



Living on the Edge: Investigating Experiences of Poverty Through the Lens of the Desperation Threshold Model

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Abstract

The Desperation Threshold Model (DTM) seeks to explain conflicting findings about the risk propensity of people living in poverty, predicting risk aversion when they can still meet their basic needs, and risk taking when they cannot. The DTM makes assumptions: that people have a conception of basic needs, that their ability to meet these motivates their decisions, and that they modulate risky decisions depending on their ability to do so. The realism of these assumptions has not yet been investigated. To start filling this gap, we investigated experiences of poverty through the lens of the DTM, using two complementary approaches: a pre-registered online survey with British participants ($n=300$) and semi-structured qualitative interviews with very low-income individuals in France ($n=14$). Our results imply that basic needs have both a context-general component and context-specific elaborations. Furthermore, participants often relied on social and institutional resources when experiencing financial adversity, indicating that measuring only personal income or wealth might not accurately capture the resources available to people. With respect to the DTM's main predictions, most individuals close to—but still above—the desperation threshold exhibited caution and took a safety-first approach, consistent with risk-averse behavior. Risky or antisocial behaviors (e.g., cheating, stealing) emerged only in rare instances of severe financial hardship and complete lack of external support. These results suggest that the DTM's main assumptions are empirically grounded but that they need to be qualified in specific ways. They also suggest that abstract models like the DTM can capture something about the experience of people living in conditions of poverty.

Keywords Poverty · Risk-sensitivity · Basic needs · Social support · Coping strategies

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Introduction

How can we best make sense of the risk propensity of people living in conditions of poverty? In this paper, we investigate recent ideas about the existence of a desperation threshold. Traditional analyses of risky choice predict risk-aversion at all levels of resources, since they operate on the assumption that there is a concave relationship between utility and resources (Kreps, 2013; von Neumann & Morgenstern, 1944). The Desperation Threshold Model (DTM) (de Courson et al., 2026), on the other hand, introduces the concept of basic needs, together with a minimal level of resources that allows these needs to be met: the desperation threshold. The main consequence of this addition is that the utility function now has both a convex and a concave segment, predicting risk-seeking and risk-aversion as a function of the level of resources (see Fig. 1). If a person is meeting their basic needs, but barely, they would be extremely careful not to fall below the threshold where their basic needs are not met anymore. A person just above the threshold is therefore expected to be strongly risk-averse. On the other hand, a person who is currently failing to meet their basic needs does not have much left to lose, but a lot to gain if basic needs can be restored. A person below the threshold is therefore expected to do everything they can to get back above, and will exhibit risk-seeking behavior.

The DTM is motivated by findings about low-income people in high-income countries and it has mainly been used to explain behavior in such contexts (de Courson et al., 2026). Since it predicts that people will exhibit either risk-averse or risk-seeking behavior as a function of their position with respect to the desperation threshold, it has the potential to accommodate conflicting and seemingly inconsistent results

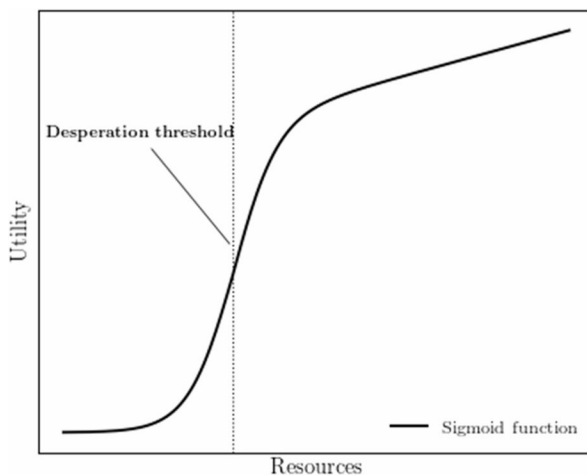


Fig. 1 Graphical illustration of a sigmoid utility function that counts as an instance of the DTM (de Courson et al., 2026). The utility function is steepest at the point where basic needs are just met: the desperation threshold. This captures the idea that failing to meet one's basic needs generates a sharp drop in utility. The utility function also contains a "rock bottom", defined as a minimal level of utility. This captures the idea that there is only so much suffering that one can experience, or, alternatively, that the reproductive value is bounded at 0. The sigmoid utility function has emerged in recent work on the measurement of psychological utility functions (Nettle & Wolff, 2025).

