Ergo AN OPEN ACCESS JOURNAL OF PHILOSOPHY

To Have a Need

RUSS COLTON
Independent scholar

Philosophers often identify needing something with requiring it to avoid harm. This view of need is roughly accurate, but no adequate analysis of the relevant sort of requirement has been given, and the relevant notion of harm has not been clarified. Further, the harm-avoidance picture must be broadened, because we also need what is required to reduce danger. I offer two analyses of need (one probabilistic) to address these shortcomings. The analyses are at a high level of generality and accommodate our ordinary notion of need as well as narrower conceptions. I also explain why the only extant, detailed modal account of need, David Wiggins's (1987/1998), is inadequate. My analyses imply that to have a need for something is to have the (expected) quality of one's life depend counterfactually on it in a certain way. The analyses shed some light on need's distinctive normative significance.

1. Introduction

Some needs, like the need for a toothbrush, a friend, or rent money, have a kind of weight or normative significance that others lack entirely, like my need for a match to light my cigarette or for money to buy a vacation home. The former bring a certain force to prudential, moral, and political deliberations that the latter do not. Philosophers aim to better understand this special normative significance and how it is grounded in the nature of this kind of need. This requires a clear understanding of what it means to have such a need.

Contact: Russ Colton <ercolton@comcast.net>

^{1.} The 1980s saw a flurry of interest in the nature of need, e.g., Doyal and Gough (1984), Frankfurt (1984), Wiggins (1987/1998), Wiggins and Dermen (1987), G. Thomson (1987). Basic needs theory, capability theory, and care ethics heavily involve need (see Reader 2005). Brock and Reader (2002) advocates a needs-centered ethics. Reader (2007) offers a novel deep dive into the subject. Feldman (2016) bases a theory of justice heavily on a species of need. Other work on need is mentioned later in this paper.

The two kinds of need reflect a classification that is popular in need theory. It has no standard description or nomenclature; I put it as follows. A goal need is essentially for something that will/would promote a goal or aim of the person—like the need for a match because I aim to light something. A welfare need is essentially for something that will/would promote a certain minimum level of life quality (value) for the person-like the need for a toothbrush or for a friend.

Many philosophers have embraced a more specific intuition about welfare need that seems to be a step in the right direction: what is needed is required to avoid harm, where harm is in some way relative to a minimum threshold level of life quality.2 But this rough idea still needs to be made precise. My main goal here is to provide a fairly precise analysis of welfare need in the harm-avoidance spirit, reductively explaining the kind of requirement and harm involved.

I am mostly interested in our ordinary notion of (welfare) need, what we use in everyday prudential and moral deliberations. Much of the philosophical work on need has focused on narrower species which authors usually argue have important implications for justice. These are sometimes called "vital," "basic," "constitutive," or "fundamental" need,3 and they have lower or otherwise restricted thresholds compared to our ordinary notion. My analyses and discussion assume the threshold befits our ordinary notion (and I will discuss what that threshold may be). However, the analyses are structured to accommodate various threshold levels, from merely getting by as a person to flourishing in bliss. So they are relevant to other species, too.

Only David Wiggins (1987/1998) offers a detailed modal characterization of the relevant sort of requirement.4 I will criticize his account and defend a

^{2.} Feinberg (1973: 111), Frankfurt (1984: 6), Wiggins (1987/1998: 10), G. Thomson (1987: 9), D. Miller (1999: 207). Anscombe (1958: 7) is in the same spirit without using the word "harm." Doyal and Gough (1984), Brock and Reader (2002), and Reader and Brock (2004) cast needing something as requiring it to avoid not existing fully as a person. This is a similar idea, which involves a kind of threshold, but it is not so clearly welfare-based.

^{3.} Respectively: Wiggins (1987/1998: 43), basic needs theory (e.g., Doyal & Gough 1984; Brock 2005), S. C. Miller (2005: 137), G. Thomson (1987: 8). Garrett Thomson (1987: ch. 1) seems to claim to be analyzing the more ordinary kind, but he is not. His threshold is too low. He says what is needed is required to live without "serious harm," which he says excludes impairments that we would eventually recover from without intervention (1987: 36). That does not fit our ordinary concept of need-we often need relief for pains that would eventually go away on their own. David Miller (1999) also focuses on a narrow species without naming it. His threshold is minimally decent life, which I will argue later is too low for our ordinary concept of need. His species has other restrictions as well. He makes clear (1999: 206-13) that it serves the interests of distributive justice by design.

^{4.} Fletcher (2018: 13) advocates a similar modal view, though with fewer specifics.

new one that recasts requirement in terms of counterfactual dependence. I will defend my approach against some plausible but ultimately faulty theoretical intuitions about need.

As for harm, many need theorists (whether explicitly using the word "harm" or not) indicate harm-relevant thresholds. These are sometimes in relation to narrow species of need, and they range from existing as a person to having a minimally decent life to flourishing.⁵ But there has been almost no exploration of how, formally, such target levels are involved in defining the relevant sort of harm.⁶ The relevant harm is not, say, just being below the threshold—we may need something that is required not to avoid that but rather just to keep us from sinking further, or to improve upon a partial recovery, or perhaps for another purpose. My analysis will reveal, at a high level of generality, the way that unmet needs harm people.

But the harm-avoidance idea also has to be augmented to accommodate certain needs for safety. Threats can be viewed as moderately probable in many circumstances. When we see them this way, we still see ourselves as needing precautions (seatbelts, vaccinations), even though we know we might be unharmed without them, if luck is with us. To understand need according to our full conception of it, we have to understand in what sense we can need protection from a threat that is not guaranteed to hurt us if we lack the protection.⁷ To that end, I offer a second, probabilistic analysis as an extension of the first. This analysis shows a second, broader way unmet needs are bad for people, the way they endanger them.

I begin by explaining a few technical assumptions, after which I say more about the nature of need to clarify the target concept further at the intuitive level. I then explain Wiggins's influential account of need, criticism of which will provide a useful springboard for my analyses. Risk raises special issues, so I mostly turn a blind eye to probabilistic matters until late in the paper.

^{5.} Respectively, for instance, Doyal and Gough (1984: 14), D. Miller (1999: 212), Feldman (2016: 77). Others are "decent" (Brock 2005: 51) and with vital interests satisfied (Wiggins 1987/1998: 17, in discussing his narrower species, "vital need").

^{6.} Frankfurt explores the matter very briefly (1984: 6–7). He says that "being harmed has to do with becoming worse off than one was," where worse is cumulatively. He says you can be harmed while your bad condition is stable, if you lack a cure, and that the cure counts as needed because it would stop the accumulation. But we also need to know how to count as needed something that only moderately improves the bad condition, and something that tempers a worsening, as well as how to weigh these against their future effects on one's welfare above and below the threshold.

