THE UNIVERSITY OF CHICAGO

Whose Life is More Meaningful:

Benefits to Society and Benefits to Oneself

In People's Intuitions of Meaning

By:

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Abstract

Meaning in life is a key component of a desirable life. However, it remains to be examined how ordinary people think about meaning in life. Across three studies, we examined the role of two orthogonal and theoretically most important factors (i.e. benefits to society and benefits to oneself) in people's intuitions of meaning, in comparison to people's intuitions of happiness. In Study 1, we asked participants to rate fifteen jobs in terms of their benefits to society, benefits to the self, meaning, and happiness. We found that benefits to society was a stronger predictor of meaning judgment than benefits to the self, whereas the two factors were equally strong predictors of happiness judgment. In Study 2, we experimentally manipulated the levels of benefits to the society and to the self through four vignettes and we found converging evidence that benefits to society was more important than impact to the self in people's judgment of meaning, while benefits to society was as important as benefits to the self in happiness judgment. In Study 3, we replicated and extended these results in a real-life advice-giving paradigm: participants emphasized benefits to society when offering advice to people who needed meaning, whereas they focused on both benefits to the self and benefits to the society when offering advice to people who needed happiness. These results suggest that meaning and happiness are two different constructs in people's subjective judgment, and people weigh the impact to society more when they are making meaning judgments about other people. *Keywords*: meaning in life, happiness, subjective experiences, moral judgment

Whose Life is More Meaningful: Benefits to Society and Benefits to Oneself

In People's Intuitions of Meaning

"Does life have a meaning?" Whether life is meaningful or not is one of the most fundamental questions that even philosophers have not reached an agreement about. While some historical figures in existential nihilism posit that human life has no intrinsic meaning or value, other philosophers such as Aristotle and Kand believe that a person ought to seek a life that matters. In his classic work *Man Searching for Meaning*, Viktor Frankl (1963) supported Aristotle and Kand's idea by observing the prisoners who tried to search for meaning in the Nazi concentration camp. Meaning is of great importance to human existence as it enables human beings to survive and thrive under objectively meaningless situations. Yet, despite the fact that meaning has been debated for centuries in philosophy, only in the recent decade has the field of psychology begun to view meaning as something crucial not only to human survival but also to psychological well-being (Wong & Fry, 1998).

Past research on meaning has primarily focused on the experience of meaning in life as a subjective state, especially about the functions and the correlates of the experience of meaning in life (Hicks & King, 2009). For example, the feelings of meaning in life can be predicted with a sense of belonging (Lambert, Stillman, Hicks, Kamble, Baumeister, & Fincham, 2013). When asked to think about the social identities and the connection with social groups, participants reported the strongest feeling of meaning, compared with thinking about the support or compliment they received. (Lambert et al., 2013). In addition, the feelings of meaning in life is also associated with important life outcomes such as life satisfaction (Steger & Kashdan, 2007; Zika & Chamberlain, 1992), life quality (Kraus, 2007), depression (Mascaro & Rosen, 2005), hope (Felderman & Snyder, 2005), substance abuse (Lecci, MacLean, & Croteau, 2002), coping

with physical illness (Jim & Anderson, 2007), suicide ideation (Heisel & Flett, 2004), and many other aspects of physical and psychological health. Research has also identified factors that positively predict the subjective experience of meaning in life, such as social relationships (Lambert et al., 2013), religion (Steger & Frazier, 2005), and positive affect (King et al., 2006). Most existing studies have relied on people's own definitions of "meaning" to measure feelings of meaning in life, not about the cognitive processes of how people evaluate meaning in life, and it remains an open question of how ordinary people make judgments about meaning.

Researchers have proposed three components of meaning: 1) a purpose, 2) a coherence that transcends chaos, and 3) a significance beyond the trivial or momentary (King, Hicks, Krull, & Del Gaiso, 2006). Purpose in life includes having motivations, goals, or a sense of direction to accomplish life tasks (Reker & Wong, 1988). Coherence reflects the feeling that perceiving one's world as comprehensible, manageable, and meaningful (Antonovsky, 1979). Significance involves generativity and a sense that one matters to the social world (King et al., 2006). Past studies on cognition related to meaning in life have examined the role of purpose and coherence in meaning judgment. For instance, Heintzelman, Trent, and King (2013) demonstrated that life is perceived as meaningful when the world contains connection and reliable associations. When presented with photographs or linguistic stimuli that follow an organized pattern, participants reported higher feelings of meaning in life, compared with those that were presented photos in random order. Moreover, with regard to the meaning of work, Fairlie (2010) discovered that meaningfulness in work is determined by three aspects: finding a meaningful career that contributes to one's life purpose, perceiving one's work as contributing to personal growth, believing one's work serves a greater purpose.

