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The Ordinary Concept of a Meaningful Life: The Role of Subjective and Objective Factors in Third-Person Attributions of Meaning

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ABSTRACT

The desire for a meaningful life is ubiquitous, yet the ordinary concept of a meaningful life is poorly understood. Across six experiments (total N = 2,539), we investigated whether third-person attributions of meaning depend on the psychological states an agent experiences (feelings of interest, engagement, and fulfillment), or on the objective conditions of their life (e.g., their effects on others). Studies 1a–b found that laypeople think subjective and objective factors contribute independently to the meaningfulness of a person's life. Studies 2a–b found that positive mental states are thought to make a life more meaningful, even if derived from senseless activities (e.g., hand-copying the dictionary). Studies 3a–b found that agents engaged in morally bad activities are not thought to have meaningful lives, even if they feel fulfilled. In short, both an agents' subjective mental states and objective impact on the world affect how meaningful their lives appear.

The search for life's meaning appears across cultures and historical periods, and is commonly thought to reflect an innate human need. Victor Frankl (1971) famously claimed that a human being's 'main concern is not to gain pleasure or to avoid pain but rather to see a meaning in [their] life' (p. 115). Empirical work on this topic finds that most people do in fact report a greater interest in living a meaningful life than a pleasant one (Kim et al., 2014). Indeed, this desire is so strong that the more a person feels that their life lacks meaning, the greater their risk of suicide (Chen et al., 2020; Schnell et al., 2018). On the other hand, those who do find their lives meaningful tend to display superior mental and physical health across a wide range of metrics (Steger, 2017). For these reasons, the feeling that one's life is meaningful has been called a 'flagship indicator of well-being' (Steger et al., 2013), and is the focus of an enormous amount of research (for reviews, see: Baumeister & Landau, 2018; King & Hicks, 2021; Wong, 2013).

Yet, something important has so far been missing from this research. The standard self-report measures of meaning in life (e.g., the Purpose in Life Test, Crumbaugh & Maholick, 1964; the Meaning in Life Questionnaire, Steger et al., 2006; or the Perceived Personal Meaning Scale, Wong, 1998) all require participants to define 'meaning' or 'meaningful' for themselves. This strategy of offloading definitional questions to participants can be quite useful for researchers.

However, at present, little is known about how study participants use these terms, and, therefore, little is known about what people are reporting when they complete these questionnaires.

A better understanding of the ordinary concept of a meaningful life will be important if this body of research is to be put to practical use. At least one primary reason for academics to study life's meaning should be to help people live more meaningfully. People make real life choices – everything from what to do with an afternoon to what career to pursue – on the basis of what they take to be meaningful. The trouble is that it is difficult to help people achieve a goal without understanding what the goal is.

One strategy for investigating the lay concept would be to simply ask people for their definitions of a meaningful life, and to look for commonalities or themes (Wong, 1998). However, people are rarely in a position to explain how or why they form the judgments that they do (Nisbett & Wilson, 1977; Wilson & Dunn, 2004). Just as competent English speakers can be unable to explain the rules of English grammar (Chomsky, 1965), a competent concept-user may be unable to explain the criteria they use in applying it. Hence, a theory of meaning in life developed by asking people what makes life meaningful would be analogous to a theory of grammar developed by asking native speakers what makes a sentence grammatical. A better approach to understanding lay theories and

concepts involves, not asking for explicit definitions, but observing participants' *use* of their concepts. On this approach, researchers present participants with short stories or vignettes, and systematically vary different factors to see what influences participants' judgments. This methodology is ubiquitous in moral psychology (e.g., Clifford et al., 2015; Greene, 2001), and experimental philosophy (Knobe & Nichols, 2017; Phillips et al., 2017).

The present research investigates how lay people ordinarily think about what makes a life meaningful. To this end, we considered philosophical theories to be an important source of insight. After all, philosophers have spent much time reflecting on and attempting to clarify this topic (for an overview, see Metz, 2013b). In the academic philosophical literature, there are three main kinds of theories: subjectivist, objectivist, and hybrid. Broadly speaking, subjectivists claim that a life is meaningful when the person living it experiences certain mental states – typically positive attitudes towards their life or activities (Frankfurt, 1998; Rowlands, 2015). For instance, Richard Taylor (1970) once argued that feeling fulfilled by one's life is both necessary and sufficient for it to be meaningful. Objectivists, on the other hand, claim that one's life is meaningful when certain subject-independent, evaluative facts obtain (Metz, 2013a; Smuts, 2013). For instance, Frank Martela (2017) argues that 'lives are meaningful to the extent that they are able to contribute to something beyond themselves … [i.e., insofar as they involve] promoting or realizing some intrinsic value that goes beyond the agent in question' (pp. 233, 241). Objectivists typically argue that this value can be of various kinds: moral (e.g., benefiting others), aesthetic (e.g., producing beautiful art), epistemic (e.g., making a scientific discovery), and perhaps others. Hybrid views, meanwhile, claim that life is meaningful 'when subjective attraction meets objective attractiveness' (Wolf, 2010, p. 26). That is, one's life is meaningful only when one possesses certain positive attitudes towards one's activities, *and* those activities are objectively valuable (Evers et al., 2016; Wolf, 1997, 2010). Hence, philosophers typically claim that, to be meaningful, a life must meet a subjective condition, an objective condition, or both simultaneously.

We tested these claims against lay persons' assessments using short vignettes that systematically varied subjective and objective factors in a series of 2 × 2 experimental designs. We assessed third-person attributions of meaning and *agent-perceived* meaning – that is, the extent to which participants believed that the agent in the vignette had a meaningful life, and the extent to which participants believed that *the agent* felt that their life was meaningful. This enabled us to explore not only the conditions under which lay people think a life is meaningful, but also when they think someone is (in their view) an accurate or inaccurate judge of the meaningfulness of their own life.

The six experiments reported here are organized into three pairs. Each pair includes an exploratory study and a conceptual replication using a wider variety of vignettes. Studies 1a-b investigated the effects of fulfillment and contribution on third-person attributions of meaning and agent-perceived meaning. The subsequent studies investigated potential boundary conditions – i.e., how much it matters whether one's activities are sensible (Studies 2a-b) or moral (Studies 3a-b). For each pair of experiments, we report both sets of results before discussing. The exploratory studies also included a within-subjects component that is not reported here, though these data are available online, along with all other data, materials, and the R scripts used for analyses: https://osf.io/cn5ed/. The confirmatory studies were pre-registered on AsPredicted: https://aspredicted.org/35cb5.pdf.

Study 1a: The Roles of Fulfillment and Contribution

Our first research question was whether people consider a life meaningful when it is fulfilling but makes no contribution to the world, or when it is unfulfilling but does make a contribution. These are the cases in which the aforementioned philosophical theories have different implications. Each would agree that a life is meaningful when it is both fulfilling and makes a contribution, and that a life is not (or not especially) meaningful when it is unfulfilling and makes no contribution. The theories diverge in their predictions when only one of the two conditions is met. We independently manipulated fulfillment and contribution and assessed attributions of meaning and agent-perceived meaning.

Method

Participants. Using Amazon's Mechanical Turk, we recruited 402 adults from across the United States. Participants who responded to an item that read 'This is an attention check, please leave this question blank' were excluded from analysis ($n = 11$). This left $N = 391$ participants ($M_{Age} = 39.24$, $SD_{Age} = 12.84$; 43.2% women, 56.3% men, <1% other or prefer not to say; 4.9% Asian, 7.4% Black or African American, 4.3% Hispanic or Latinx, 76.7% White or European American, 6.7% mixed, other, or prefer not to say).