^{7.} Rather than viewing the improvement of safety as additional to harm avoidance, we could understand harm avoidance to include it. Claire Finkelstein (2003) and others argue that endangering is itself harmful. Either approach will work, but I will keep to the more usual understanding.

2. Technical Assumptions

I will focus exclusively on unconditional particular needs of individual people (I now need to put on gloves), not conditional needs (I need gloves if it is cold out), not tendencies or dispositions to need (I need gloves when it is cold out), and not needs of people generally. These latter are all important, especially for policies and planning, but I assume they supervene on possible cases of the first type and therefore have derivative analyses.

We often talk of needing objects. I assume that when we do, there is an implied verb and time relevant to what is needed. When I say I need gloves, I mean that I need to have them, or that I need to buy them, wear them, etc., during some time(s).

That is just one illustration of the fact that needs are standardly denoted in various ways syntactically. To facilitate general claims about need, it will help to have a phrasing that renders them generally applicable. I assume this is right: I have a need to be paid tomorrow if and only if (iff) I need that I am paid tomorrow to be true. More generally, for any possible need someone can have, there is some proposition P such that a person has that need iff the person needs P to be true. I will occasionally (not usually) write in terms of needing propositions to be true to facilitate generality and clarity at key points. My analyses will be stated in such terms; they can be evaluated with respect to candidate cases of need couched in more ordinary language by rephrasing with the appropriate proposition.

Need theorists often discuss thresholds or harms in terms of flourishing. I want to be more neutral. I will use how good life is, or how well life is going, for the person ("welfare level," I will call it). I leave it open what the underlying source of this value is—flourishing, pleasure, perfection, or something else.

It is natural to talk about how well someone's life is going, or how good it was for some segment of time, and I will often do so here. Unless I explicitly refer to total value, I assume that how good someone's life is for a segment of time is the average of its values at each moment. (For simplicity, I assume that the value is 0 at moments the person does not exist.)

Many people think there is an ordinary sense of the verb "need" on which needing some present condition or event necessarily implies that it is lacking. I follow most need theorists in rejecting that view. At many points in this paper, it would lead to confusion. Notice that on such a sense, no one ever has what they need to have, no one is ever doing what they need to be doing, etc. Those are not

^{8.} Wiggins explicitly rejects it (1987/1998: 6, n. 9), as do Alan R. White (1975: 107) and G. Thomson (1987: 12).

ordinary claims. (The point here is only about the verb. When you are "in need" or "in a state of need," you lack what you need.)

3. On Welfare Need

Here I offer a few points to help clarify the nature and importance of welfare need before we turn to analyses.

Welfare need has much in common with goal need, which can cloud the picture of how welfare need is special. For both kinds, what is needed is readily viewed as being in the person's interest—either because it serves a goal or because it promotes a minimum level of life quality (Wiggins 1987/1998: 17). Also, instances of the two kinds very often share relata, because what helps life go better often serves a goal, too (I have both a goal need and a welfare need to prepare breakfast now). They certainly do not always coincide in this way, because many of our goals are bad for us, and much of what we need we have never even thought of, let alone embraced as a goal. A third alignment is that for both kinds, what is needed is, commonly, needed only in virtue of its instrumental role, as a means to promoting an interest of the person.¹⁰

But despite these connections, the two kinds have a profound difference. Welfare need essentially involves a complex normativity: what is needed promotes a certain minimum quality of life that we assign special significance. Goal need lacks this essential feature, or anything like it, because of the wide variety of goals people can adopt.¹¹

One might wonder whether the goal/welfare classification leaves out some important needs. After all, an employee can need firing without firing promot-

^{9.} This mistake is popular enough to deserve a diagnosis, which I do not think it has received. One source of error may be that in many common contexts, it is pointless to assert your need unless it is unmet, so that assertions pragmatically imply they are unmet. Another source may be equivocation on the relevant verbs and times. Verbs: That I need to get a ticket may entail that I do not have one. But even if so, needing to get and needing to have are two different needs. I can need to be getting the ticket I am in the process of getting, thus not lacking what I need. Times: That I need to rise from my chair now may entail that I have not risen from it; but what matters is that it does not entail that I am not rising from it now. It could be that during the brief time I am rising, I need to be, and thus am not lacking what I need.

^{10.} This is why I am not following G. Thomson (1987: ch. 1) and some others in calling goal need "instrumental need." Theorists seem to agree that an important difference between the two kinds is the nature of the relevant ends, and that is what my nomenclature highlights.

Arguably, an object of welfare need that is *not* a means is life quality above the threshold. It seems obvious to me that people need their lives to go that well, but this has been denied by some, including White (1975: 106) and Frankfurt (1984: 2). See McLeod (2015) for related discussion.

^{11.} Most theorists view the essential difference between the kinds roughly this way, though each describes it a little differently. See G. Thomson (1987: ch. 1) for valuable discussion, as well as Brock and Miller (2019).

ing his goals or life quality. But the firing is not a need *of his*. The classification is meant to cover only cases of need where it is more natural to say the person has the need than that they don't. When we say the employee needs firing, we mean that firing him is needed. It serves an end or interest—perhaps moral, or ours—but not his.¹²

Analyses of welfare need must, of course, clarify in what sense the object of need promotes a minimum welfare level. For now, we can gain some intuitive clarity on this by noticing a plausible necessary condition for need: (*the threshold intuition*) for any case of need, there is a certain welfare level such that if the need is met, life for a time is better and closer to that level than if it is not met. To put it another way, if a candidate object of need will not help life to be better (on average) for even one time segment, or it will only help it to be better than a level that is at or above the threshold, then it is not really needed.

Where is the need threshold? This is a central question. I know of no arguments for an answer, but there are opinions. G. E. M. Anscombe says people need what is required to flourish (1958: 7), suggesting that flourishing is the relevant threshold. Others seem more or less sympathetic with Anscombe's proposal, while some think it "seems to set the bar too high" (Fletcher 2018: 7). ¹³

In my framework, I need to locate the threshold in terms of how well life is going, not in terms of flourishing specifically. This is fitting, because the concept of need is a very ordinary one, the threshold is a key part of that concept, and the concept of life going well is very ordinary. The concept of human flourishing is much less so.