about the risk propensity of people living in conditions of poverty (Banerjee, 2004; Kish-Gephart, 2017). Recent empirical work with data from France and the UK has found that risk taking follows a V-shape against subjective resources: risk taking is highest at both extremes of the (subjective) resources distribution, suggesting that participants became more risk averse with declining resources, until a very low point where their risk aversion started to decrease again (de Courson et al., 2025). There therefore is some initial evidence that the concept of a desperation threshold might help us better understand the experiences and risk propensity of people living in conditions of poverty.

Yet, the DTM also relies on assumptions and makes predictions that have not yet been thoroughly investigated. First, the model assumes that people have basic needs that they seek to meet, but it is agnostic on what these consist of. For the DTM to have some explanatory power and be falsifiable in principle, there must exist at least some convergence on what basic needs are. Otherwise, any increase in an individual's risk proneness could be interpreted as being in the service of maintaining or satisfying basic needs; and risk-aversion could always be interpreted as evidence that basic needs were in fact satisfied. Second, the model assumes that what determines whether basic needs can be met or not is resources, and the relevant resources are implicitly assumed to be personal income and wealth. While sufficient personal financial resources can presumably prevent individuals from failing to meet their basic needs, research has shown that social connections and support can also provide a buffer for people living in poverty (Davis et al., 2025; Lubbers et al., 2020; Nettle et al., 2025; Richards, 2016). External help, from friends, family, charities or institutions more generally could in theory substitute for one's own financial resources when in conditions of severe financial adversity (Hwang et al., 2025). It therefore remains unclear what the minimal level of resources satisfying basic needs consists of, and what kind of resources people in financially desperate situations tend to draw upon. Finally, the DTM predicts that behavior changes qualitatively around the desperation threshold. It remains an open question to what extent, in high-income countries, people actually experience situations in which they do not have enough resources to satisfy their basic needs, especially taking into account resources distributed in their social network. Is there actually any evidence that the risky behaviors predicted by the DTM occur with any substantial frequency?

We relied on a mixed-methods approach to tackle these questions across two high-income populations in Western Europe. We show results both from a pre-registered survey of British participants on the online platform Prolific and from semi-structured qualitative interviews with mostly undocumented very low-income participants in the Parisian region in France. We conducted both a survey with a large number of participants and in-depth interviews with a smaller sample of individuals to contrast or possibly generalize the results from the two approaches. Participants answered questions about their conception of basic needs, about their experiences of financially desperate situations and about how they coped when in such situations. The answers were open-ended to capture the full breadth of the participants' experiences. Although our design and materials were pre-registered, we did not make confirmatory predictions and our approach was mainly descriptive. We were mainly interested in the following questions:

- (RQ1) Do people judge that they have basic needs, and if so, do they tend to list similar basic needs?
- (RQ2) Are people risk-averse, or taking a safety-first approach, when they feel they are getting close to the desperation threshold?
- (RQ3) How do people cope when they experience a financially desperate situation, and what kind of resources do they draw upon?
- (RQ4) Do people transition from risk-averse to risk-seeking behavior when they cannot satisfy their basic needs anymore?

Participants were also asked about whether they know others in their social environment that experienced financially desperate situations, and if they did, how those others experienced such situations. We were also interested in how experiences of financially desperate situations would affect emotions and either strengthen or strain social relationships, which as discussed above can be an important resource for people living in poverty. The results concerning those topics are reported in the Supplementary Materials and will only be mentioned in passing in the main text.