Procedure and Measures. The vignettes in this study described an agent named Teddy, who had a comfortable life working in finance. Participants were randomized to one of four conditions in a 2 (Fulfillment:

fulfilled or unfulfilled) x 2 (Contribution: high or low) design. The fulfilled conditions included the following description of the agent's mental states: 'Teddy loved working in finance. He was truly engaged with life, and his day-to-day activities left him with a sense of fulfillment.' The unfulfilled conditions, by contrast, included the following description: 'Teddy really disliked working in finance. He wasn't truly engaged with life, and his day-to-day activities left him feeling unfulfilled.' In the high contribution conditions, he was described as 'a very generous philanthropist, giving away over half of his annual earnings to charities.' In the low contribution conditions, he was described as 'a wine connoisseur, collecting and drinking very expensive vintage wines.' After reading the vignette, participants used 7-point Likert scales (1 = 'Strongly disagree', 2 = 'Disagree', 3 = 'Slightly disagree', 4 = 'Neither agree nor disagree', 5 = 'Slightly agree', 6 = 'Agree', 7 = 'Strongly agree') to respond to a series of statements:

- Teddy lived a meaningful life
- Teddy felt that he was living a meaningful life
- Teddy made a valuable contribution to the world
- Teddy felt fulfilled

These statements were mixed in with several additional items, which concerned the attitudes Teddy held towards his life, whether his life made for a good story, and whether he lived a good life overall. These items are beyond the focus of the present analyses but are included in the online materials: https://osf.io/cn5ed/.

Results

We first performed manipulation checks. Agreement with 'Teddy felt fulfilled' was significantly higher in the fulfilled conditions ($M = 6.15$, $SD = .81$) than unfulfilled conditions ($M = 3.12$, $SD = 1.54$), $t(388) = 24.23$, $p < .001$, $d = 2.45$. Agreement with 'Teddy made a valuable contribution to the world' was significantly higher in the high contribution conditions ($M = 6.36$, $SD = .84$) than low contribution conditions ($M = 4.05$, $SD = 1.55$), $t(388) = 18.26$, $p < .001$, $d = 1.85$.

Next, we tested whether third-person attributions of meaning differed from third-person attributions of agent-perceived meaning. Collapsing across conditions, agreement with 'Teddy lived a meaningful life' ($M = 5.21$, $SD = 1.51$) differed significantly from agreement with 'Teddy felt that he was living a meaningful life' ($M = 4.75$, $SD = 2.01$), paired $t(390) = 5.40$ $p < .001$, $d = .26$. Moreover, the correlation between these third-person attributions of meaning and agent-perceived meaning was not especially strong,

$r = .57$, $p < .001$. Thus, participants' own assessments of meaning were related to – but clearly distinct from – their beliefs about the agent's own assessment of his life.

We used a 2 (unfulfilled, fulfilled) x 2 (low, high) factorial ANOVA to compare the effects of Fulfillment and Contribution on third-person attributions of meaning (Figure 1, Panel A). This revealed main effects of Fulfillment, $F(1, 387) = 100.86$, $p < .001$, $\eta_p^2 = .21$ (95% CI: .15, .26), and Contribution, $F(1, 387) = 135.60$, $p < .001$, $\eta_p^2 = .26$ (95% CI: .20, .32), as well as a significant interaction effect, $F(1, 387) = 13.93$, $p < .001$, $\eta_p^2 = .03$ (95% CI: .01, .07). Tukey's post-hoc tests found that all pairwise comparisons were significant ($ps < .001$) except between the fulfilled-low contribution and unfulfilled-high contribution conditions ($p = .379$). The majority of participants in the unfulfilled-high contribution condition (87.9%) and fulfilled-low contribution condition (75.8%) indicated 'Slightly agree' or higher to the statement that the agent lived a meaningful life.

We then ran a similar ANOVA in which the dependent variable was *agent-perceived* meaning (Figure 1, Panel A). This revealed a very large main effect of Fulfillment, $F(1, 387) = 367.99$, $p < .001$, $\eta_p^2 = .49$ (95% CI: .43, .54), a main effect of Contribution, $F(1, 387) = 32.02$, $p < .001$, and a small interaction effect, $F(1, 387) = 8.38$, $p = .004$, $\eta_p^2 = .02$ (95% CI: .00, .05). Tukey's post-hoc tests found that all pairwise comparisons were significant ($ps < .001$), except between the fulfilled-low contribution and fulfilled-high contribution conditions. Hence, when the agent in the vignette felt fulfilled, participants thought that he considered his life meaningful *regardless* of whether he made a contribution. However, when the agent was unfulfilled, they thought he considered his life more meaningful only when he made a contribution.

Given the very large effect of Fulfillment on attributions of agent-perceived meaning, we computed the correlation between participants' responses to 'Teddy felt that he was living a meaningful life' and 'Teddy felt fulfilled' across conditions. These two variables were highly correlated, $r = .86$, $p < .001$.

Note: 'A-P Meaning' indicates 'agent-perceived meaning.' Error bars indicate 95% confidence intervals.

Study 1b: Conceptual Replication

This study aimed to replicate the results of Study 1a with additional vignettes, and to address some of its potential weaknesses. First, in Study 1a, the vignettes described a single agent, who was male and of relatively high socioeconomic status. In this study, we
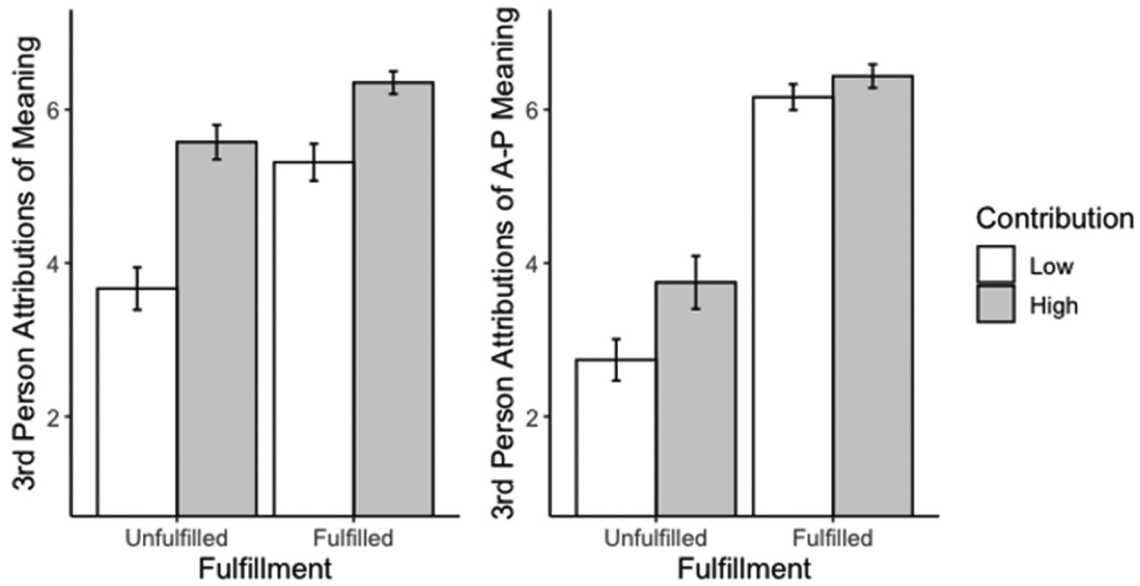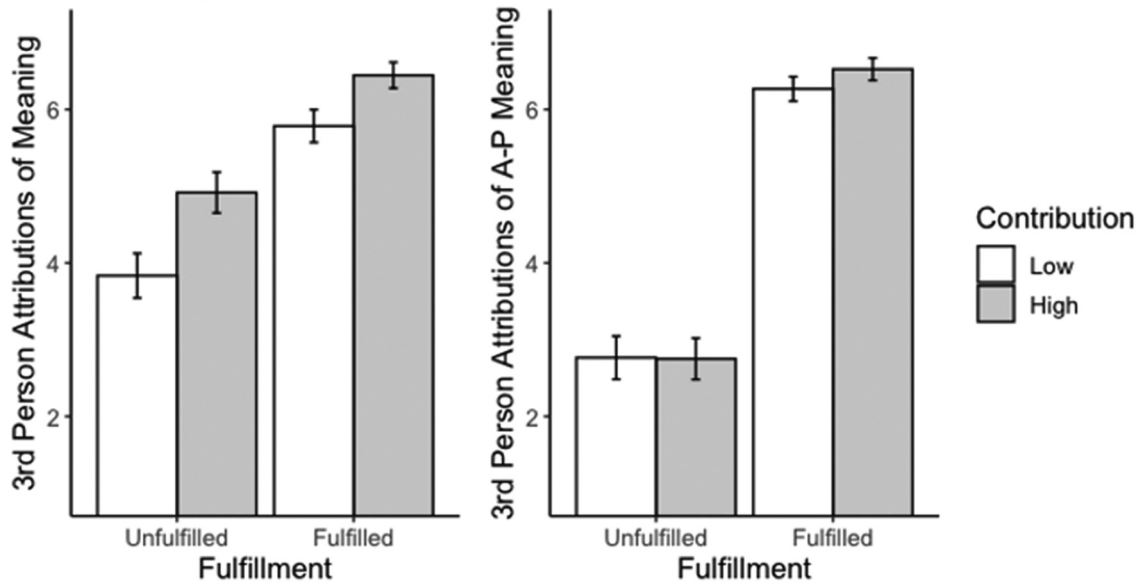
Figure 1. Third-Person Attributions of Meaning and Agent-Perceived Meaning in Studies 1a–b.