As I will explain, commonplace evidence suggests that what is needed has to help make life for a time be closer to at least good, or going well, as we ordinarily mean those terms in describing people's lives. To be clear, we ordinarily use those terms to describe lives we view as better than the lives we characterize as just above neutral—better than the lukewarm lives we might call "okay," "not bad," "acceptable," "fair," "fair-to-middling," "fairly good," "minimally decent," or "decent at best." If a friend describes her life as fair or minimally decent, you will not reply that you are glad to hear things are going well, because "going well" ordinarily means something better.

Here, briefly, is some of the commonplace evidence. First, when we hear that people we care about are not quite doing well, we often inquire as to their unmet needs (likewise if we hear that their lives are in those lukewarm condi-

^{12.} Similarly: White (1975: 104), G. Thomson (1987: 8).

^{13.} Fred Feldman (2016: ch. 4, esp. 76) seems implicitly to agree with Anscombe. As I read him, people have "community essential needs" for a subset of what people ordinarily need, and what people ordinarily need is what they require to flourish. Wiggins *may* agree, though he emphasizes "minimal" levels of flourishing or well-being (1987/1998: 13; 29) and sometimes seems to have an even lower standard in mind (2005: 31).

tions); but when we hear that they are doing well, we don't. Second, the idea that people need their lives to go well sounds like a benign claim, as does the idea that everybody needs a good life, or at least a moderately good life; but the idea that people need *very* good lives, or for things to go great, sounds dubious; and the idea that people need only fairly or slightly good lives also sounds dubious. Third, we commonly think children need what will help them have good lives. No one cites a lower bar.

But intuitions may vary. For discussion purposes, I assume at least that when life is going well (as we ordinarily mean), it is not below the threshold, and when it is going badly (as we ordinarily mean), it is. But my analyses will be entirely neutral, so that a range of thresholds can be used. I will call the threshold value level "the satisfactory level," in a value-neutral sense. This is a placeholder for whatever the threshold level truly is. When (the value of) life is at or above that level, we can call it "satisfactory" and say life is going "satisfactorily."

Before we get there, let us consider Wiggins's view. As I mentioned, for many philosophers, what is needed promotes a minimum welfare level in the sense that what is needed is required to avoid harm, harm being somehow relative to that level. This is plausible, but still vague. Wiggins tries to clarify this rough idea in a way that is at least modally precise.

4. Wiggins's Account

Wiggins (1987/1998) presents his view in various ways, and he never offers a thorough statement of it. In terms of his stock object of need, "to have x," one version of his view can be put this way: at t, I need to have x at t1 iff it is necessary (relative to t and the t circumstances c) that if I am not harmed at t2, then I have x at t1 ($t \le t1$, t2) (1987/1998: 7, 10). The modality, the conditional, and the relativities are clarified by a more detailed account in terms of alternative world histories. This picture can be summarized as follows.¹⁴

^{14.} My summary employs "possible" worlds and histories. Wiggins prefers "alternative" worlds and histories. For our purposes, there is no significant difference. My summary is based on a long passage (1987/1998: 12), but here are some key parts: "When we make a claim of the form *Necessarily at t if such and such then so and so*, where t is a moment for which this *necessarily* is temporally indexed, we thereby confine our consideration to all alternative futures from t onwards, and what we are saying is equivalent to the claim that every alternative in which such and such holds is one in which so and so holds." P is a "historical necessity at t . . . if and only if p is true in every alternative world whose history is indistinguishable from the history of the actual world up to the moment t, natural laws being counted as part of the history of the world and fixed as of t. But where needing is concerned, it seems that the definition of alternativeness must be modified to restrict the class of alternative futures to futures $\geq t$ that (i) are economically or technologically realistically conceivable, given the actual state of things at t, and (ii) do not involve us in morally (or otherwise) unacceptable acts . . . " It may be unclear whether Wiggins

Very roughly, the idea is simple: for me to have a need is for all the possible futures in which I am unharmed to be ones in which my need is met. More precisely: Consider a set *S* of possible worlds with histories (including natural laws) matching the actual world before a certain time t but then deviating from it at various points in various ways, the variations limited only by certain practical constraints (to be explained) implied by the t circumstances c. To say that at t, I need to have x at t1 is to say that for some t2, every world in S in which I am unharmed at t2 is a world in which I have x at t1, and there is at least one such world $(t \le t_1, t_2)$ (1987/1998: 12–13). This calls for a few clarifications.

The t-circumstantial constraints include physical laws as well as the standards of flourishing and harm that are contextually relevant at t (1987/1998: 13). They also include social norms as of t that limit options; for example, I now need money to buy shoes in part because stealing them is unacceptable (1987/1998: 12, n. 18). In addition, they limit the possible histories from t forward to those that are "economically, technologically, politically, historically, etc., possible to envisage occurring"—or "realistically conceivable"—given the state of the world at t (1987/1998: 14).

For Wiggins, these constraints are important. He is mostly interested in needs that engender politically viable claim rights, and for this purpose, what is practically feasible makes for an important limitation on what people need. But the account allows constraints to be loosened or tightened, so that it is relevant to the broader, more ordinary conception I am pursuing, a conception that can cover needs beyond the practical constraints of politics, morality, or even physical law. Having squandered my savings, I may need yours. Trapped in a cave, I may need a miracle.

Wiggins rightly casts need as relative to a time (t). This is important partly because all needing happens at a time, but especially because need for a future event can come and go between now and then as circumstances evolve and probabilities change. Last year I did not need to attend my friend's wedding next week, because the marriage was unlikely; but now I do, and if it is canceled tomorrow for some reason, I no longer will.¹⁵ This will be important for my probabilistic analysis, and I will say more about it later. Note that from here on, I draw a distinction between the time of need (t) and the time of what is needed (t1).

As for "harm," Wiggins (like those who follow him) does not say precisely what he means, as I noted earlier. He discusses the close relationship between

intends contrary-to-fact presents to be "realistically conceivable," since they contradict what we are to take as "given." But he should, because sometimes people now need the present to be different from how it is.

^{15.} Wiggins gives an example in which a need that did not exist comes into being once its "chance" rises (1987/1998: 8, n. 12).

being harmed and not flourishing even to a "minimal extent" (1987/1998: 13). At times, he seems to equate these two, but he never clearly does. If he did, his account of need would not work. It would not allow us, for instance, to count something as needed that largely alleviates your bad pain but still leaves you below the threshold. Fortunately, my main criticisms are independent of this issue. We can proceed with an intuitive understanding of harm for now.¹⁶

5. Criticism of Wiggins's Account, and Desiderata for a New One

Here I describe some problems for Wiggins's approach and italicize what they suggest for a better one.