While the purpose and coherence show that meaning can be constructed through making connections among different aspects of life and experiencing life as a coherent whole, the significance component has been much less studied, despite its importance in reflecting what people value in their lives when they are defining their meanings in life. In fact, recent findings suggest that significance, or "mattering", is the most reliable factor predicting people's feelings of meaning in life, compared to purpose and coherence (Costin & Vignoles, 2020). When an action (or life in general) has significance, it means that it should make a difference in the world and thus, may have some impact on certain entities. Therefore, to examine the role of significance in meaning judgment, it is crucial to understand how different types of impact may influence people's meaning judgment differently. Research on sources of meaning (Baum & Steward, 1990) has asked people to list meaningful events in life. The result revealed that across age and gender, meaningful events can be grouped into multiple major categories throughout the lifespan, including: work (i.e. career and education), love and marriage, births of children, independent pursuits (e.g. military service, travel experiences, personal accomplishments), separations or divorces, major purchases and accidents, illness, or death. The events that provided meaning to people seem to involve two major types of impact: the impact that directly affects the person themselves (e.g., love and marriage, births of children, independent pursuits, accidents, major purchases) and society at large (e.g. work). In our study, we were interested in systematically examining how these two different types of impact influence people's judgment of meaning.

Another construct that has been debated similarly by philosophers and psychologists is the concept of happiness. It has been found that happiness and meaning are two essential components in the folk concept of a good life (King & Napa, 1998). On one hand, as subjective states, happiness and meaning can reciprocally influence each other: when primed with positive mood concepts, participants were more likely to report a higher level of meaning in life (King, 2006). Recent work has also found that envisioning a happier future helps people find meaning in their daily life events, especially for those who are searching for meaning in life (Tilburg & Igou, 2018). Reversely, meaning can prolong the feeling of happiness. Participants who perceived higher meaningfulness in happy moments and events reported higher happiness levels after one week, compared to those who perceived less meaningfulness (Catapano, Hardisty, & Aaker, 2017). On the other hand, happiness and meaning are not always correlated, and people, particularly those who sacrifice personal pleasures to participate in contributing to society, might perceive life as meaningful but not necessarily happy (King, 2009; Baumeister, Vohs, Aaker, & Garbinsky, 2013). In fact, these two constructs might stem from different sources in life. Meaning is associated with the past, present, and future whereas happiness is more about the present moment. Furthermore, meaningfulness entails the notion of being a giver, but happiness comprises being a taker and satisfying one's own needs (Baumeister et al., 2013). Accordingly, the thoughts, feelings, and behaviors that produce happiness may differ from those that produce meaning. For instance, participants chose to engage in substantially different weekend activities that would produce meaning rather than happiness (Dwyer, Dunn, & Hershfield, 2017). Therefore, it seems that subjective feelings of happiness and meaning are related but are also distinct.

Moreover, in terms of people's intuitions, recent research on people's judgment of happiness and meaning has focused on the role of moral values in people's judgment. For instance, studies have found that children and adults believe that bad people are not happy (Yang, Knobe, & Dunham, 2020; Phillips, Misenheimer., & Knobe, 2011). Furthermore, even if a morally bad person (i.e. a person who funds terrorist killing) feels fulfilled about his life, people still view this person's life as not meaningful (Prinzing et al., under review). These findings suggest that people think morally bad people are not happy and do not live a meaningful life. Nevertheless, most people in real life are not purely morally good or bad but are ordinary people who would like to become happier or more meaningful in their lives. It remains to be investigated how people think about what makes the life of an ordinary person to be happier or more meaningful. Our studies aim to examine the role of benefits to society and benefits to the self in people's intuitions of happiness and meaning in an ordinary life.