used three sets of vignettes with different agents. Two of these three agents were female, each was described as being either working-class or middle-class, and each was given an ethnically ambiguous name (Ariana, Marcus, and Naomi). Second, in Study 1a, the vignettes mentioned two parts of the agent's life (his career in finance, and either his wine connoisseurship or philanthropy). Participants might have believed the agent to have felt differently about his work versus non-work activities. For instance, he might have been seen as feeling unfulfilled by a career in finance but fulfilled by charitable giving.

To address this issue, in Study 1b, each vignette mentioned only one activity that the agents were engaged in. One agent, Ariana, was described as running a restaurant and eating by herself each night (low contribution) or as providing meals to local homeless people (high contribution). Another, Marcus, was described as playing on an amateur football team (low contribution) or as coaching a football team for children with special needs (high contribution). The third, Naomi, was described as playing the cello in her garage (low contribution) or for thousands of adoring fans (high contribution).

Method

Participants. Using Amazon's Mechanical Turk, we recruited 411 adults from across the United States. Before they began, participants were alerted that there would be a comprehension check embedded in the survey. This was a text-entry question that read: 'Please summarize the life of the person you read about. You only need to write a sentence or two. We just want to make sure you read carefully.' Participants who wrote nonsense, or obviously irrelevant or inaccurate information ($n = 5$) were excluded from analysis. We also excluded participants ($n = 10$) who spent less than 5 seconds reading the vignette (an impossibly fast time). This left $N = 396$ ($M_{Age} = 39.19$, $SD_{Age} = 12.60$; 57.8% women, 40.9% men, 1.3% other gender or prefer not to say; 8.3% Asian, 10.1% Black or African American, 6.1% Hispanic or Latinx, 67.9% White or European American 1.0% mixed race, 6.6% other or prefer not to say).

Procedure and Measures. Participants in this study were randomized to one of three agents, and then to one of four main conditions, parallel to those of Study 1a. After reading the vignette, participants used 7-point Likert scales (same as Study 1a) to respond to the following statements:

- [Agent] lived a meaningful life
- [Agent] felt that [s]he was living a meaningful life
- [Agent] made a valuable contribution to the world
- [Agent] felt fulfilled
- [Agent's] activities were sensible things to spend time on*
- [Agent's] activities were pointless*
- [Agent's] activities were valuable*
- [Agent] was a good person*

Finally, on a separate page of the survey, participants responded to the comprehension check (see above). Note, the asterisked items above were not analyzed in this study but were important for subsequent studies (2b and 3b). For consistency, we used the same set of items across the three confirmatory studies. This set also included several items that were used for exploratory purposes. These are not discussed here and are available with the rest of the online materials: https://osf.io/cn5ed/.

Results

We first performed manipulation checks, collapsing across agents. Agreement with '[Agent] felt fulfilled' was higher in the fulfilled conditions ($M = 6.21$, $SD = 1.07$) than the unfulfilled conditions ($M = 2.62$,

$SD = 1.44$), $t(362.01) = 28.10$, $p < .001$, $d = 2.83$. Agreement with '[Agent] made a valuable contribution to the world' was higher in the high contribution conditions ($M = 6.06$, $SD = 1.02$) than the low contribution conditions ($M = 4.57$, $SD = 1.48$), $t(352.19) = 11.64$, $p < .001$, $d = 1.17$.

As in Study 1a, third-person attributions of meaning (i.e., agreement with '[Agent] lived a meaningful life') were positively correlated with third-person attributions of agent-perceived meaning (i.e., agreement with '[Agent] felt that [s]he was living a meaningful life'), $r = .67$, $p < .001$. However, they again differed significantly, paired $t(395) = 8.28$, $p < .001$.

To determine the effects of Fulfillment and Contribution on third-person attributions of meaning and agent-perceived meaning, we used the *lmerTest* package in R (Kuznetsova et al., 2017) to run mixed effects models (Figure 1, Panel B). Since Fulfillment and Contribution were the factors of interest, they were treated as fixed factors. Since agent was simply a robustness check, it was treated as a random intercept. The first model, with third-person attributions of meaning as the dependent variable, revealed significant main effects of Fulfillment, $b = 1.95$, $t(389.99) = 11.45$, $p < .001$, and Contribution, $b = 1.09$, $t(390.14) = 6.40$, $p < .001$, with no significant interaction, $b = -.42$, $t(390.03) = -1.75$, $p = .081$. Across agents, the majority of participants in the unfulfilled-high contribution conditions (74.0%) and fulfilled-low contribution conditions (90.0%) indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful.

In contrast to Study 1a, we found no difference between the high and low contribution versions of the unfulfilled conditions. This may reflect the fact that, as mentioned above, participants in Study 1a may have seen the agent as feeling unfulfilled by a career in finance but fulfilled by charitable giving. In this study, we eliminated that potential confound by ensuring that each vignette only mentioned one activity for each agent.

The second model, with third-person attributions of agent-perceived meaning as the dependent variable, revealed a significant main effect of Fulfillment only, $b = 3.50$, $t(392.00) = 21.86$, $p < .001$. There was no significant effect of Contribution ($p = .93$), and no interaction ($p = .23$). As in Study 1a, responses to '[Agent] felt that [s]he was living a meaningful life' and '[Agent] felt fulfilled' were highly correlated across conditions, $r = .89$, $p < .001$.

These results confirm our pre-registered hypotheses: replicating Study 1a, we found main effects of both

Fulfillment and Contribution on third person attributions of meaning in life.

Discussion: Studies 1a–1b

We sought to determine whether people consider a life meaningful when it is fulfilling but makes no valuable contribution to the world, or when it is unfulfilling but does make a contribution (that is, when it meets a subjective but not objective criterion, and vice versa). In two studies, we found effects of both fulfillment and contribution on third-person attributions of meaning. Hence, like hybrid theorists (Evers et al., 2016; Wolf, 1997, 2010), laypeople considered both factors to be relevant. But, unlike hybrid theorists, the absence of an interaction effect suggests that they didn't think that meaning only arises when *both* factors are present. Instead, each was viewed as independently sufficient for a meaningful life. In both studies, the majority of participants in the mixed conditions (i.e., fulfilled-low contribution and unfulfilled-high contribution) indicated 'Slightly agree' or higher to the statement that the agent had a meaningful life (percentages ranging from 74.0% to 90.0%). These results suggest that the majority of people hold an implicit conception of meaningfulness that is inconsistent with the three theories that currently predominate the philosophical literature. Specifically, most participants thought that meaningfulness could be bestowed by *either* subjective states (i.e., feelings of fulfillment) *or* objective conditions (i.e., making a valuable contribution).