A. Suppose I need to turn a key by noon to prevent a bomb from exploding tomorrow. Unfortunately, the key is too far away to arrive in time. For Wiggins's account to work, my turning the key by noon has to count as a conceivable possibility. That is fine, but then why not also count as conceivable the possibility that even without the key, the bomb malfunctions and fails to explode? That is just as conceivable as my turning a key that is beyond reach. But given such a possibility, we will not be able to say I am unharmed only if I turn the key, since in some just-as-conceivable worlds, I am unharmed because the bomb malfunctions. Wiggins needs a way to restrict the conceivable possibilities to ensure the special causal significance of what is needed. He must rule out conceivable possibilities in other spatiotemporal regions that undermine this significance. As I will explain, this could readily be handled by relying on *counterfactual-conditional supposition of the need being met (versus not)*.

B. Wiggins starts with the intuition that needing something is requiring it to avoid harm. He then renders requirement as a kind of necessary accompaniment: all the worlds (of a sort) in which I am unharmed are worlds in which my need is met. This is a natural idea, but it flouts a central intuition about need: it is in some way better for me to have my need met than not. The necessary-accompaniment approach fails to entail this. This is because even if all the unharmed worlds are P worlds, that does not rule out that all the harmed worlds are, too—all that is required for that is the necessity of P. Wiggins's account implies that I need every animal born a thousand years from now to be self-identical. Never mind whether that is an intuitively plausible result. Rather, notice that it is false that it is better for me if that need is met than if it is not. The account does not

^{16.} Harm has been much discussed recently. I will not, and do not need to, find the ordinary meaning(s) of "harm." As we will see, my analyses can be construed as indirectly defining a special sense of "harm," but that is all. On harm, see, e.g.: Norcross (2005), J. J. Thomson (2011), Hanser (2011), Bradley (2012), Shiffrin (2012), Northcott (2015), Feit (2016), Purves (2018), Klocksiem (2019), Carlson, Johansson and Risberg (2022).

entail that met needs are better, and this is the bad result. *An analysis should clearly reflect that it is always in some way better when a need is met than when it is not.*

C. Wiggins's approach undercounts specific needs as we ordinarily construe them. Suppose you wake up stranded in the desert at sunset. You are wearing only shorts and a T-shirt. It will get dangerously cold soon, and no provisions are at hand. Fair to say, you need a large campfire soon. Fair to say, you need warm clothes soon. Asked whether you need a dune buggy so you can drive to safety, you would reply, "Of course!" But none of these things save you in *all* the worlds in which you end up unharmed—some do in some, some in others. Under the circumstances, your having any one of them seems (pretty equally) conceivable, but none will count as needed on Wiggins's view. All that will count as needed is something very general, like "something that will keep you warm or take you to safety." An analysis should count not only very general needs but also specific needs as we ordinarily construe them.

D. According to Wiggins's account, for me to need P to hold, there just has to be *some* time (*t*2) at which, necessarily (etc.), if I am unharmed at *t*2, then P holds. This implies that sometimes I need things that prevent worthwhile sacrifices, which is counterintuitive. For example, there is certainly a good sense in which I do not need to skip my painful, preventive-care appointment tomorrow with my competent dentist, but there is a time—tomorrow—when I am unharmed only if I skip it. Wiggins's view does not reflect that whether something is needed depends in part on whether the potential harm is preceded or followed by benefits that outweigh it. *An analysis should be sensitive to the potential benefits and burdens we experience at other times besides (what is intuitively) the candidate time of harm.*

E. Beyond such temporal complexities, the relevant sense of "harm" requires more clarity. I noted that the simplistic idea (probably not Wiggins's) that being harmed is being in a condition below a "minimal level of flourishing" will not serve Wiggins's approach. *Ideally, an analysis based on the harm-avoidance intuition will reveal the relevant sense of "harm."*

F. Imagine a specially rigged bomb that has a 70% chance of being triggered soon by certain atomic-decay events. You can go near it or stay away. No doubt, you see yourself as having a need to stay away. And yet, we cannot say that necessarily (etc.), you will flourish only if you stay away. There are realistic worlds in which you go near and everything turns out fine. But you are *safer* in some respect only if you stay away, which is why you have a need to. The same applies to the need to wear helmets, get vaccinated, or buy fire insurance, in possible scenarios in which the relevant threats are objectively as chancy as they actually seem intuitively (I will return to this). A complete analysis of need must reflect that we can need protection from threats that will not necessarily harm us if we are unprotected.

6. A New Need Analysis

Here is a first step toward an analysis that meets desiderata A–E: I now (t) need nonpast P to hold iff, if $\sim P$ were so, my life would be worse in some special way than it would be if P were so. For simplicity, let us restrict P to propositions expressible in the form that event e occurs or that event e does not occur, where the events have their times (t1) essentially. 17

As David Lewis emphasizes, there appears to be a standard interpretation of ordinary-language counterfactual conditionals about ordinary events whereby the implied antecedent circumstances include the actual past up to the time of the antecedent event, or shortly before.¹⁸ By this interpretation, when we consider how things would go if I were to drink some water now, we take it that nothing about the past would be any different from actuality, except maybe the proximate causal precipitators of the drinking. From the time of the drinking onward, things would evolve lawfully given the drinking and its contextually determined circumstances (which could include the sorts of normative circumstances Wiggins emphasizes). My preliminary analysis intends this standard interpretation. Thus, the possibilities for comparison in the analysans, P and ~P, include the actual past up to about P's time (t1), rather than up to the time of need (t), as Wiggins has it, and evolve lawfully from there. As desired (A), this ensures that the causal significance of what is needed is not undermined by conceivable possibilities in other regions.

The preliminary analysis involves comparison of value, and as desired (B), it clearly reflects the idea that it is in some way better for us to have our needs met than not. The analysis is also built to count specific needs (C). In the desert example, the warm clothes, campfire, dune buggy—for each, on the face of it, your life would be significantly worse without it than with it, so that each can count as needed. The more general need can also be counted: if nothing were to arrive that can keep you warm or take you to safety, you would be much worse off than otherwise. To make these points clearer, let us turn to the important task of clarifying the "special way" in which life would be worse without the object of need.

It seems clear that I now need P to hold only if P matters to my present or future. So our question is, when I need P to hold, how would my nonpast life be worse without it? According to the threshold intuition (Section 3), what is needed will help make life for some time be better and closer to satisfactory. This means that when I lack what I need, this help is lacking, so life for a time is worse

^{17.} I have prohibited t1 from preceding the time of need (t) because I am unsure whether we ever need past events and because allowing past events to be needed makes my probabilistic analysis unclear. (Wiggins's account must also restrict what is needed to the nonpast.)