Across three studies, the present study investigated the cognitive mechanism of how individuals make meaning judgments. Our studies focused on the role of two major factors in meaning judgment: the benefits to society (e.g. self-transcending activities and contributions) and the benefits to the self (e.g. pleasure, personal growth), and we were interested in whether people value these aspects equally in meaning judgment. In addition, the current study used happiness judgment as a comparison to meaning judgment to examine whether the two factors affect happiness judgment and meaning judgment similarly. Our findings may reveal people's intuitions of meaning and thus have implications on how to promote a fulfilling life.

Study 1

The purpose of Study 1 was to explore the role of perceived impact to society and to the self in different jobs in its relation to perceived meaning and happiness. Specifically, Study 1 focused on the judgment of meaning in different jobs, as working for a job constitutes a large part of life that people may have intuitions about, and it is often described as an important source of meaning (Fairlie, 2011; Ward & King, 2017). Participants were asked to rate their perceived impact (to the self and to the society at large) for fifteen jobs. Their ratings of impact were

examined in relation to their perceived meaning and happiness associated with each job. All of our studies are preregistered and the materials will be available to the public on OSF.

Method

Participants. We preregistered (preregistration link: https://aspredicted.org/see_one.php) to recruit 100 participants on Amazon Mechanical Turk (MTurk) in exchange for a small amount of payment. Ninety-four participants (M_{age} = 36.14 years, SD = 11.85 years, range = 20-68, female = 37) completed our study. The recruitment criteria were locations in the United States and have an approval rate of 95% or higher. Among all the participants, 68% of the participants were White, 9% Asian or Pacific Islander, 16% Black or African American, 7% Hispanic or Latino.

Design and Procedure. We first conducted a pilot study in which we asked a sample of twenty adults to rate 30 different jobs in terms of the jobs' benefits to the worker and to society. Among 30 jobs, some of them are conventionally associated with more individual benefits (e.g., high salary, high social status) and some of them are associated with more contributions to society (e.g., help someone in need, solve the essential problems in the society). We selected 15 jobs that received diverse ratings on these two dimensions and presented them to participants in a random order, using a within-subject design (see Appendix A for a full list of jobs). For each job, participants were asked to rate four statements regarding the job's impact to the self, impact to society, meaning, and happiness. Participants used a slider to indicate their answers (e.g. "This job makes great contributions to the society"; 0 = "Completely Disagree", 50 = "Neutral", 100 = "Completely Agree"; see Appendix A).

Results and Discussion

No effects of age, gender, race, or education level on participants' subjective judgments were found during preliminary analyses. Therefore, these variables were not included in the subsequent analyses.

As preregistered, we first conducted a hierarchical linear mixed-effect model using the robustImm package in R (Koller, 2019), predicting participants' subjective meaning judgment as a function of the two factors (i.e., impact to society vs. impact to the self), with participant ID and job items included as random intercepts. The result revealed a significant effect of impact to different beneficiaries on the judgment of meaning. Specifically, impact to society was a much stronger positive predictor in meaning judgment ($\beta = 0.62, 95\%$ CI = [0.58, 0.66]), compared to impact to the self, which was a relatively weak predictor ($\beta = 0.17, 95\%$ CI = [0.13, 0.21]).

We also conducted a similar model predicting participants' happiness ratings as a function of benefits to society and benefits to the self, with participant ID and job items included as random intercepts. In contrast to people's rating of meaning, benefits to society ($\beta = 0.21$, 95% CI = [0.17, 0.24]) and benefits to the self ($\beta = 0.27$, 95% CI = [0.23, 0.31]) equally predicted happiness judgment.

Taken together, our results demonstrated that when making judgments about how meaningful a job was, participants considered the impact to society at large as a much more important indicator of the meaningfulness in a job, rather than impact to the self (e.g., fulfilling individual pleasures and needs). In comparison, when making judgments about how happy a job was, participants considered the impact to society and impact to the self to be equally important. In Study 2 we experimentally manipulated the impact to different beneficiaries and examined their roles in meaning and happiness judgment in a real-life situation.

Study 2

While Study 1 investigated the association between judgments of meaning and happiness and impact of different beneficiaries (society vs. the self) about different types of jobs, Study 2 directly examined people's judgment of happiness and meaning in a 2 (impact target: self vs. society) X 2 (impact level: low vs. high) experimental design using four vignettes.