It is important to note that the DTM is a behavioral model rather than a psychological one, in the sense that it is agnostic about psychological states and processes (de Courson et al., 2026). It only predicts that different kinds of behavior (risk-averse or risk-seeking) will be observed in different situations (above and below the threshold). Risk-averse and risk-seeking behavior have clear definitions in expected utility theory: risk-aversion means that individuals prefer a certain outcome over a risky prospect with the same expected value, while risk-seeking means that individuals prefer a risky prospect over a certain outcome with the same expected value. Our participants retrospectively described how they behaved and coped in different financial situations. They did not choose between lotteries, which is the standard way to measure risk sensitivity (Holt & Laury, 2002). Therefore, although our questions are about real life and have high ecological validity, they can not strictly test whether our participants exhibited risk-averse or risk-seeking behavior in the situations they described and experienced. In this paper, we take the following approach: we will interpret cautious, prudent or careful behavior as evidence for risk-aversion and bold, impulsive or antisocial behavior as evidence for risk-seeking. We therefore start from the premise that (i) there exists a strong enough agreement on what cautious or impulsive behavior means, and (ii) there exists a close correspondence between what we consider as cautious or impulsive behavior and the mathematically well-defined concepts of risk-aversion and risk-seeking.

Methods

Online survey

Our study design and analysis plan were preregistered on OSF (<https://osf.io/hj6yf/>). We recruited British participants from the online platform Prolific (<https://www.prolific.com>), a platform known for its high-quality participant pool and for rigorous prescreening tools (Palan & Schitter, 2018), for participation in a first online survey

(the “screening” survey). We required that the participants were 18 years old or more, that they were a UK resident and that their native language was English. Participants first answered basic sociodemographic and income questions and were then screened according to whether or not they had already experienced a financially desperate situation. The screening question was the following: “*Was there ever a time when you did not have enough financial resources to satisfy your most basic needs?*”. Participants that answered that they had experienced such a situation were invited to take part in a longer “main” survey about their own and others’ experience of financially desperate situations, consisting mostly of open-ended answers. Those participants that answered that they had not experienced a financially desperate situation were asked about whether they ever felt close to experiencing such a situation and if they already implemented strategies in their everyday life to prevent experiencing such situations.

703 participants took part in the initial “screening” survey after removing duplicates and participants that did not finish the survey (surveys available here: <https://osf.io/hj6yf/>). Subsequently, 300 participants took part in the “main” survey. This was our preregistered target number of participants. Figure 2 describes the study flowchart.

Table 1 presents basic descriptive statistics for the participants that did and did not take part in the “main” survey. We have computed the average equivalised monthly income only for those participants that had an equivalised monthly income inferior to £14620 (15% of our participants mentioned having more than £14620 as equivalised monthly income, which suggests that they entered their annual income).

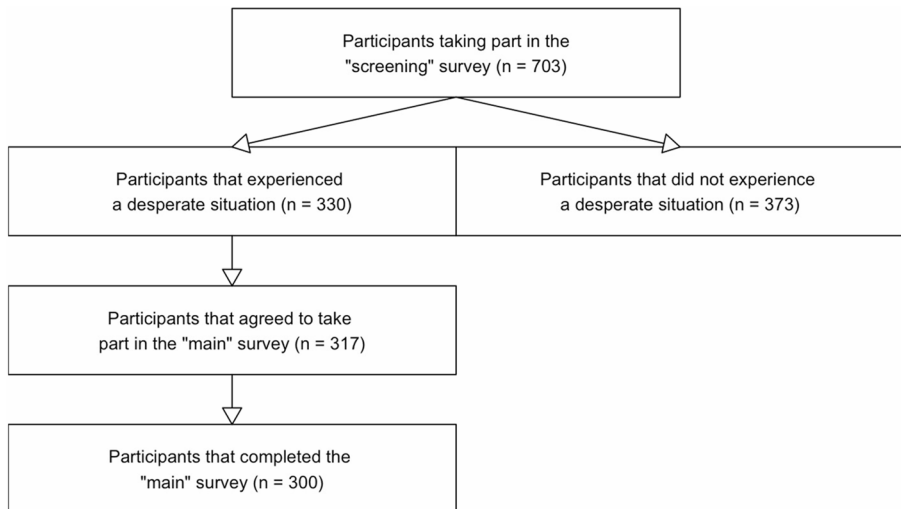


Fig. 2 Flow diagram illustrating participant progression through the study phases. 703 participants completed the initial “screening” survey. Of these, 330 reported having experienced a financially desperate situation, while 373 did not. Among those who had experienced a financially desperate situation, 317 agreed to take part in the “main” survey, and 300 ultimately completed it.