^{18.} Lewis (1973: 566-67; 1979: passim, esp. 465-67). Similarly, Stalnaker (1968: sec. II, 112).

and further from satisfactory by comparison (i.e., unsatisfactory and worse). We can understand this last point in terms of a counterfactual comparison: if I were to lack something I needed, my life for a time would be unsatisfactory and worse than it would otherwise be. This gives us one way my nonpast life would be worse were my need unmet, for any case of need.

But even though this dependence is necessary for need, it is not sufficient, because sometimes, if a certain event were not to occur, life would indeed be unsatisfactory and worse in one time, but it would also be better enough in another to compensate so that the event is not needed. Skipping tomorrow's dentist appointment was an example of this—I do not need to skip it, because if I were not to skip it, then even though tomorrow would be unsatisfactory and worse due to the unpleasant appointment, the months that follow would be better enough to outweigh.

So maybe the relevant way that life without the object of need would be worse is that the person's nonpast *as a whole* would (on average) be unsatisfactory and worse.¹⁹ This would allow us to deny that I need to skip my dentist appointment since my whole nonpast on average would actually be *better* if I were not to skip it. But this proposal will not work. Suppose I have an hourlong headache coming on. I need an analgesic—but this does not have to be because my whole nonpast would (on average) be unsatisfactory and worse without it. It would be worse, but it might still be satisfactory. My next hour would certainly be blighted, and perhaps even my day could count as unsatisfactory if that hourlong headache were bad enough. But obviously I can still have a good life ahead of me even if a small piece of it contains a bad headache.

Perhaps we need P to hold only if the *total* quantity of nonpast unsatisfactoriness would be lower with P than without, rather than the average. This seems plausible, and it would explain why, in many cases, we do not need to avoid a painful sacrifice that brings future benefits. But the problem with this proposal is that some worthwhile sacrifices are for luxuries, not just for allaying other bad conditions. We see this when a financially comfortable person accepts an offer to be inconveniently bumped from a flight in return for a nice wad of cash. The passenger does not need to decline the offer, even though declining would reduce total nonpast unsatisfactory life, by preventing tedium at the airport. Perks can outweigh pains.

A better idea is to let the counterbalancing be insensitive to the line of satisfactoriness. On this plan, for any case of needing P to hold, there are two requirements for the relevant sort of harm that would ensue without P, one being that there is some nonpast segment in which life would be unsatisfactory and worse

^{19.} The comparison here would use the time segment covering the person's whole nonpast life with the object of need, or without—whichever is longer if one is.

(on average), the other being that nonpast life in total would be worse, this latter having nothing to do with satisfactoriness. Thus I need the analgesic for my headache, because my day would be bad and worse without it *and* my nonpast life in total would be worse. But the airplane passenger does not need to decline to be bumped from her flight, because being bumped would not make her future worse in total, thanks to the cash. Similarly, it is false that I need to skip my dentist appointment, because it is false that life going forward would be worse in total if I did not skip it.

Thus I propose the following nonprobabilistic analysis of need:

Welfare need (nonprobabilistic) (v1): I now need (nonpast) P to be so iff, if ~P were so, my life from now on (i) would, for some time segment, be unsatisfactory and worse (on average) than if P were so, and (ii) would be worse in total than if P were so.²⁰

Unsatisfactory and worse is the same as more unsatisfactory.²¹ A more intuitive phrasing is this:

Welfare need (nonprobabilistic) (v2): I now need (nonpast) P to be so iff my life from now on would be less unsatisfactory for a time if P were so than if not, and would be better on the whole.

As desired (D), the analysis is sensitive to the benefits and burdens that impact us at other times besides what is intuitively the time of harm, allowing it, as we just saw, to correctly treat the headache, dentist appointment, and airport cases. The analysis can also count partial palliatives as needed, since there is no requirement that what is needed puts a person into satisfactory territory.

As desired (E), the analysis clarifies the way in which unmet needs are bad for me, or harmful. When I have an unmet need for P to hold, ~P holding is harmful in the sense that life for me is or will be more unsatisfactory for a time, and worse overall, than it would be if P were so—in short, life for a time will go worse and not well, and there will be no adequate compensation.

^{20.} More precisely: I now need nonpast P to be so iff for some nonpast time segment T and some w, x, y, and z: if P were so, the average value of my life during T would be w; if ~P were so, it would be x; x is a more unsatisfactory life value than w; if P were so, the total value of my nonpast life would be y; if ~P were so, it would be z; z is less than y. We can prohibit infinite values and life lengths by restricting to *realistic* possibilities.

^{21.} NB: If life is good instead of great, it is not more unsatisfactory, since neither is unsatisfactory at all; if life is great instead of good, it is not less unsatisfactory, since neither is unsatisfactory at all.

The duality in the analysans highlights that what is needed is always a net benefit—it benefits my nonpast overall.22 It also shows us how unneeded benefits differ from needed ones: the unneeded benefits fail either (i), (ii), or both. For example, drowning your sorrows with alcohol can make life less unsatisfactory for a time without being a net benefit; luxuries on an otherwise good day go the other way; luxuries with awful effects can fail on both counts.

In our welfare-based practical deliberations concerning a single individual, options that are not net benefits get weeded out early — they are not worth choosing. Among the remaining net benefits, we often want to differentiate the needed from the unneeded. The analysis singles out one distinctive feature: the needed ones would, at least for a time, make life less unsatisfactory than it would otherwise be.

The analysis is based on counterfactual comparison. This obviously suggests a simple analysis of goal need that appears to work well: I now have a goal need for nonpast P to hold iff I now have a goal $Q \neq P$ such that if P were so, Q would be, and if ~P were so, ~Q would be (i.e., Q is counterfactually dependent on P). I have little to say in this paper about goal need. It is easy to consider examples. Some prima facie objections are applicable also to welfare need and addressed in the next section.

7. Three Challenges

Before I turn to probabilistic need, let me address three potential concerns. First, suppose you need a hammer and a nail because you are trying to fix a chair.²³ It may seem to follow that you need a nail. More generally, when a pair is needed, it often seems to follow that each element is needed. But not on my analysis. The relevant dependences may or may not hold, depending on the circumstances. Suppose no hammer is nearby, so that if you had a nail, you would still not have a hammer. Then whether or not you have a nail makes no difference to whether or not you would fix the chair, so you do not need a nail. Is this the right result?

I believe it is. One of our intuitions about need is that what is needed in a given situation promises to make things better in some way—it is not supposed to be worthless. If no hammer is available, then attaining a nail is worthless. So if we allow that whenever you need a pair, you need each element, we will have to admit some needs for what is worthless. Worse still, we will have to admit some needs for what is purely harmful: suppose the plane is going down and you will be seriously injured; if there are no parachutes onboard, it is still true

^{22.} I will use the noun "benefit" to refer to what is beneficial, not just the beneficial effect of what is beneficial. Analogously for "burden."