Method

Participants. We preregistered (preregistration link:https://aspredicted.org/see_one.php) to recruit 100 participants from Amazon Mechanical Turk (MTurk) in exchange for a small amount of payment. Participants were recruited from locations within the United States and overall had a 95% or higher approval rate. Ninety-six participants (M_{age} = 37.15 years, SD = 12.32 years, range = 21-76, female = 50) completed our study. 70% of the participants were White, 9% Asian or Pacific Islander, 15% Black or African American, 3% Hispanic or Latino and 3% other.

Design and Procedure. Study 2 also adopted a within-subject design. Four vignettes were presented to participants in a random order, with each vignette describing an individual with high or low levels of contributions to society, paired with high or low levels of personal benefits that they created in life. Therefore, four vignettes represented four conditions: high benefits to society and high benefits to the self; high benefits to society and low benefits to the self; low benefits to society and high benefits to the self; low benefits to society and benefits to the self (Appendix B). After reading about each vignette, participants were asked to indicate to what extent they thought this person's life was meaningful and to what extent they thought this person's life was meaningful and to either rate meaning first or happiness first.

Results and Discussion

The effects of conditions on perceived meaning and perceived happiness were assessed via hierarchical linear mixed-effects models using the lme4 package in R (Version 3.0.1; Bates, Maechler, Bolker, & Walker, 2015).

Meaning Judgment. Similar to Study 1, to understand how impact to society and impact to the self affected participants' meaning judgment, we predicted participants' ratings of meaning as a function of conditions (i.e., low self-high society, low self-low society, high self*high society, high self-low society*), with a random intercept for each participant. We found a significant main effect of conditions on subjective meaning judgment, $(F(3, 278.26) = 94.81, p < 10^{-10})$ 0.001). A following post hoc pairwise comparison was conducted on the four conditions using Tukey's adjustment. The results revealed that the individual in the *high self-high society* scenario received the highest rating on subjective meaning judgment (M = 6.11, SE = 0.15), whereas the individual in the low self-low society scenario received the lowest rating on meaning (M = 3.53, SE = 0.15, (t(295) = 13.93, SE = 0.19, p<0.001), Figure 1. More importantly, participants evaluated the life of the individual with low impact to the self and high impact to the society as more meaningful (M = 5.83, SE = 0.15) than the individual with high impact to the self and low impact to the society (M = 4.21, SE = 0.15), suggesting that people value impact to society more than impact to individual when making judgments about meaning in life, (t(297) = -8.93, SE =0.19, *p*<0.001), Figure 1.

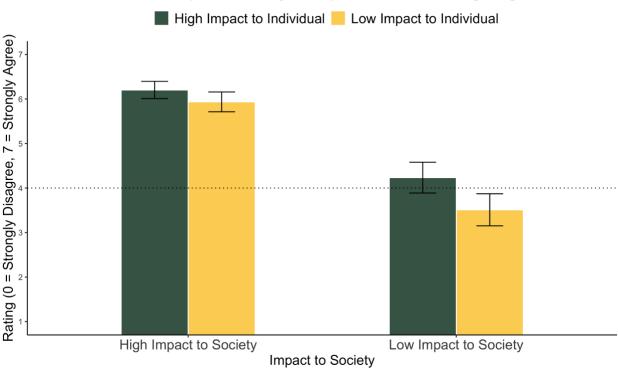
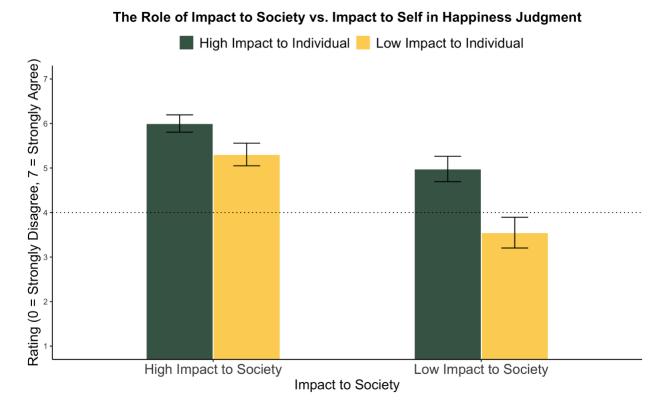
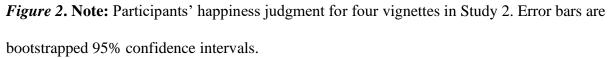


Figure 1. Note: Participants' meaning judgment for four vignettes in Study 2. Error bars are bootstrapped 95% confidence intervals.