One possible explanation for these results is that our participants were epistemically deferential objectivists. That is, while they themselves thought that meaningfulness depends solely on objective conditions, they also deferred to the judgment of the person living the life. After all (the thinking may go), an agent typically holds positive attitudes towards their life only when they believe that they are doing something valuable and worthwhile. Thus, knowing that someone holds such positive attitudes, participants might have assumed that the agent had reason to believe that their activities were objectively valuable. Epistemically deferential individuals might simply accede to that person's judgment, even if they see no basis for it.

However, this explanation does not fit the data. First, in both studies participants seemed to distinguish between how meaningful the agents' lives were, and how meaningful *those agents felt* their lives were. Third-person attributions of meaning differed significantly from third-person attributions of agent-perceived meaning. While these two assessments were positively correlated, those correlations were not high enough to suggest that the two assessments are identical (rs = .57 and .68). Second, while third-person attributions of meaning were affected by both fulfillment and contribution, third-person attributions of agent-perceived meaning were affected only by fulfillment.[1] Thus, when people assess the meaningfulness of an agent's life, the data suggest that they do not simply try to determine that person's own views on the question, and then defer to those views. Rather, it appears that they consider agents to be fallible judges of the meaningfulness of their own lives.

Why might people think that agents are sometimes mistaken about the meaningfulness of their own lives? One possibility is that agents are sometimes viewed as employing mistaken criteria of meaningfulness. For instance, some religious people might consider a life to be meaningful only if it advances God's plans. Meanwhile some atheists might see this as mistaken, thinking that a life is meaningful only if it benefits other people. (Of course, which criteria, if any, are the 'correct' criteria of meaningfulness is a philosophical question, beyond the scope of the present work.) Another possibility is that, regardless of which criteria of meaningfulness an agent employs, false beliefs might lead agents to misapply their own criteria. For instance, an agent might hold that their life is meaningful only if it positively affects other people. That agent might spend weeks painting a mural on the side of their home in the belief that it will inspire joy in passersby. Those passersby may, in fact, consider the mural an eyesore, and want it removed. In this case, according to the painter's own criteria of meaningfulness, the project was *not* meaningful because it did not positively affect others. Yet the painter may mistakenly believe that it was meaningful because they *believe* that it positively affected others.

Our results invite questions about boundary conditions on the effects of subjective and objective factors. For instance, while the agents in the low contribution conditions didn't make a positive difference in the lives of others, their activities were nevertheless sensible. Even if one doesn't personally care about pursuits such as wine connoisseurship or cello playing, one can recognize them as worthwhile projects. In contrast, senseless activities – e.g., hand-copying *War and Peace*, or (like Sisyphus from Greek mythology) endlessly rolling boulders up a mountain only for them to roll back down – have been considered paradigm examples of meaningless activities (Camus, 1969; Taylor, 1970; Wolf, 2010). This suggests that feelings of fulfillment may be thought to add meaning to one's life *only* when they result from engaging in an intelligible or sensible activity. After all, an objective criterion of meaningfulness

need not claim that, for a life to be meaningful, it must benefit others. Instead, it might be that one needs to do something that one has good reason to care about – something, for instance, with *aesthetic* or *epistemic* value. In Studies 2a-b, we examined the effects of fulfillment and sensibility, in order to determine whether laypeople think that fulfillment derived from senseless activities can make a life meaningful.

Study 2a: The Role of Sensibility

We hypothesized that fulfillment derived from senseless activities would not be thought to make a life meaningful. We therefore independently manipulated fulfillment and sensibility and assessed participants' attributions of meaning and agent-perceived meaning.

Method

Participants. Using Amazon's Mechanical Turk, we recruited 400 adults from across the United States. Participants who responded to an item that read 'This is an attention check, please leave this question blank' were excluded from analysis (*n* = 24). This left *N* = 376 (M_{Age} = 37.24, SD_{Age} = 11.69, 54.0% women, 45.2% men, <1% other gender or prefer not to say, 9.3% Asian or Asian American, 9.0% Black or African American, 5.3% Hispanic or Latinx, 71.5% White or European American, 3.5% mixed race, 1.4% other or prefer not to say).

 Procedure and Measures. The experimental design and materials were nearly identical to Study 1a. Only, in this study, we crossed Fulfillment with an independently manipulated factor of Sensibility, which systematically varied the sensibility of the agent's projects. Wine connoisseurship was reused as the sensible project. For the senseless project, the agent, Teddy, was described as 'an avid collector of rubber bands. He didn't use the bands for anything. He just wanted to have them in his evergrowing warehouse.' The items and response scales were identical those used in Study 1a, only we included two new items for manipulation checks.

- Teddy's activities were sensible things to spend time on
- Teddy's activities were valuable

Results

We first performed manipulation checks. Agreement with 'Teddy felt fulfilled' was significantly higher in the fulfilled conditions (*M* = 5.95, *SD* = 1.00) than unfulfilled conditions (*M*= 2.86, *SD* = 1.57), *t*(372) = 22.59, *p* < .001, *d* = 2.36. Agreement with 'Teddy's activities were

sensible things to spend time on' was significantly higher in the sensible conditions (*M* = 4.58, *SD* = 1.49) than senseless conditions (*M* = 4.14, *SD* = 1.61), *t*(372) = 2.78, *p* = .006, *d* = .29. Similarly, agreement with 'Teddy's activities were valuable' was also higher in the sensible (*M* = 4.62, *SD* = 1.47) than senseless conditions (*M* = 4.01, *SD* = 1.64), *t*(373) = 3.80, *p* < .001, *d* = .39.

We used a 2 (unfulfilled, fulfilled) x 2 (senseless, sensible) ANOVA to compare the effects of Fulfillment and Sensibility on third-person attributions of meaning across conditions (Figure 2, Panel A). This revealed a large main effect of Fulfillment, *F*(1, 372) = 100.22, *p* < .001, η_p^2 = .21 (95% CI: .15, .27), no effect of Sensibility, *F*(1, 372) = .05, *p* = .821, and a marginally significant interaction effect, *F*(1, 372) = 3.69, *p* = .055. Tukey's post-hoc tests found significant (*p*s < .001) pairwise comparisons for all levels except across levels of sensibility for which fulfillment stayed constant. Though, the difference between the fulfilled-senseless (M = 5.73, SD = 1.25) and fulfilled-sensible (*M* = 5.21, *SD* = 1.33) conditions was marginally significant, *p* = .057. In the fulfilled-senseless conditions, 92.7% of participants indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful. By contrast, only 37.6% of participants in the unfulfilled-sensible conditions did the same.

A similar ANOVA, with third-person attributions of agent-perceived meaning as the dependent variable, revealed an extremely large effect of Fulfillment, *F*(1, 372) = 314.97, *p* < .001, η_p^2 = .46, no effect of Sensibility, *F*(1, 372) = .17, *p* = .681, and no interaction, *F*(1, 372) = .001, *p* = .979 (Figure 2, Panel A). Hence, as in Studies 1a-b, third-person attributions of *agent-perceived* meaning were affected only by subjective factors. Also confirming the results of the previous studies, responses to 'Teddy felt that he was living a meaningful life' and 'Teddy felt fulfilled' were highly correlated across conditions, *r* = .85, *p* < .001.
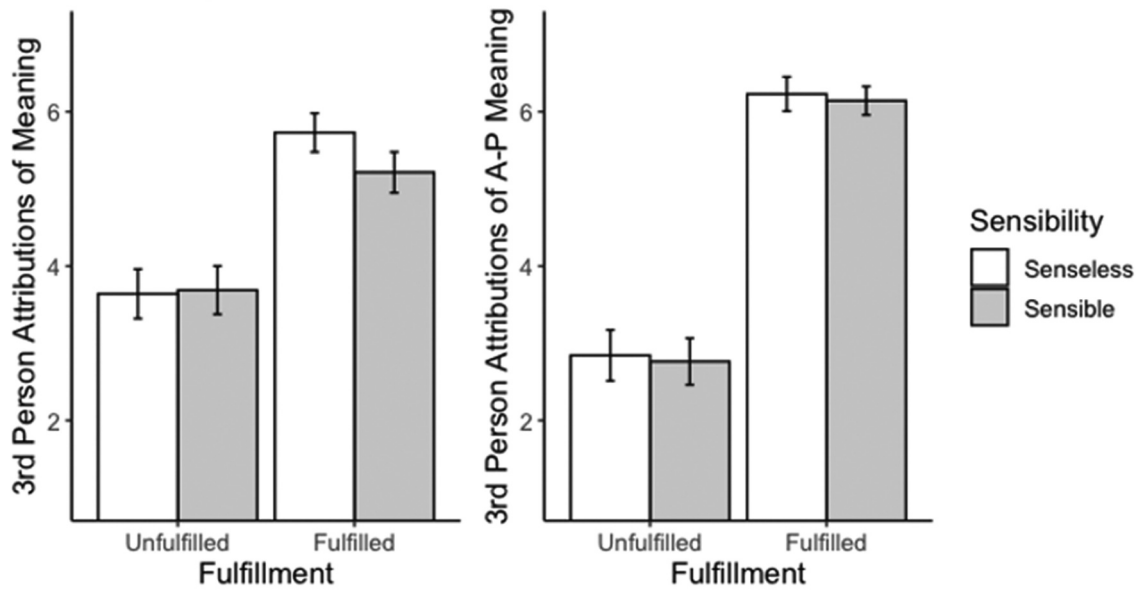
Note: 'A-P Meaning' indicates 'agent-perceived meaning.' Error bars indicate 95% confidence intervals.