^{23.} Thanks to Ben Bradley for pressing me to address this first concern.

that you need to put on a parachute and jump from the plane; so the view I am rejecting implies that you need to jump from the plane. But under the circumstances, you do not need to jump from the plane, as doing so would lead to death rather than injury.²⁴

The second challenge is that the analysis may seem to overcount specific needs. In the desert example, if you were to find a green dune buggy capable of being driven to safety, you would be relevantly better off than if not, since there is nothing else useful around. But do you really need a green dune buggy? The emphasis is required to make the objection compelling. It suggests an intended contrast: "Do you need a green dune buggy rather than one of another color?" The answer to that question is no, but the analysis does not say otherwise. The analysis says you need to get a green buggy because of how things would go relative to not getting one, under the circumstances. If the circumstances were more favorable—if, say, a red one were nearby—then it would be false that without a green one, you would be doomed, since you might get the red one instead, and the analysis would then imply, correctly, that it is false that you need a green one. I admit that if someone phoned you to ask what you need, you would not reply, "I need a green dune buggy" (unless that is your lucky color). But that may be because doing so would be pointlessly specific. You also would not reply, "One thing I do not need is a green dune buggy." And if someone offered you one, you would not say, "No thanks, I do not need a green one."

The third concern is temporal. I discussed cases in which we do not need to forego a small burden because its luxurious effect compensates. Since it is in virtue of the later luxury that the earlier burden does not need avoiding, it seems to me we now have a need for that later luxury. This is a verdict the analysis delivers: at 09:00, the passenger volunteers to be bumped from the morning flight to the afternoon flight in exchange for a large cash payout she will receive just before boarding; at 09:00, she has a need for the later payout because without it, her day from 09:00 on would be more unsatisfactory (and this would not be outweighed by anything on later days). I am happy with that, because I think it would be odd to deny that the luxury is needed, given that it is the only reason the passenger does not need to refrain from volunteering to be bumped. But this yields another oddity: moving through time, when she is done with the tedium of waiting and arrives at the time for the cash payout, she no longer needs the payout—it is a luxury after all, and we only need what matters to our nonpast, so the fact that it compensates for what is now a past pain is no longer relevant to what is now needed. If one prefers, this oddity can be avoided by changing the analysis to say "my life from P onward" instead of "my life from now on"

^{24.} When you need that a pair of events occurs, it is always the case that for each element, you need that it occurs in conjunction with the other element. Thus, we can always say that each element is needed as part of a pair, even if it is not needed simpliciter.

(though then we will have to deny that at the start, the luxury is needed, even though it is the whole reason the person does not need to avoid the burden). This revised version will have consistent results through time because it consistently ignores the segment (if any) between now and P. I am inclined to think this subtle issue does not reflect trouble with the analysis, but rather subtly different conceptions of need: we may think of now needing future things in virtue of how they impact life from *now* on, as well as now needing future things in virtue of how they impact life from *then* on.

8. Including the Need for Safety

Modern physics tells us the world is chancy: based on history and laws up to a given time, any possible event has, at that time, an objective probability (chance), and for future events, that chance is commonly neither o nor 1. But modern physics aside, we may—and certainly can—intuitively view many events as chancy, including hazards such as falling ill, lightning striking, or wheels slipping on a road. And when we do, we still see ourselves as having needs for things that protect us from them—vaccines, health insurance, lighting rods, seatbelts, etc. At the same time, we can see that it is often false that we would be harmed without the protection. This may be clearest in the case of the bomb with a 70% chance of being detonated soon by atomic-decay events. You know you have a need to steer clear of that bomb, despite knowing that you might be fine if you went near it. A complete analysis of welfare need has to cover the need to protect against threats that do not have a very high chance of hurting us.

My nonprobabilistic analysis works by comparing the values, in P worlds, of a person's life during certain stretches of time with the corresponding values in ~P worlds. To accommodate chancy threats, we can compare *expected* values. An expected value weights alternative possible values by their probabilities, and sums. We can use chance as the relevant sort of probability. A chance holds at a time, so our tool will be expected value, at a time, of life during a certain stretch of time. This can be understood more precisely as follows.

Idealizing a bit, we can suppose there are finitely many average values your life could possibly have tomorrow. For each such value, there is some chance, as of now, that your life tomorrow will have that value. Multiply each of those possible values by its corresponding chance and sum, and that is the expected average value, now, of your day tomorrow. This can be done for any time t, person p, and segment of time T. Call this the expected average value, at t, of p's life for T. Likewise, we also have the expected total value, at t, of p's life for T,

based on the possible *total* values that a given (mortal) person's life can possibly have for T.

For reasons that will emerge, let us first restrict analysis to present needs for present happenings (t = t1):

Welfare need for present P to hold: I now have a need for present P to hold iff now, the expected average value of my life for some nonpast time segment would be less unsatisfactory if P were so than if not, and the expected total value of my nonpast life would be higher.

In short, to say I now have a need for P to hold is to say P makes the expected value of my life going forward not only better in total, but less unsatisfactory for a while.

For example, suppose I have a bad headache. Let P be that I take ibuprofen now. I now have a need for P to hold, because now, the expected average value of my life for the rest of the day would be less unsatisfactory if P were so than if not, and the expected total value of the rest of my life would be higher. Here we merely adjust the present to suppose P, or ~P, and compare the two resulting present expected values of life in certain time spans.

But what if P is in the future? When should the expected values be assessed? Suppose today is Saturday and I need to get up early Monday for a medical appointment. Whether I rise early Monday or not makes no difference to an expected value *now* of any of my future life, because expected value at a time is based only on world history up to and including that time. So using *now* will not work. On the other hand, the relevant expected values at P's time, Monday, are indeterminate as of now, because the world is chancy and it is still unsettled what the world will be like on Monday; I cannot now have a need for something based on expected values that are not derivable from history up to now. Thus no time *after* now will generally work either. But there is a simple solution to this problem.