Happiness Judgment. To examine whether impact to society and impact to the self play a similar role in happiness judgment, we predicted participants' ratings of happiness as a function of four conditions, with a random intercept for each participant. Same as meaning judgment, there was a significant main effect of conditions on subjective happiness judgment, (F(3, 278.69) = 61.63, p < 0.001). We also conducted a post hoc pairwise comparison on the four conditions using Tukey's adjustment. Consistent with result of meaning judgment, participants considered the life of the individual in the *high society-high self* condition as the happiest (M =6.01, SE = 0.14), and the individual in the *low society-low self* condition as the unhappiest (M =3.52, SE = 0.14; t(278) = 13.17, SE = 0.19, p < 0.001). However, in contrast to the meaning judgment, there was no significant difference between the conditions of *high society-low* (M = 4.98, SE = 0.14) and *low society-high self* (M = 5.32, SE = 0.139), though participants rated the person with low societal contribution but high personal benefits as slightly happier than the person with high societal contribution but low personal benefits , (t(279) = -1.82, SE = 0.19, p = 0.27).





Using experimental manipulation, Study 2 conceptually replicated the findings of Study 1 in a real-life context by showing that impact to society (e.g., helping someone in need, solving essential problems in the world) played an important role in people's meaning judgment: having high impact to society but low impact to the self is more meaningful than having low impact to society but high impact to the self. The previous two studies were designed to highlight the role that impacts to the self versus society in people's judgment of meaning and happiness in life. Extending these results, Study 3 sought to examine people's intuitions about how to increase meaning and happiness in a real-life advice-giving situation.

Method

Participants. We recruited 200 adult participants from MTurk in exchange for a small amount of payment (preregistered link: https://aspredicted.org/see_one.php). 20 participants failed to complete the study or the attention check question and thus, were excluded from the study. Therefore, one hundred and eighty participants were included for data analysis (M_{age} = 39.06 years, SD = 12.96 years, range = 18-76, female = 67). Among these participants, 80% of the participants were White, 7% were Asian or Pacific Islander, 7% were Black or African American, 4% were Hispanic or Latino and 2% were other.

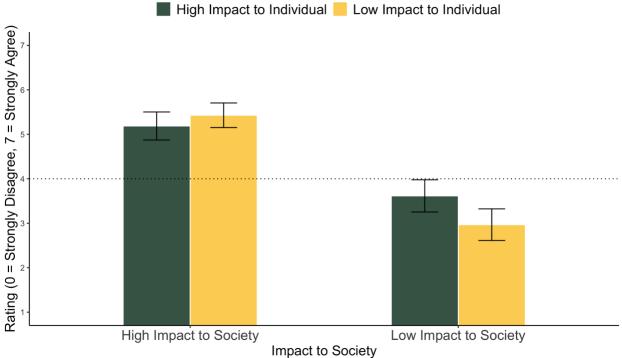
Procedure and Design. This study adopted a between-subject (*meaning condition* vs. *happiness condition*) design. Participants were asked to serve as a consultant for an online support program that provided advice for people with various life issues. Participants were randomly assigned to either meaning or happiness conditions and read statements about an individual who would like to make his or her life more meaningful (*meaning* condition) or happier (*happiness* condition). After they completed the manipulation check question about the person's goal (passing rate: 96.7%), they were asked to write down advice on the specific activities that this person should do to increase either meaning or happiness in his/her life (see Appendix C). Participants were told that their advice would be sent to their clients via email after the study. After providing open-ended advice, participants were asked to evaluate four types of activities recommended by the therapist in the program, featuring high vs. low levels of

contributions to society paired with high vs. low levels of benefits to the self (i.e., high societylow self, high society-high self, low society-low self, low society-high self), on a 7-point scale (1 = "Strongly Disagree" and 7 = "Strongly Agree").