Study 2b: Conceptual Replication

This study aimed to replicate the results of Study 2a with a wider variety of vignettes. Since Study 2a found no effect of sensibility on third-person attributions of meaning, we made two changes that might enable us to detect such an effect. First, we increased the sample size by approximately 50%, providing adequate statistical power to detect even very small effects. Second, as in Study 1b, we used three agents, and described them as engaging in activities that we expected participants to find particularly senseless: digging for buried treasure, hand-copying the dictionary, and counting the bricks in local buildings.
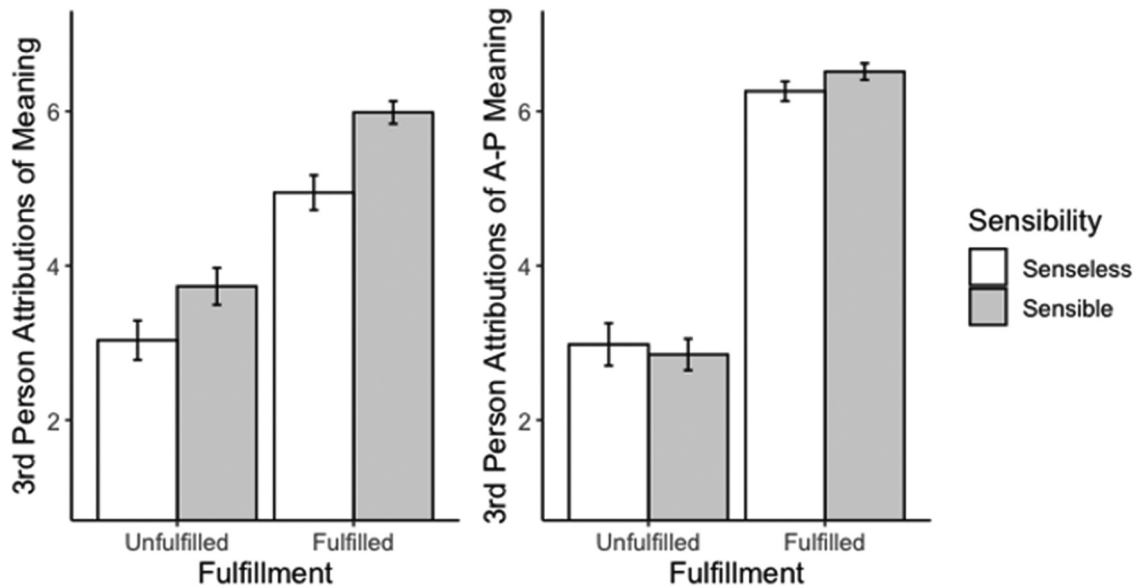
Figure 2. Third-Person Attributions of Meaning and Agent-Perceived Meaning in Studies 2a–b.

Method

Participants. Using Amazon's Mechanical Turk, we recruited 602 adults from across the United States. After reading the vignettes and responding to the statements, participants were presented with the same comprehension check as in Study 1b. We again excluded participants who failed this check ($n = 3$) or spent less than 5 seconds reading the vignette ($n = 12$). This left $N = 587$ participants ($M_{Age} = 41.61$, $SD_{Age} = 14.23$; 55.0% women, 43.9% men, 1.0% other gender; 9.0% Asian or Asian American, 7.7% Black or African American, 3.9%

Hispanic or Latinx, 71.2% White or European American, 1.4% mixed or other race, 6.8% prefer not to say).

Procedure and Measures. Participants were randomized to one of three agents, and then to one of the same four conditions as Study 2a. The descriptions of the agents' mental states in the fulfilled and unfulfilled conditions were identical to those used in replication Study 1b. One agent, Ariana, was described as spending time in her backyard, either building a treehouse (sensible) or searching for buried treasure (senseless).

Another, Marcus, was described as correcting out-dated entries in the dictionary (sensible) or repeatedly hand-copying the dictionary (senseless). The third, Naomi, was described as painting the buildings in her neighborhood (sensible) or counting the bricks in those buildings (senseless). To discourage participants from assuming that the agents in the senseless conditions suffered from mental illness, each vignette described the agent as being an ordinary person in good health. We used the same measures as in Study 1b.

Results

We first performed manipulation checks, collapsing across agents. Agreement with '[Agent] felt fulfilled' was higher in the fulfilled conditions ($M = 6.32$, $SD = .91$) than the unfulfilled conditions ($M = 2.67$, $SD = 1.49$), $t(487.24) = 35.94$, $p < .001$, $d = 2.96$. Agreement with '[Agent's] activities were sensible things to spend time on' was higher in the sensible conditions ($M = 4.90$, $SD = 1.38$) than the senseless conditions ($M = 3.09$, $SD = 1.59$), $t(578.62) = 14.75$, $p < .001$, $d = 1.21$. Similarly, agreement with '[Agent's] activities were valuable' was higher in the sensible conditions ($M = 5.08$, $SD = 1.38$) than the senseless conditions ($M = 3.36$, $SD = 1.64$), $t(572.32) = 13.70$, $p < .001$, $d = 1.13$. Agreement with '[Agent's] activities were pointless' was lower in the sensible conditions ($M = 2.78$, $SD = 1.49$) than the senseless conditions ($M = 4.56$, $SD = 1.73$), $t(578.4) = -13.36$, $p < .001$, $d = -1.10$.

To determine the effects of Fulfillment and Sensibility on third-person attributions of meaning and agent-perceived meaning, we ran two mixed effects models, with Fulfillment and Sensibility as fixed factors, and Agent as a random intercept (Figure 2, Panel B). The first model, with third-person attributions of meaning as the dependent variable, revealed significant main effects of Fulfillment, $b = 1.91$, $t(581.13) = 12.07$, $p < .001$, and Sensibility, $b = .70$, $t(581.52) = 4.38$, $p < .001$, and no significant interaction, $b = .34$, $t(581.46) = 1.50$, $p = .134$. Across agents, in the fulfilled-senseless conditions, 66.0% of participants indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful. By contrast, only 36.3% of participants in the unfulfilled-sensible conditions did the same.

The second model, with third-person attributions of agent-perceived meaning as the dependent variable, revealed a significant effect of Fulfillment, $b = 3.28$, $t(581.03) = 24.05$, $p < .001$, no effect of Sensibility, $b = -.13$, $t(581.25) = -.93$, $p = .351$, and a marginally significant interaction, $b = .38$, $t(581.22) = 1.96$, $p = .051$. However, post-hoc comparisons, using least squares

means and the Satterthwaite method for estimating degrees of freedom, found no significant differences between conditions differing in sensibility but not fulfillment. As in the previous studies, responses to '[Agent] felt that [s]he was living a meaningful life' and '[Agent] felt fulfilled' were highly correlated across conditions, $r = .91$, $p < .001$.