In explaining Wiggins's analysis (Section 4), I noted that a need for a given future event can come and go over time as circumstances change: last year I did not need to attend my friend's wedding next week, because the marriage was unlikely; now I do, lest I damage my friendship; but if the wedding is canceled tomorrow, I no longer will. Moving through this timeline, it seems that whenever I need to attend, it is very likely that my friendship will depend on my attending. As the probability of a wedding next week rises and falls, the probability that my welfare will depend on attending rises and falls, and my need to attend comes and goes. We can incorporate this idea just by changing "now" in the analysans to "it is now highly probable that at P's time," and this will extend the analysis

to future P's, while still including present ones.²⁵ The complete analysis—risk-sensitive and suitable for all worlds—is this:

Welfare need: I now (t) have a need for nonpast P to hold iff it is now highly probable that at P's time, the expected average value of my life for some nonpast ($\geq t$) time segment would be less unsatisfactory if P were so than if not, and the expected total value of my nonpast ($\geq t$) life would be higher.²⁶

Again, suppose today is Saturday and I need to get up early Monday for a medical appointment. As I noted, whether I rise early Monday or not makes no difference to the expected value now of my future life. However, given the state of the world now, there is a high chance that early Monday morning, the world will be such that my rising rather than not will make the relevant sort of difference to my day and my overall future. This involves the chance now (t) of future (t1) counterfactual conditionals. That is more fathomable than it may seem. It is just the chance at t that the world will evolve to be in a (any) state at t1 such that the relevant dependences hold. There are various possible worlds for which it will, and there is actually a certain chance at t that the world will evolve to be one of them.

The analysis reveals how unmet needs are bad for me. They are bad for me in virtue of endangering me in a certain way: at the time P fails to hold, the expected average value of my life for some time segment is then more unsatisfactory than it would otherwise be, and the expected total value of my life from then on is lower.

I noted that my nonprobabilistic analysis singles out a distinctive feature of needed net benefits relative to unneeded ones. This broader analysis does the same for expected analogs. The distinctive feature of a *needed* net expected benefit is that it is highly likely that at its time, the expected average value of life for a while would be less unsatisfactory with it than without it.

^{25.} A tempting alternative is to try weighting possible t1 expected values by their t probabilities, a kind of expected-expected value. But such an approach would generate prematurely cautious "needs" to protect against potential future burdens when it is still very up in the air whether the precaution will be needed when its time comes. For example, suppose there is a moderate chance that in two weeks, my boss will decide I must immediately go into a country that has its own dangerous epidemic. A vaccine with no side effects is available. The vaccine takes about two weeks to become effective, so I now have a need to get vaccinated soon, just in case I get the assignment. But I do not now have a need to be immune in two weeks; the proposed approach would say otherwise.

^{26.} Alternatively, we can replace " $\geq t$ " with " \geq P's time," in parity with the change offered in the last paragraph of Section 7.

As before, we can apply a similar approach to goal need: I now have a *goal need* for nonpast P to hold iff I now have a goal $Q \neq P$ such that it is now highly probable that at P's time, the chance of Q would be higher if P were so than if it were not. For example, I have a need to be at the bakery at o7:00 tomorrow, so I can buy fresh baguettes before they sell out; it is now highly probable that at o7:00, the chance of my buying fresh baguettes before they sell out would be higher if I were at the bakery than if not.

9. An Epistemic Challenge: The Need for Precautions Due to Ignorance

There is a subtle but important challenge to both of my analyses.²⁷ Imagine there are two cups of water before you. You drink from one of them. Now you learn that one of the cups contained a deadly poison, but you have no information about which one. Naturally, you are alarmed by this, and you see yourself as having a need to receive an effective antidote just in case. Similarly, if you have to move an electric cable and you are unsure whether it is live, you will see yourself as having a need to wear an insulated glove. But the need in these examples is not due to indeterminism. It is due to imperfect information. Commonly, when we do not know whether danger lurks, we still have needs for precautions—regardless of whether objectively there is any significant danger.

But I do not seem to be using "need" in the sense of welfare need as I have analyzed it, since in some of these cases there is objectively no danger to be protected from. So the challenge here is this: in what sense do you have a need to be given an antidote in the poison story, *even if* you were not poisoned?

If what you needed in the story were to choose or to take an antidote, then arguably you would have a welfare need to do so, because it would be prudent, and exercising that virtue is arguably part of living a good life. In this way, many of the precautions we take on a daily basis can count as needed, based as they are on our incomplete information. But to make the challenge a little stronger, I have characterized the object of need to be not a choice or act, but a desirable external event, your receiving an antidote.

I believe the answer involves a different kind of expected life value, one for which the probability is epistemic, not objective. There are various conceptions of epistemic probability. We can rely on a fairly standard rough idea: the epistemic probability of P, given certain information (or evidence), is the degree of belief in P that it is rational to have given that information.

^{27.} Thanks to Mark Walker for convincing me to address this issue and for helpful discussion.

The answer is that you have a certain goal need to receive an antidote. In the imagined situation, you want the world to change to improve your odds in a certain way. That is, you want some possibility to obtain which, in conjunction with your other information, makes the expected value of your future much brighter than it would otherwise be. Having such a possibility actually obtain is presumably a goal of yours in the imagined situation. Under the circumstances, if you were to receive an antidote, your goal would be attained, and if not, not. If you lack such a goal, then I do not see your receiving an antidote as a need of yours, unless you were really poisoned.

It may seem like a stretch of the word "goal" to say that your goal is to have circumstances change in a way that improves your prospects. We often think of a goal as something a person tries to achieve. But there is also a looser sense of "goal" on which it just means something like "adopted end." For example, it may be a goal of mine that my trees grow taller than yours, even if I have no plans to do anything to promote this end. Goal need involves "goals" in this looser sense.²⁸

10. The Normative Significance of Need

Intuitively, the fact that a benefit is needed seems to have some kind of normative significance, giving the benefit an extra value or moral importance. My main aim in this paper has been to analyze (welfare) need, in the hope of clarifying the source of that significance. The source in general is twofold: roughly, needed benefits have a high probability of being net beneficial and helping to make life less unsatisfactory for a while.

The harder question is, what is need's normative significance? The answer is not obvious. Needed benefits are not always better for a person-sometimes we rationally forgo them for larger luxuries. Needing does not, on the face of it, always confer even pro tanto rights-I may need a wife, a miracle, or good weather. And one person's needed benefit does not, or not clearly, always take moral precedence over another person's luxury—if I am a god who can change your good year to blissful, and the price is to let the migraine of a stranger just like you last another five minutes, perhaps I ought to do that.²⁹

^{28.} This is not to equate goals with desires. I truly desire to be able to hold my breath under water for five minutes, but I have not adopted it as a goal or end, and thus I have no need to begin training. See Frankfurt (1984: 3, especially n. 3) for related discussion. Frankfurt's so-called volitional need is akin to goal need. Just as I have to mean "goal" broadly, he has to mean "desire" narrowly, but we seem to have the same target.

^{29.} To infer such robust normative claims, philosophers sometimes focus on one of the aforementioned narrow species of need (basic, vital, etc.), the meeting of which is more critical to one's welfare. See Fletcher (2018) for related discussion.