Table 1 Descriptive statistics for the participants that did and did not take part in the “main” survey. The GCSE is the General Certificate of Secondary Education, with grades from 1 (lowest) to 9 (highest). Grades from 1 to 3 mean below pass, while grades from 4 to 9 mean the student has passed. A-Level education refers to post-secondary, pre-university education. Are shown both the mean and the standard deviation of the monthly household equivalised net income

Gender	Did not take part to the survey (<i>N</i> =403)	Took part to the survey (<i>N</i> =300)
Man	205 (51%)	148 (49%)
Woman	195 (48%)	150 (50%)
I identify myself another way	2 (0%)	2 (1%)
I prefer not to say	1 (0%)	0 (0%)
Age	42.3 ± 13.8	39.9 ± 12.9
Education		
GCSE (Grade 3–1)	22 (5%)	14 (5%)
GCSE (Grade 9–4)	34 (8%)	29 (10%)
A-Level	79 (20%)	68 (23%)
Undergraduate degree (BA, BSc)	165 (41%)	138 (46%)
Master’s degree (MA, MSc)	89 (22%)	45 (15%)
Doctorate (PhD)	14 (3%)	6 (2%)
Number of adults	2.3 ± 1.0	2.4 ± 1.2
Number of children	0.5 ± 1.0	0.6 ± 0.9
Household equivalised net income (without outliers)	2463.9 ± 2014.6	2317.3 ± 2014.0

Semi-structured qualitative interviews

We also conducted in-depth semi-structured qualitative interviews with 14 very low-income, mostly undocumented, women living in or around Paris in France. We recruited participants from this sample for two main reasons. First, we expected this population to have experienced severe financial adversity since most of the participants were not entitled to social security benefits and were living “outside the system”. Second, we had privileged access to this sample. Participants were initially recruited between September and December 2022 for a randomized control trial evaluating barriers to access to childcare, led by one of the authors (L.C.). Around 2000 women had been recruited while they were pregnant in 8 maternity wards in the Paris metropolitan area, using a systematized sampling procedure. In France, parents need to be registered with the French Family Allowances Fund (*Caisse d’Allocations Familiales*, CAF hereafter), which is a public institution that allocates family allowances, to have access to childcare. 103 of the sampled participants were irregular (undocumented) migrants. Undocumented migrants cannot register with the CAF and therefore were not able to participate in the randomized control trial. Since we had the contact details of those participants, we were able to call them for participation in the present study about their experiences of financially desperate situations. We first generated a sample of 44 women with very-low income, on average less than 500 euros per month individually and 1000 euros per month at the household level. 39 of these participants were contacted by phone or by text message, starting in December 2024, for participation in the study. 29 agreed to take part. We were able to conduct interviews with only 14 of them, mainly due to time and schedule constraints. The interviews were conducted in February 2025. 7 interviews were conducted by phone and 7 interviews were conducted in person. All the participants received monetary compensation (30€) for the time that they provided us.

The interview guide (in French) can be accessed here: <https://osf.io/hj6yf/>. The participants were asked about their financial situation while growing up, their current financial situation, their perspective on available help, how their financial situation influenced their social relationships, their basic needs, their experiences of financially desperate situations and whether they ever renounced opportunities due to their precarious financial situation. None of the participants were born in France and 13 of them were still considered as irregular migrants at the time of the interview. Most arrived in France in the last 5 years but some were in France for more than 10 years. All of them had at least one child (average 2). Only 2 of them had a paid job, 5 were unemployed but looking for a job and 7 considered themselves as housewives. 10 lived with a partner while 4 of them either lived alone or were sofa surfing with their children. Some of them lived on as little as 200€ per month.