Results and Discussion

Open-ended responses. Each response was coded in terms of whether it mentions benefits to others (e.g volunteer, donation, adoption) or benefits to the self (e.g. travel, exercise, personal hobbies). Each response received 1 if it fell into the category, and received 0 if it did not fall into that category. The first author of the paper coded all the responses and a reliability coder coded 20% of the sample. Inter-rater reliability, as indicated by two-way random effects, showed that the intraclass correlation coefficient (ICC) was high for both the meaning condition (0.85 and 0.87) respectively for the self and others categories) and happiness condition (0.92 and 0.85 respectively for the self and others categories). In the *meaning* condition, there was a significant difference between the self category and the others category, (t(179) = 3.93, p < 0.001). 53.8% of responses mentioned activities that could potentially affect others, and 28.6% of the responses mentioned activities that would mainly only benefit the self. In the *happiness* condition, the difference between the self category and the others category was not significant, (t(176) = 0.57, p = 0.57). Only 29.2% of the responses mentioned activities that produce impacts to others, whereas 50.6% of participants gave out advice with activities that produce benefits to the self.

Meaning Judgment. To examine whether people think some activities were more helpful for increasing a person's meaning in life, we conducted a linear mixed-effects model, predicting participants' meaning judgment as a function of condition, with a random intercept of each participant. The result yielded a significant main effect of condition on participants' meaning judgment, (F(3, 270) = 56.84, p < 0.001). The post-hoc comparison test using Tukey's adjustment showed that the type of activities that produce high impact to the society and high impact to the self received highest ratings in participants' meaning judgment (M = 5.19, SE = 0.17), whereas the type of activities that produce low impact to the society and low impact to the self was rank the lowest in meaning judgment (M = 2.97, SE = 0.17; t(270) = 9.878, p < 0.001). The type of activities with high impact to society and low impact to the self was rated the highest on meaning among all four types of activities (M = 5.43, SE = 0.17) while the type of activities with low impact to the self was rated as the second-lowest among all (M = 3.62, SE = 0.17; t(270) = -8.068, p < 0.001). These results were overall consistent with the results of Study 2, except the fact that in this study, high impact to society and low impact to the self was granted the highest in meaning judgment. One possible explanation is that participants understood that the individual who sought advice for meaning already had a happy life, therefore his or her personal needs and pleasures have already been fulfilled.



Advice Giving: The Role of Impact to Society vs. Impact to Self in Meaning Judgment

Figure 3. Note: Participants' meaning judgment for four pieces of advice in Study 3. Error bars are bootstrapped 95% confidence intervals.

Happiness Judgment. We also conducted a similar linear mixed-effects model predicting people's happiness judgment as a function of condition, with a random intercept of each participant. There was a significant main effect of condition on happiness judgment, (*F*(3, 264) = 39.53, *p* < 0.001). A post-hoc pairwise comparison test (Tukey's adjustment) showed that the type of activities with high impact to society and high impact to the self was considered as the most happiness-improving (*M* = 5.45, *SE* = 0.17) whereas the type of activities with low impact to society and low society to the self was considered as the least happiness-improving (*M* = 3.16, *SE* = 0.17; *t*(264) = 10.268, *p* < 0.001). However, there was no difference between the high impact to society and low impact to the self activities (*M* = 4.67, *SE* = 0.17) and the low impact to society and high impact to the self activities (*M* = 4.99, *SE* = 0.17; *t*(264) = -1.409, *p* = 0.49). Though there was no significant difference between these two types of activities, the type of activities of low impact to society and high impact to the self was still rated as slightly more happiness-improving, suggesting that happiness may be associated with promoting some personal pursuits.

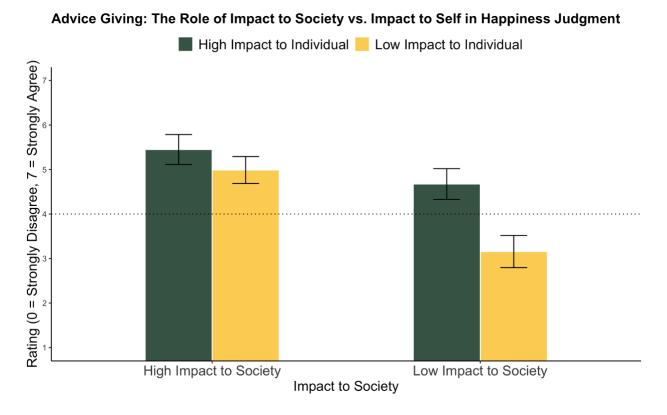


Figure 4. Participants' happiness judgment for four pieces of advice in Study 3. Error bars are bootstrapped 95% confidence intervals.