I will say very little about need's normative significance, both because it is a large topic and because I am unsure of the answer. I will make one point relevant to my analyses.

I suggested that the need threshold is at what we ordinarily consider life going well, or good life. If this is right, then the source of need's normative significance is partly that what is needed helps make life be closer to at least good. (The other part is being a net benefit, which is an obvious source.) It is easy to believe that this could be part of what gives need a special significance, given that we are commonly concerned whether ordinary people without good lives have better ones in a way that we are not at all concerned whether ordinary people with good lives have better ones. This difference in concern is not simply because we think good life is good, for some needed benefits cannot raise us to good. Rather, merely rising toward good seems to have a kind of importance that rising beyond good lacks. Why this is, and the nature of that importance, are interesting questions. They are questions of interest for moral philosophy or value theory that do not presuppose the concept of need. So we potentially have here a reduction of the question of what is need's normative significance to these other philosophical questions.

11. Conclusion

The intuition that to need something is to require it to avoid harm is plausible. But it is only roughly correct, and it is too narrow since sometimes we just need what is required to be safer. I explained how Wiggins's attempt to clarify the intuition is problematic. I argued that, in contrast to his approach, we should understand the relevant requirement in terms of counterfactual dependence and the relevant harm or danger as relative to how well life would (expectedly) go without the object of need. When you have a need for something, it is highly likely that at its time, the (expected) total value of your nonpast would be higher with it than without it, and the (expected) average value of part of your life would be less unsatisfactory. In short, what is needed promises to be a net benefit that improves an unsatisfactory time.

I also pressed the proposal that the line of satisfactoriness is at what we ordinarily consider life going well, or good life. This is optional, as my analyses are at a high enough level of abstraction to accommodate various thresholds. However, as I explained in the previous section, this threshold appears to help the analyses explain the nature of need's normative significance, by reducing that problem to one of explaining the special normative significance of life's value being closer to (at least) good. This latter warrants investigation independently of investigating need. This reduction is some progress, though it still leaves us short of knowing what need's normative force is.

Acknowledgments

Thanks to Ben Bradley, Hélène Langerock, Jean-Paul Vessel, Mark Walker, and referees for this journal for helpful comments. Thanks also to Phillip Bricker and Fred Feldman for discussion of related topics.

References

Anscombe, G. E. M. (1958). Modern Moral Philosophy. *Philosophy*, 33(124), 1–19.

Bradley, Ben (2012). Doing Away with Harm. *Philosophy and Phenomenological Research*, 85(2), 390–412.

Brock, Gillian (2005). Needs and Global Justice. In Soran Reader (Ed.), *The Philosophy of Need* (51–72). Cambridge University Press.

Brock, Gillian and David Miller (2019). Needs in Moral and Political Philosophy. In Edward N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2019 ed.). https://plato.stanford.edu/archives/sum2019/entries/needs/

Brock, Gillian and Soran Reader (2002). Needs-Centered Ethical Theory. *The Journal of Value Inquiry*, 36, 425–34.

Carlson, Erik, Jens Johansson, and Olle Risberg (2022). Causal Accounts of Harming. *Pacific Philosophical Quarterly*, 103, 420–45.

Doyal, Len and Ian Gough (1984). A Theory of Human Needs. *Critical Social Policy*, 4(10), 6–38.

Feinberg, Joel (1973). Social Philosophy. Prentice-Hall.

Feit, Neil (2016). Comparative Harm, Creation and Death. Utilitas, 28(2), 136-63.

Feldman, Fred (2016). Distributive Justice: Getting What We Deserve from Our Country. Oxford University Press.

Finkelstein, Claire (2003). Is Risk a Harm? *University of Pennsylvania Law Review*, 151, 963–1001.

Fletcher, Guy (2018). Needing and Necessity. In Mark Timmons (Ed.), Oxford Studies in Normative Ethics (170–92). Oxford University Press.

Frankfurt, Harry G. (1984). Necessity and Desire. *Philosophy and Phenomenological Research*, 45(1), 1–13.

Hanser, Matthew (2011). Still More on the Metaphysics of Harm. *Philosophy and Phenomenological Research*, 82(2), 459–69.

Klocksiem, Justin (2019). The Counterfactual Comparative Account of Harm and Reasons for Action and Preference: Reply to Carlson. *Ethical Theory and Moral Practice*, 22, 673–77.

Lewis, David (1973). Causation. *Journal of Philosophy*, 70, 556–67.

Lewis, David (1979). Counterfactual Dependence and Time's Arrow. *Nous*, 13(70), 455–76.

McLeod, Stephen K. (2015). Two Philosophies of Need. *Polish Journal of Philosophy*, 9, 33–50.

Miller, David (1999). Principles of Social Justice. Harvard University Press.

Miller, Sarah Clark (2005). Need, Care and Obligation. In Soran Reader (Ed.), *The Philoso-phy of Need* (51–72). Cambridge University Press.

Norcross, Alastair (2005). Harming in Context. Philosophical Studies, 123, 149–73.

Northcott, Robert (2015). Harm and Causation. Utilitas, 27(2), 147-64.

Purves, Duncan (2018). Harming as Making Worse Off. *Philosophical Studies*, 176(10), 2629–56.

Reader, Soran (2007). Needs and Moral Necessity. Routledge.

Reader, Soran and Gillian Brock (2004). Needs, Moral Demands and Moral Theory. *Utilitas*, 16(3), 251–66.

Shiffrin, Seana Valentine (2012). Harm and Its Moral Significance. *Legal Theory*, 18, 357–98.

Stalnaker, Robert C. (1968). A Theory of Conditionals. In Nicholas Rescher (Ed.), *Studies in Logical Theory* (98–112). American Philosophical Quarterly Monographs 2. Blackwell.

Thomson, Garrett (1987). Needs. Routledge & Kegan Paul.

Thomson, Judith Jarvis (2011). More on the Metaphysics of Harm. *Philosophy and Phenomenological Research*, 82(2), 436–58.

White, Alan R. (1975). Modal Thinking. Blackwell.

Wiggins, David (1998). Claims of Need. In *Needs, Values, Truth: Essays in the Philosophy of Value* (3rd ed., 1–57). Oxford University Press. (Original work published 1987)

Wiggins, David (2005). An Idea We Cannot Do Without. In Soran Reader (Ed.), *The Philosophy of Need* (25–50). Cambridge University Press.

Wiggins, David and Sira Dermen (1987). Needs, Need, Needing. *Journal of Medical Ethics*, 13(2), 62–68.