Data analysis

Survey

Our analyses were descriptive and involved both quantification and analysis of free text. All analyses were conducted in R (R Core Team, 2025). We computed the proportion of individuals that answered that they (i) have experienced a financially desperate situation, (ii) know others that have experienced a financially desperate situation, (iii) have not experienced a financially desperate situation but felt they were close to experiencing such a situation, (iv) have not taken opportunities due to the lack of a safety net.

The core of our analyses concerned the participants' conception of basic needs and their behavior and experience when in financially desperate situations. We analyzed the open-ended answers to the questions about (i) participants' conception of basic needs, (ii) participants' behavior in desperate situations, (iii) how participants felt in such situations, (iv) how participants' social relationships were affected and (v) how others behaved and felt in such situations, by hand-coding the answers and classifying them into general themes that emerged. We also extracted quotes from the participants' answers to illustrate some of the main results.

Finally, we hand-coded answers about the participants' emotions and social relationships when in financially desperate situations. In addition to the main analyses described above, we pre-registered predictions about the covariation between coping strategies, feelings and social relationships in financially desperate situations. These analyses are reported in the Supplementary Materials.

Interviews

All interviews were audio-recorded and transcribed using the transcription software Nootaa (<https://www.nootaa.io/fr>). While the interviews were semi-structured and touched on a variety of themes as described above, the participants' answers are analyzed here with the present research questions in mind. We singled out interview transcripts as a function of whether they referred to (i) how participants conceptualized their most basic needs, (ii) how they behaved when they felt close to the

danger zone, (iii) how they coped when in financially desperate situations and what resources they drew upon, (iv) how they felt when in such situations and (v) how their social relationships were affected. For basic needs, we listed the basic needs mentioned by the participants. For each other research question, we tried to retrieve the most informative quotes in the sense that they would provide the richest picture of the participants' experiences.

Results

Basic needs

We first present results about basic needs. The objective was to test whether there existed any convergence in our participants' conception of basic needs (RQ1). Survey participants were given the following instructions: "*Please take a few sentences to describe what you think constitute your most basic needs, in the sense that if these needs were not met, then you would experience a significant and painful drop in your quality of life, security and status*". Their answers were hand-coded and classified in the following categories: *Material resources* (food, water, shelter, electricity, clothing, etc.), *Bodily resources* (physical safety, physical and mental health, proper hygiene, etc.), *Social resources* (friends, family, social contact, etc.), *Institutional resources* (proper infrastructure, healthcare, education, etc.), *Cultural or symbolic resources* (having a good job, having social status, etc.), *Leisure* (entertainment, holidays, nights out, etc.), and *Other* if their answer did not fit into any of the mentioned categories.

96% of the survey participants mentioned material resources among their most basic needs, 34% mentioned bodily resources, 31% mentioned social resources, 12% mentioned cultural or symbolic resources, 11% mentioned institutional resources, 10% mentioned leisure and 7% mentioned other resources, such as having a sense of purpose, meaningful work or being free to do as one wants. On average, survey participants mentioned 2 categories of basic needs in their answer, with a standard deviation of 1. This focus on essential material resources for living, such as food, water and shelter can be seen in Figure 3, which displays the participants' choice of words for this question. Food, for instance, was mentioned by 205 (68%) of the participants.

Instead of computing the frequency of each individual word in the participants' answers, we can also compute how often pairs of words (one word following another) are found in the overall corpus of answers. This process, called tokenizing by bigram, gives us more information about the structure of the answers and can also be visualized on a graph as shown in Figure 4 (arrows show directionality of the relationship, while links are darker the more common the bigram is). Clusters of words in a bigram graph represent groups of words that frequently appear together in the text. These clusters tend to reflect conceptual or thematic groupings, meaning the words are related to the same topic or theme. One can see, for instance, that food represents a central node around which other (material and bodily) needs cluster. In particular, food often precedes the two other most frequent words in the corpus, water and shelter.

Table 2 Conditional co-occurrence of basic needs categories. Each cell shows the proportion of responses containing the column category among responses where the row category is present.