Given that we found a main effect of Sensibility on third person attributions of meaning in life, these results contradict the results of Study 2a, and therefore our pre-registered hypothesis.

Discussion: Studies 2a–2b

Our aim in these two studies was to determine whether fulfillment is still thought to make a life meaningful when it is derived from senseless or unintelligible activities. In Study 2a, we found a main effect of fulfillment but no effect of sensibility on meaning ratings. However, in Study 2b – with a larger sample and wider variety of vignettes – we found main effects of both fulfillment and sensibility. This suggests that the sensibility of a person's activities *can* affect third-person attributions of meaningfulness. In both studies, a majority of participants in the fulfilled-senseless conditions indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful (92.7% in Study 2a, and 66.0% in Study 2b). Hence, it seems that most laypeople consider fulfillment to be sufficient to make a life meaningful – even if that fulfillment is derived from senseless activities. In contrast, in the unfulfilled-sensible conditions, only a minority of participants indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful (37.6% in Study 2a, and 36.3% in Study 2b). Hence, most laypeople don't consider sensibility sufficient to make an unfulfilling life meaningful.

One explanation for these results is that participants were thinking something like the following: 'Hey, this person has found something that they love. It's bizarre. But they're not hurting anyone.' When one's activities don't affect other people, their meaningfulness may be thought to depend primarily on one's own mental states. After all, 'find your passion' is a common recommendation for those seeking meaning in their lives. And many of the things that people are passionate about can appear strange – even senseless – to others.

The qualification about not hurting others seems important, however. Meaningfulness is supposed to be an aspect of the *good* life (King & Napa, 1998; Wolf, 1997), and may therefore require a certain minimum of moral goodness. For instance, it seems strange to think that going to a racist rally or punching strangers could

make a person's life more meaningful just because that person happens to find it fulfilling. In Studies 3a-b, we tested whether fulfilling but *evil* activities are thought to add meaning to a life.

Study 3a: The Role of Morality

We hypothesized that fulfillment derived from morally bad activities would *not* be thought to make a life more meaningful. Therefore, we independently manipulated fulfillment and morality and assessed participants' attributions of meaning and agent-perceived meaning.

Method

Participants. Using Amazon's Mechanical Turk, we recruited 401 adults from across the United States. Participants who responded to an item that read 'This is an attention check, please leave this question blank' were excluded from analysis ($n = 7$). Two additional participants did not respond to 'Teddy lived a meaningful life' and were also excluded from analysis. This left $N = 393$ participants ($M_{Age} = 40.74$, $SD_{Age} = 12.98$, 59.7% women, 39.2% men, <1% other gender or prefer not to say; 3.8% Asian or Asian American, 7.1% Black or African American, 3.8% Hispanic or Latinx, 76.7% White or European American, 6.8% mixed race, 1.7% other or prefer not to say).

Procedure and Measures. The experimental design and measures were nearly identical to Studies 1a and 2a. Only, in this study we crossed Fulfillment with an independently manipulated factor of Morality, which systematically varied the morality of the agent's activities. Philanthropy was reused (from Study 1a) as the good activity. For the morally bad activity, the agent was described as 'a religious extremist, giving away over half of his annual earnings to terrorist organizations.' In this experiment, we also included a morality manipulation check: 'Teddy was a good person'.

Results

We first performed manipulation checks. Agreement with 'Teddy felt fulfilled' was significantly higher in the fulfilled conditions ($M = 5.84$, $SD = 1.13$) than unfulfilled conditions ($M = 3.11$, $SD = 1.77$), $t(391) = 18.23$, $p < .001$, $d = 1.84$. Agreement with 'Teddy was a good person' was significantly higher in the morally good conditions ($M = 6.24$, $SD = 1.03$) than bad conditions ($M = 1.86$, $SD = 1.46$), $t(390) = 34.30$, $p < .001$, $d = 3.47$.

We used a 2 (unfulfilled, fulfilled) x 2 (bad, good) ANOVA to compare the effects of Fulfillment and Morality on third-person attributions of meaning across conditions (Figure 3, Panel A). This revealed a medium-sized main effect of Fulfillment, $F(1, 389) = 23.51$, $p < .001$, $\eta_p^2 = .06$ (95% CI: .03, .10), a very large main effect of Morality, $F(1, 389) = 189.87$, $p < .001$, $\eta_p^2 = .33$ (95% CI: .27, .38), and no significant interaction, $F(1, 389) = .02$, $p = .902$. In the fulfilled-bad conditions, only 36.4% of participants indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful. By contrast, in the unfulfilled-good conditions, 82.0% of participants agreed that the agent's life was meaningful.

A similar ANOVA, with third-person attributions of agent-perceived meaning as the dependent variable, revealed a very large main effect of Fulfillment, $F(1, 388) = 158.60$, $p < .001$, $\eta_p^2 = .29$ (95% CI: .23, .35), no main effect of Morality, $F(1, 388) = .78$, $p = .378$, and a small interaction, $F(1, 388) = 4.18$, $p = .041$, $\eta_p^2 = .01$ (95% CI: .00, .03). Tukey's post-hoc tests found that all pairwise comparisons between conditions differing in Fulfillment were significant ($ps < .001$), but no comparisons between conditions differing in Morality were significant while Fulfillment stayed constant. As in the previous studies, responses to 'Teddy felt that he was living a meaningful life' and 'Teddy felt fulfilled' were highly correlated across conditions, $r = .78$, $p < .001$.

Note: 'A-P Meaning' indicates 'agent-perceived meaning.' Error bars indicate 95% confidence intervals.

Study 3b: Conceptual Replication

This study aimed to replicate the results of Study 3a with a wider variety of vignettes.

Method

Participants. Using Amazon's Mechanical Turk, we recruited 409 adults from across the United States. Participants were presented with the same comprehension check as in Studies 1b and 2b. We excluded participants ($n = 4$) who failed this check. We also excluded participants who spent less than 5 seconds reading the vignette ($n = 8$). This left $N = 397$ participants ($M_{Age} = 40.5$, $SD_{Age} = 13.94$; 58.9% women, 41.1% men; 6.8% Asian or Asian American, 8.3% Black or African American, 4.0% Hispanic or Latinx, 73.6% White or European American, 1.3% mixed race, 6.0% other or prefer not to say).

