			[-.27, -.03]	[-.37, -.14]	[-.34, -.10]	[-.27, -.03]	[-.27, -.02]	[-.52, -.33]	[-.41, -.19]	[-.35, -.12]	[-.44, -.22]	[-.34, -.11]	[-.47, -.25]	[.56, .71]	
14. SWLS	16.74	6.15	-.01	.38**	.30**	.35**	.31**	.55**	.45**	.43**	.53**	.37**	.54**	-.53**	-.50**
			[-.13, .12]	[.27, .48]	[.18, .41]	[.23, .45]	[.20, .42]	[.46, .63]	[.35, .55]	[.33, .53]	[.44, .62]	[.25, .47]	[.44, .62]	[-.61, -.43]	[-.58, -.40]

Notes. IMI_p: "pursuit" subscale of IMI. IMI_r: "realization" subscale of IMI. WB: well-being and relatedness. SA: self-actualization. ST: self-transcendence. SB: secular benefits. EVS_A: "feeling of existential vacuum" subscale of EVS. K6: Kessler Psychological Distress Scale. SWLS: Satisfaction With Life Scale. * $p < .05$. ** $p < .01$. The values in parentheses are 95% confidence intervals.

TABLE 2. The relationship between pursued meanings and meaninglessness

Predictor	B	SE	β	t	p
Intercept	32.904	2.298		14.319	< .001
IMI_p_WB	-0.275	0.081	-0.414	-3.420	< .001
IMI_p_SA	0.006	0.070	0.010	0.081	.936
IMI_p_ST	0.018	0.125	0.014	0.142	.887
IMI_p_SB	0.261	0.128	0.203	2.035	.043

Notes. IMI_p: "pursuit" subscale of IMI. WB: well-being and relatedness. SA: self-actualization. ST: self-transcendence. SB: secular benefits.

TABLE 3. The relationship between pursued meanings and life satisfaction

Predictor	B	SE	β	t	p
(Intercept)	4.229	1.993		2.12	.035
IMI_p_WB	0.191	0.070	0.317	2.74	.007
IMI_p_SA	-0.068	0.061	-0.127	-1.12	.264
IMI_p_ST	0.195	0.109	0.172	1.79	.074
IMI_p_SB	0.058	0.111	0.050	0.52	.603

Notes. IMI_p: "pursuit" subscale of IMI. WB: well-being and relatedness. SA: self-actualization. ST: self-transcendence. SB: secular benefits.

TABLE 4. The relationship between pursued meanings and psychological distress

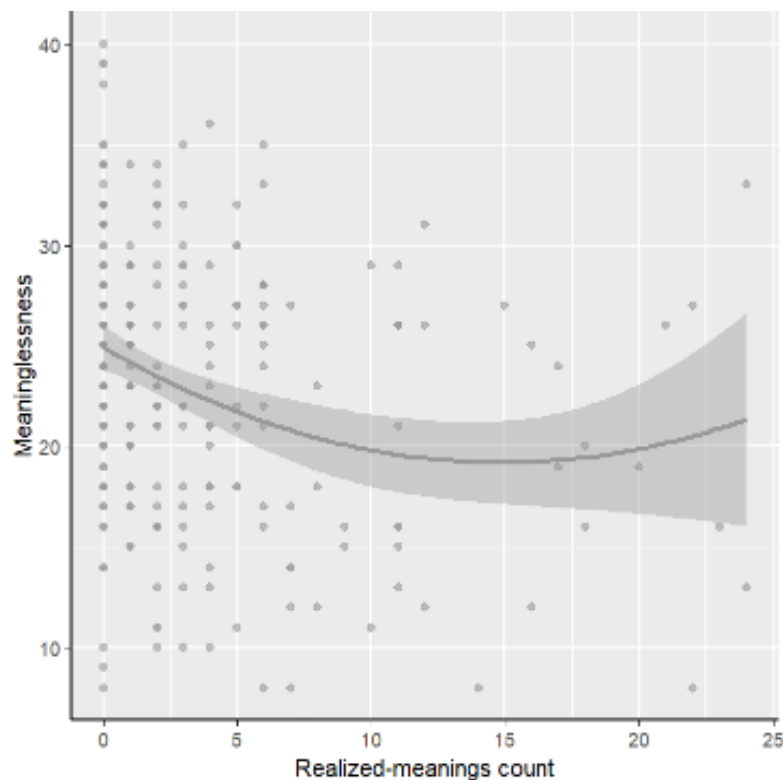
Predictor	B	SE	β	t	p
(Intercept)	14.545	1.917		7.59	< .001
IMI_p_WB	-0.185	0.067	-0.333	-2.75	.006
IMI_p_SA	-0.057	0.059	-0.115	-0.97	.331
IMI_p_ST	0.111	0.104	0.106	1.06	.289
IMI_p_SB	0.127	0.107	0.119	1.19	.235

Notes. IMI_p: "pursuit" subscale of IMI. WB: well-being and relatedness. SA: self-actualization. ST: self-transcendence. SB: secular benefits.

CONCLUSION

We hypothesized that individuals pursuing secular benefits more intensely would experience higher levels of meaninglessness. As hypothesized, pursuit of secular benefits positively predicted meaninglessness. We also hypothesized that individuals with fewer realized meanings would experience higher meaninglessness. It turned out that realized meanings count and meaninglessness had U-shaped relationship in which few or excessive realized-meanings count

are related to intense meaninglessness. This is the first study to examine the meanings-related factors for meaninglessness among Japanese based on a previous philosophical discussion. In addition, this is the first study to show a non-linear relationship between the number of realized meanings and meaninglessness. We hope that more studies will verify the theoretical discussion on meaninglessness among Japanese as well as discovering novel patterns to stimulate interdisciplinary discussions. Finally, meanings-related variables in our study did not explain the variance of



Notes. The curve represents the quadratic function and the dark area represents standard errors.

FIGURE 1. The relationship between number of realized SOMs and meaninglessness

meaninglessness so much. Thus, it is suggested that future studies should also investigate other possible factors for meaninglessness (e.g. approaches or motivations in the pursuit of meanings).

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