The findings from Study 3 replicated and extended the results from prior studies. The findings show that when giving advice to people who need more meaning in life, people focused on contributions to society instead of benefits to the self. In contrast, when giving advice to people who need more happiness in life, participants focused equally on contributions to society and benefits to the self.

General Discussion

Across three studies, we examined the role of benefits to society and benefits to the self in people's intuitions of meaning, as compared to their intuitions of happiness. We found that contributions to society was a much stronger predictor than benefits to oneself in people's ratings of the meaningfulness of jobs (Study 1). People relied more on the impact to society when evaluating the meaning of a person's life, considering a life with high impact to society and low benefits to the self as more meaningful than a life with low impact to society and high benefits to the self (Study 2). People show a similar intuition when giving advice to the person who wants to increase meaning in life, and recommended activities that would have a high impact to society (Study 3). In contrast, impact to society and impact to the self were weighted equally heavily in people's ratings of happiness for jobs (Study 1), perceptions of happiness in life (Study 2), and advice for increasing happiness (Study 3). The findings suggest people intuitively view meaning and happiness as two distinct constructs, and the impact beyond oneself plays an important role in people's meaning judgment.

Our studies have also revealed interesting comparisons between people's intuitions of meaning and happiness. In recent studies, researchers have found that children and adults think "bad people are not happy" (Yang et al., in press). And even if bad people who are involved in evil activities (i.e., funding terrorist killings) feel subjectively content with their lives, people still consider the lives of these morally bad people as meaningless (Prizing et al., under review). However, it remains to be examined what contributes to happiness in an ordinary life that is not purely good or bad. We found that people actually take into consideration both impact to the self and impact to society when thinking about happiness. Therefore, it seems one key difference between meaning and happiness is that people place more emphasis on impact to the self in happiness judgment than in meaning judgment. Our results are consistent with the notion that meaning is associated with being a "giver", centering on perspectives and impact beyond oneself, whereas happiness is more associated with being a "taker", centering on the pleasure and positive affect regarding the self (Tilburg & Igou, 2018; Baumeister et al., 2013)

Our findings help to illuminate the cognitive process of how people make meaning judgment. Most existing studies on feelings of meaning in life have conceptualized meaning in life as a subjective life experience and relied on people's own interpretations of meaning (e.g., "I understand my life's meaning") (Steger, Frazier, Oishi, & Kaler, 2006). Nonetheless, it is not clear what factors contribute to people's sense of meaning. The present research reveals that within different domains of life, there are certain moral values that are commonly shared: people use impact to society as a benchmark when evaluating meaning. The current research is also consistent with the previous studies on the different definitions of meaning and happiness, though these two constructs are often viewed as related. The results of the current research agree with the notion that happiness is centered on fulfilling personal needs and thus produce good feelings about the self, whereas meaning is centered on the existential perspective in the relation to the surrounding (Tilburg & Igou, 2018). Our findings thus provide insights on the moral aspects that participants use when they are evaluating the meaning in life, along with providing possible implications for increasing people's sense of meaning in life.

It should be noted that the current research explores how people make meaning and happiness judgment towards others, and the question of whether they will use the same moral standards to evaluate themselves still remains unanswered. Moreover, whether their judgment would influence their behaviors is still unknown. Individuals tend to avoid tasks that they deemed as costly, effortful, or beyond their capacities, though it might be morally good to do so (Bandura, 1980). Therefore, it is not clear whether they will engage in such behaviors to increase meaning in their lives. It may also be worthwhile to examine other social and cognitive factors that may affect people's intuitions of meaning. Recent research has found that using the word "you" to refer to people in general, known as the "generic you", helps people to make meaning from negative experiences (Orvell, Kross, & Gelman, 2017). Therefore, it is worth investigating whether there are similar linguistic effects on how people make judgment of meaning. For example, religious words, such as god, came up as a piece of advice multiple times in the open response question in Study 3, and religion is one important predictor of meaning (Steger & Frazier, 2005). However, the present study did not take religion into account since this study emphasizes the impact to different beneficiaries. Future research should investigate whether different religious beliefs would affect a person's judgment on meaning, specifically on the impact to society and impact to the self.