Procedure and Measures. The procedure and measures used in this study were identical to those used in Studies 1b and 2b. Participants were randomized to one of three agents, and then to one of the four conditions of Study 3a. The descriptions of the
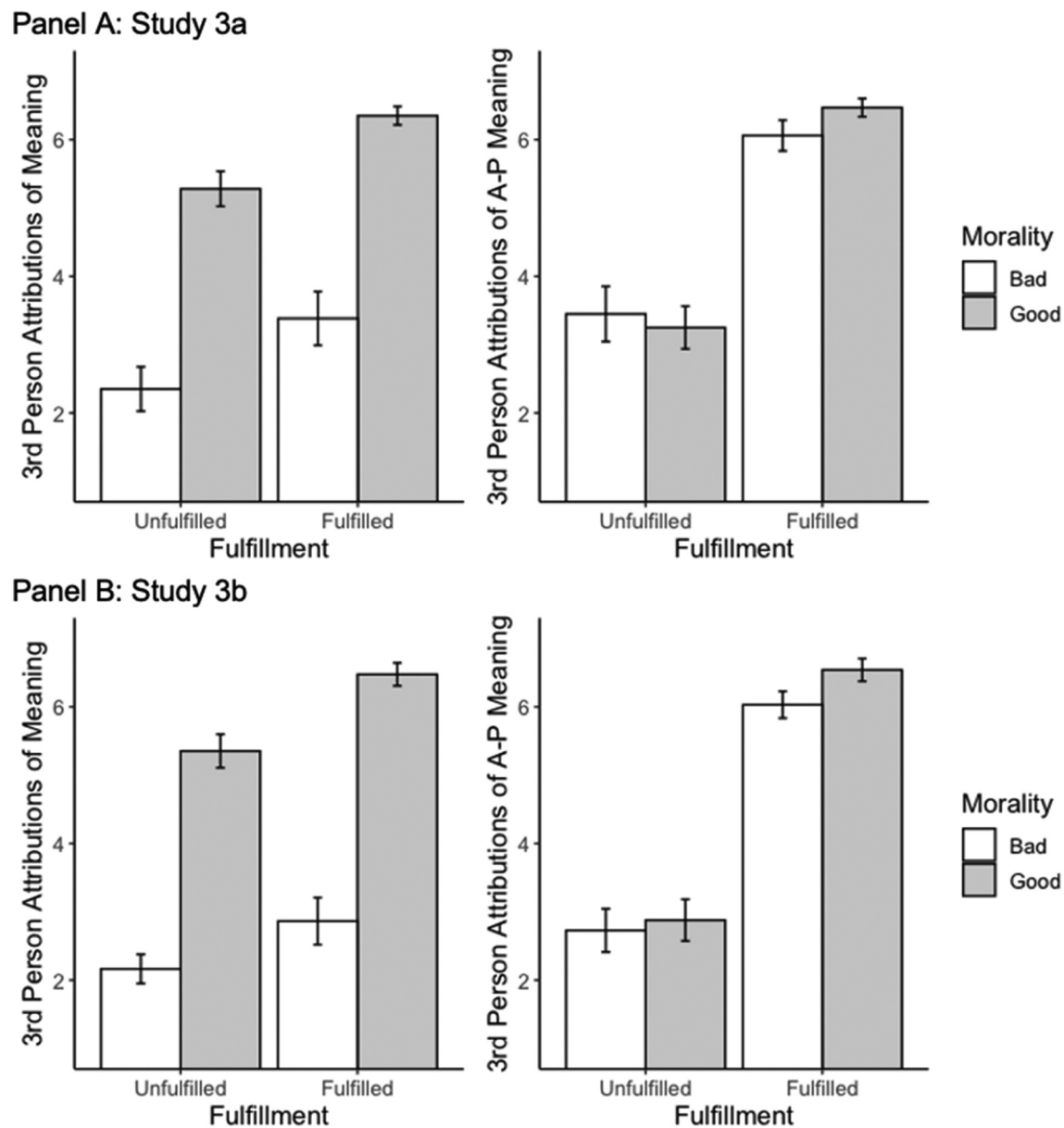
Figure 3. Third-Person Attributions of Meaning and Agent-Perceived Meaning in Studies 3a–b.

agent's mental states in the fulfilled and unfulfilled conditions were identical to those used in Studies 1b and 2b. To manipulate morality, we held the type of activity constant while varying its moral valence. One agent was described as working for a pharmaceutical company, and either reducing the cost of overpriced drugs (good) or as driving patients into debt by increasing prices (bad). Another agent was described as working with at-risk teenagers, and either helping them to stay motivated at school and away from drugs (good), or as encouraging them to use drugs (bad). The third agent was described as either volunteering for a homeless outreach group (good), or as harassing the local homeless people (bad).

Results

We first performed manipulation checks, collapsing across agents. Agreement with '[Agent] felt fulfilled' was higher in the fulfilled conditions ($M = 6.10$, $SD = .97$) than unfulfilled conditions ($M = 2.53$, $SD = 1.51$), t $(342.35) = 27.98$, $p < .001$, $d = 2.79$. Agreement with '[Agent's] was a good person' was higher in the morally good conditions ($M = 6.24$, $SD = .84$) than bad conditions ($M = 2.46$, $SD = 1.35$), $t(331.51) = 33.40$, $p < .001$, $d = 3.35$.

To determine the effects of Fulfillment and Morality on third-person attributions of meaning and agent-perceived meaning, we ran mixed effects models, with Fulfillment and Morality as fixed factors, and Agent as

a random intercept (Figure 3, Panel B). The first model, with third-person attributions of meaning as the dependent variable, revealed significant effects of Fulfillment, $b = .70$, $t(393.00) = 3.91$, $p < .001$, and Morality, $b = 3.19$, $t(393.00) = 17.94$, $p < .001$, and no significant interaction, $b = .42$, $t(393.00) = 1.66$, $p = .097$. Across agents, in the fulfilled-bad conditions, only 18.8% of participants indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful. By contrast, in the unfulfilled-good conditions, 82.9% of participants did the same.

The second model, with third-person attributions of agent-perceived meaning as the dependent variable, revealed a main effect of Fulfillment, $b = 3.30$, $t(392.00) = 17.83$, $p < .001$, but no significant effect of Morality, $b = .15$, $t(392.00) = .82$, $p = .413$, and no interaction, $b = .36$, $t(392.00) = 1.37$, $p = .172$. As in the previous studies, responses to '[Agent] felt that [s]he was living a meaningful life' and '[Agent] felt fulfilled' were highly correlated across conditions, $r = .87$, $p < .001$.

These results confirm our pre-registered hypotheses: replicating Study 3a, we found main effects of both Fulfillment and Morality on third person attributions of meaning in life.

Discussion: Studies 3a–3b

Are agents who derive fulfillment from immoral activities still viewed as leading meaningful lives? In both studies, we observed main effects of Fulfillment and Morality, with no interaction. Thus, contrary to our original prediction, the incremental effect of fulfillment on attributed meaning was not eliminated by immorality. With that said, the effect of Morality was far larger than that of Fulfillment ($\eta_p^2 = .33$ versus .06 in Study 3a and $b = 3.17$ versus .70 in Study 3b). In both studies, a majority of participants in the unfulfilled-good conditions indicated 'Slightly agree' or higher to the statement that the agent's life was meaningful (82.0% in Study 3a, and 82.9% in Study 3b). By contrast, only a minority of participants in the fulfilled-bad conditions did the same (36.4% in Study 3a, and 18.8% in Study 3b). Hence, it seems that most people think that moral goodness is sufficient to make an unfulfilling life meaningful, but that fulfillment is *not* sufficient to make an immoral life meaningful.

General Discussion

What, according to the ordinary concept, makes a life meaningful? Studies 1a-b found that laypeople think positive mental states (interest, engagement, fulfillment) can make an agent's life meaningful. These studies also found that, according to lay assessments, doing something that has value for *others* can also make an agent's life meaningful. These findings conflict with the predominant philosophical theories of meaning in life. These theories posit an exclusive role for either positive mental states (subjectivist theories) or objective states of an agent's life (objectivist theories), or they require that both criteria be met (hybrid theories). In contrast, we found that laypeople think an agent's life is meaningful when *either* criterion is met. This indicates that the ordinary concept of a meaningful life does not fit neatly with these three philosophical theories. Instead, they seem to be captured by what we will call the *independent-additive* theory: subjective factors (positive mental states like fulfillment) and objective factors (like contribution, sensibility, and morality) each affect the meaningfulness of an agent's life, and their effects are both independent and additive.

We investigated the roles of sensibility and morality as plausible boundary conditions for lay attributions of meaningfulness. For sensibility, we saw somewhat mixed results. Study 2a found no evidence that a life characterized by sensible activities (wine connoisseurship) was seen as more meaningful than a life characterized by senseless activities (rubber band collecting). However, Study 2b, with a larger sample and wider variety of vignettes, did find such an effect. Nevertheless, in both studies, fulfilling lives were seen as more meaningful than unfulfilling ones – regardless of whether that fulfillment was derived from sensible or senseless activities. Hence, on the ordinary concept, sensibility contributes to meaningfulness, though not as much as fulfillment does. Moreover, in alignment with the independent-additive theory, fulfillment maintains its additive effect, independently of sensibility.

Regarding morality, Studies 3a-b found that morally good lives were viewed as much more meaningful than morally bad ones. In fact, morally bad agents were not thought to live meaningful lives, even if those agents felt very fulfilled. In contrast, morally good agents were seen as having meaningful lives even if they didn't feel fulfilled. Nevertheless, though the effect of morality was larger than that of fulfillment, participants still thought that a fulfilled, immoral agent was living more meaningfully than an unfulfilled, immoral agent. Supporting the independent-additive theory, the additive effect of fulfillment was independent of morality.