Category	Material	Physical	Social	Institutional	Cultural	Leisure	Other
Material	1.00	0.34	0.31	0.11	0.12	0.10	0.06
Physical	0.97	1.00	0.37	0.28	0.15	0.06	0.12
Social	0.94	0.39	1.00	0.16	0.18	0.11	0.11
Institutional	0.97	0.85	0.45	1.00	0.12	0.06	0.12
Cultural	0.94	0.42	0.47	0.11	1.00	0.03	0.08
Leisure	1.00	0.21	0.34	0.07	0.03	1.00	0.03
Other	0.81	0.57	0.48	0.19	0.14	0.05	1.00

tioned physical, social, institutional, cultural, leisure or other needs, material needs were (almost) always mentioned. This is not true the other way around, which implies that there is some hierarchy in basic needs: material needs tend to be mentioned first, followed by other needs.

In the interviews, participants tended to list similar basic needs:

- 7 participants mentioned having shelter.
- 5 participants mentioned food.
- 3 participants mentioned having a family.
- 2 participants mentioned having papers.
- Having a job, having money, having clothes and being in good health were mentioned by one participant each.

Having papers and having a job were clearly basic needs specific to their own situation, since most of them were undocumented and therefore needed papers to participate in social life. All interviewees saw having a job as emancipating, since it would allow them to take care of their own financial situation without being dependent on others.

From both surveys and interviews, participants tended to list similar basic needs, which could be taken as evidence that they converged on their conception of basic needs. Almost all participants mentioned essential material resources such as food, water, shelter, clothing as constituting their basic needs. But basic needs also seem to be context dependent, as in the examples of papers and jobs discussed above.

Behavior close to the financial danger zone

Among the 703 participants in our “screening” survey, 373 participants (53%) answered that they had never had a financially desperate situation (Figure 2). We asked these participants the following question: “*Have you sometimes felt that your finances were edging close to a “danger zone”, a critical point where a small deterioration would lead to a significant and painful drop in your quality of life, security and status?*”. 111 (30%) answered that they had already felt close to such a financial danger zone. These participants were then asked about what they had done in their everyday life to prevent themselves from falling into that danger zone. The objective was to investigate the prediction that participants would be risk-averse and take a safety-first approach close to the danger zone (RQ2). Their answers were hand-coded

as a function of the strategies they used and classified in the following (non-exclusive) categories:

Budgeted (i.e., they reduced spending, focused on essentials, skipped meals, stopped heating, etc.), *Arrangements* (i.e., they made arrangements with energy suppliers or landlords, took out on loans, restructured their debt, etc.), *External help* (i.e., they sought help from friends, family, charities, institutions, etc.), *New income sources* (i.e., they took on a new job, they sold belongings, etc.) or *Other* if the participant's answer could not fit in any of these categories.

Among the 111 survey participants who had ever felt close to a danger zone, 80% budgeted, 20% found new income sources, 5% made arrangements, 5% sought external help and 10% used other strategies, principally saving. This focus on budgeting and finding new income sources can be illustrated with some quotes from the corpus of answers:

- “*Sold items I could go without, cut back on everything unnecessary, switched to cheaper food options, looked for more work.*” (31-year-old man, living by himself).
- “*Looked at outgoings more closely, cut back wherever possible, e.g., stopped buying luxuries, changed energy supplier, changed phone/broadband provider, sold some items.*” (45-year-old man, living with his partner and two children).
- “*Stayed in bed one day every weekend so I didn't have to put the heating on. Didn't spend money on anything that wasn't absolutely essential.*” (61-year-old woman, living by herself).

Participants that had ever felt close to a danger zone were also asked the following question: “*Have you ever not taken an opportunity because you felt that if it does not work out, then you would not have a safety net to fall back on?*”. The objective was to investigate the prediction that participants would decline *good risks* (risks with positive expected utility) close to the danger zone (de Courson et al., 2026). Among them, 29% answered that they had had to renounce opportunities, mainly renounce meeting with friends, going on holidays, or taking new job opportunities, for fear that this would be too risky or too much of a strain on their finances. Since these are usually considered as non-basic expenditures, it might well be that participants renounced these opportunities not because they are risky, but because they are not essential.