In conclusion, the present study reveals that meaning and happiness are two different constructs as people focused on a person's impact to society when making meaning judgment, and focused on both contribution to society and personal needs when making happiness judgment. People applied the same judgments when giving advice: when offering advice for an ordinary person who wants to increase meaning in life, people suggested activities involving contribution to society, whereas when offering advice for an ordinary person who wants to increase happiness in life, people recommended activities that fulfill personal needs as well as activities that make contributions to the society. Therefore, focusing on the self can help a person's life to be perceived as happier, but for a life to be viewed as meaningful, the key is to make a broader impact to go beyond the self.

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Appendix A

Study 1

The fifteen jobs that we selected based on the piloting are (appear in random order):

- 1. Professional Athlete
- 2. Doctor
- 3. Lawyer
- 4. University Professor
- 5. Investment Banker
- 6. Police
- 7. Flight Attendant
- 8. Web Designer
- 9. Primary School Teacher
- 10. Stay-at-home Mom
- 11. Drug Dealer
- 12. Construction worker
- 13. Farmer
- 14. Salesperson
- 15. Religious Clergy

Example Question:

Please rate to what extent you agree with the following statement for each job:

"This job makes great contributions to society".

Appendix B

The Four Vignettes from Study 2

Four vignettes:

- James spends most of his time engaging in activities that provide low benefits to himself, in terms of attaining wealth, social recognition, and personal growth. James' actions directly benefit a lot of other people, since the activities spread kindness and help to solve the essential social problems (poverty, human rights, equality, etc.), making a big impact to society.
- 2. John spends most of his time engaging in activities that provide **high benefits to himself**, in terms of attaining wealth, social recognition, and personal growth(be able to achieve the better self in your ability).

John's actions also **directly benefit a lot of other people,** since the activities spread kindness and help to solve the essential social problems (poverty, human rights, equality, etc.), making a big impact to society.

3. Robert spends most of his time engaging in activities that provide high benefits to himself, in terms of attaining wealth, social recognition, and personal growth. Robert's actions do NOT directly benefit a lot of other people since the activities do not spread kindness and do not help to solve the essential social problems (poverty, human rights, equality, etc.), making little impact to society.

4. Michael spends most of this time engaging in activities that provide low benefits to himself, in terms of attaining wealth, social recognition, and personal growth. Michael's actions do NOT directly benefit a lot of other people since the activities do not spread kindness and do not help to solve the essential social problems (poverty, human rights, equality, etc.), making little impact to society.

Appendix C

Scripts and the Four Types of Advice from Study 3

Meaning Statement:

"Overall I feel that my life is pretty happy. I enjoy my day-to-day activities and I have many good feelings. But I also feel like there is something missing, I feel like I don't really understand the meaning of my life. I want to do something to make my life more meaningful."

Happiness Statement:

"Overall I feel that my life is pretty meaningful. I understand the purpose of my day-today activities and I have many meaningful long-term pursuits. But I also feel like there is something missing, I feel like I don't have enough good feelings. I want to do something to make my life happier."

Four Types of Activities:

- This type of activities may provide low benefits to oneself (e.g., DO NOT lead to more wealth, sensory pleasures, social recognition or personal growth) but high benefits to society (e.g., improve people's lives or solve critical social problems).
- This type of activities may provide high benefits to oneself (e.g., lead to more wealth, sensory pleasures, social recognition or personal growth) and high benefits to society (e.g., improve people's lives or solve critical social problems).
- This type of activities may provide high benefits to oneself (e.g., lead to more wealth, sensory pleasures, social recognition or personal growth) but low benefits to society (e.g., DO NOT improve people's lives or solve critical social problems).

4. This type of activities may provide low benefits to oneself (e.g., DO NOT lead to more wealth, sensory pleasures, social recognition or personal growth) and low benefits to society (e.g., DO NOT improve people's lives or solve critical social problems).