In short, we identified four factors (fulfillment, contribution, sensibility, and morality) that seem to have independent, additive effects on third-person attributions of meaningfulness. There may well be more such

factors. But the evidence from these six experiments supports a model of third-person meaningfulness judgments that – in contrast to subjectivist, objectivist, and hybrid theories – emphasizes independent and additive factors that contribute to the meaning in a person's life. We have called such a model the 'independent-additive theory'.

These results, which concern third-person attributions, align with past research that has identified numerous sources of first-person perceptions of meaning in life. Positive mood inductions have been found to increase first-personally perceived meaning (Hicks & King, 2009; King et al., 2006). Other research has found that people report greater feelings of meaningfulness on days when they report having achieved something (Machell et al., 2015), and experiments have found that prosocial activities increase first-personal perceptions of meaning (Klein, 2017; Tongeren et al., 2016). Hence, it seems that both first-person as well as third-person attributions of meaningfulness are affected by subjective states and objective conditions (e.g., benefiting others).

In all six experiments, the fulfillment manipulation produced a very large effect on third-person attributions of agent-perceived meaning. We also found that responses to the fulfillment and agent-perceived meaning items were highly correlated (*rs* ranging from .78 to .91). This suggests the possibility that 'feeling fulfilled' and 'feeling like life is meaningful' may be more or less synonymous. This is intriguing, given that none of the standard self-report measures of meaning in life (e.g., the Purpose in Life Test, Crumbaugh & Maholick, 1964; the Meaning in Life Questionnaire, Steger et al., 2006; or the Perceived Personal Meaning Scale, Wong, 1998) include any items that use the term 'fulfilled'. Hence, our results suggest that it may be valuable to add items about feelings of fulfillment to self-report measures of meaning in life.

Why do Subjective and Objective Factors Independently Affect Meaningfulness?

Why do subjective and objective factors independently affect third-person attributions of meaningfulness? We suggest that two explanations hold promise: meaningfulness is *mattering*, and meaningfulness is *authenticity*.

Past research has suggested that first-person perceptions of meaning (i.e., the feeling that one's own life is meaningful) are based on the feeling that one's life is coherent or makes sense, that it has a purpose, and that it matters. This has led to proposals that first-person

perceived meaning in life is a 'tripartite construct' (George & Park, 2016; Martela & Steger, 2016). However, more recent longitudinal research has found that, of these three, only perceptions of mattering predict first-person perceptions of meaning (Costin & Vignoles, 2020). This finding suggests that the lay concept of a meaningful life might simply be the concept of a life that matters. If so, subjective and objective factors could each generate meaningfulness because they are different ways in which a life can matter. For instance, when something matters to a person, it is something they care about – something that elicits distinctive emotional responses like fulfillment. Hence, an agent's feelings of fulfillment are a sign that their life is filled with activities that matter *to them* – even if, perhaps, they don't matter to anyone else. Similarly, morally good activities tend to matter to many people (most notably the beneficiaries) and may do so even if they do not matter to the agent in question. Hence, an agent's moral goodness is a sign their life is filled with activities that matter *to others* – even if, perhaps, those activities don't matter *to them*.

Alternatively, the concept of a meaningful life may be one of an authentic life – i.e., one lived in accordance with one's true self. In past work, researchers have analyzed essays about times when people felt that their lives were particularly meaningful or meaningless (Debats et al., 1995). This content analysis found that the essays about meaningful times frequently mention feelings of authenticity (i.e., of being true to oneself), while essays about meaningless times frequently mention feelings of alienation and inauthenticity. Moreover, the ease with which people can describe their perceived true self predicts first-person perceptions of meaning in life, over and above their mood and self-esteem (Schlegel et al., 2011). If meaningfulness derives from expressing one's true self, this could explain why fulfillment influences attributions of meaning. Feelings of fulfillment can be taken as evidence that one is living in accord with one's true self. It could also explain why contribution and morality generate meaning. Previous studies find that people tend to assume that true selves – both their own and others' – are morally good (De Freitas et al., 2017; Newman et al., 2014). Even when someone behaves badly, people tend to assume that, deep down, they are good. This seems to be the default assumption across cultures, even among misanthropes (De Freitas et al., 2018), and even when considering the true self of a potentially threatening outgroup member (De Freitas & Cikara, 2018). If a person's true self is good, then people are likely to view prosocial activities (like

charitable donations) as highly authentic, assuming no ulterior motive is evident (De Freitas et al., 2019). For the same reason, evil deeds may be viewed as conflicting with this true (presumably good) self, reducing attributions of meaningfulness.

A particularly strong test of the claim that meaningfulness is authenticity would be if people view immoral agents as leading meaningful lives when they are described as having *evil true selves*. Although people do not tend to attribute evil true selves by default, previous work finds that if an agent's true self is explicitly described as evil (versus good), then people think that the agent is happier when engaged in evil activities (Newman et al., 2015). Perhaps a similar effect occurs for ascriptions of meaningfulness. Future work might explore this surprising possibility.

Limitations and Scope of the Effect

All of our participants were recruited on Amazon's Mechanical Turk. Workers on this platform have been found to be more demographically and geographically diverse than typical college undergraduates (Difallah et al., 2018). However, it is possible that people who spend time completing online surveys have somewhat different intuitions about meaningfulness than the population at large. Individuals engaged in paradigmatically meaningful activities (e.g., feeding the homeless or conducting cancer research) are likely to be underrepresented on this platform. Future research could compare the results obtained from samples differing in career or recreational pursuits.

Another limitation is the use of a 'Strongly Disagree' – 'Strongly Agree' response scale, which assesses participants' confidence that someone's life was meaningful, but does not readily allow for comparisons of magnitude – i.e., *how* meaningful a life is. Future studies may benefit from using response scales that range from 'Not at all meaningful' to 'Extremely meaningful.'

Finally, an additional limitation of these studies is that they paint a somewhat static picture of meaning in life. Some philosophers have argued that a life's meaning depends in part on its 'shape' – i.e., its narrative structure, or temporal dynamics (Dorsey, 2015; Glasgow, 2013). Similarly, psychological research has found that the meaning people see in particular events in their lives depends largely on how they conceive of the story of their life (Bauer et al., 2008; McLean & Pasupathi, 2011). It may be that, for instance, that people attribute greater meaning to a life that starts unhappily but ends well – what personality psychologist Dan McAdams and colleagues (2001) call a 'redemptive narrative' – than to one that starts happily but ends badly. Past research (Diener

et al., 2001) has found that third-person assessments of the overall goodness of a life are subject to the 'peak-end rule' (Fredrickson & Kahneman, 1993). Future studies may examine how the shape or progression of an agent's life affects lay assessments of its meaningfulness.

Conclusion

Across six experiments (total $N = 2,539$) we used vignettes to investigate the ordinary concept of a meaningful life. We found that lay people attribute greater meaning to lives that are experienced as fulfilling (Studies 1a–3b), as well as lives that are characterized by activities that make a valuable contribution (Studies 1a–b), are sensible (Studies 2a–b), and morally good (Studies 3a–b). Overall, these results suggest that lay people hold an implicit theory of meaning in life unlike the three theories that dominate the philosophical literature. In philosophy, subjectivist theories posit that positive mental states are necessary and sufficient for a meaningful life. Objectivist theories posit that objective value (e.g., doing good for others) is necessary and sufficient for a meaningful life. Hybrid theories posit that positive subjective states and objective value are individually necessary and jointly sufficient for a meaningful life. We introduce here a new theory that appears to fit the intuitions of lay people: the independent-additive theory, according to which subjective and objective factors each exert independent and additive effects on the meaningfulness of an agent's life.

Note

1. The correlations between third-person attributions of agent-perceived meaning and fulfillment *were* perhaps high enough to indicate identity ($rs = 86, .89$). We take up this possibility in the General Discussion.

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