While the interviewees were not directly asked about their experiences of being close to a financial danger zone, they were asked the following question that captures a similar idea: “*Do you often struggle to make ends meet?*”. Almost all participants said that they struggled to make ends meet, often even before the end of the month. Two participants told us that they did not struggle to make ends meet, in part due to them or their partner having a stable job. Reflecting the findings from the online study, all the participants adopted the strategy of planning and cutting on unnecessary expenses as much as possible to manage with a minimal budget, sometimes only 200 euros per month as financial aid. The following quotes reflect what all participants were doing as a baseline:

- “*I organize myself in advance, I always have a schedule.*” (33-year-old woman)

with three children, unemployed and undocumented, living with her employed partner and children in social housing, arrived in France in 2022).

- *“It’s a whole program at the beginning of the month, we decide what’s going to the groceries and what’s going to the side.”* (29-year-old woman with one child, unemployed and undocumented, living with her employed partner and child in an apartment, arrived in France in 2022).
- *“We try to cut down on unnecessary expenditures. [...] I try to shop for the month, not the day.”* (30-year-old woman with one child, unemployed and undocumented, living with her partner and child in social housing, arrived in France in 2002).
- *“I try to live with what I’ve got, I try to adapt. [...] I often have food packs at home. [...] The day there’s nothing left, I can use these packs to eat.”* (37-year-old woman with three children, unemployed and undocumented, housed with her partner and children by a charity, arrived in France in 2012).

Yet, planning was not always enough. This could be due to the amount of financial resources being too low to cover all the necessary expenses, or because of unexpected expenses such as medication, increases in energy or food prices, child clothes or supplies. In such cases, some participants decided to work more, skipped meals or had their bank account overdrawn:

- *“The salary isn’t enough, we always have to do more to finish the month well, otherwise we’re always tight.”* (33-year-old woman with three children, unemployed and undocumented, living with her partner and children in social housing, arrived in France in 2022).
- *“If we’re in trouble at the end of the month, I prioritize my family, I can skip meals, there’s no worries.”* (26-year-old woman with one child, unemployed and undocumented, housed with her partner and child by an acquaintance, arrived in France in 2021).
- *“I often don’t even have a cent. I know I want to eat something, but I haven’t got anything! So, I make do with what’s there, I have no choice, and I’ve got my children used to this situation.”* (31-year-old woman with three children, unemployed and undocumented, living with her children in social housing, arrived in France in 2017).
- *“On the 5th of the month, you know you have to pay the bills, but as you don’t have the salary or the budget, they’re going to cut you off directly from your bank account. [...] It’s going to become an unpaid bill. I get into this all the time.”* (31-year-old woman with three children, unemployed and undocumented, living with her children in social housing, arrived in France in 2017).

The results from the survey participants that had never experienced a financially desperate situation but felt that they were close suggest that people can recognize the existence of a financial danger zone and implement strategies to prevent themselves getting too close to that zone. From their answers, budgeting (mainly cutting on unnecessary expenses and being extremely careful about spending) clearly was the main strategy. This was in line with the results from our interviews, since interviewees mentioned strategies that were similar in nature to the ones mentioned

by the online participants, mainly budgeting such as focusing on essentials or skipping meals, making arrangements or finding new income sources. This suggests that when close to seeing their financial situation drastically deteriorating, people mainly exhibit cautious behavior and take a safety-first approach.

Coping strategies in financially desperate situations

The participants that took part in our “main” survey were given the following instructions: “*You told us that there already was a time when you did not have enough financial resources to satisfy your most basic needs. Could you explain what you did to cope with that/these situation(s)? Please take a few sentences to explain.*” The objective was to understand how people cope when they experience a financially desperate situation, and what kind of resources they draw upon (RQ3). Their answers were hand-coded as a function of the strategies they used and classified in the following (non-exclusive) categories: *Budgeted*, *Arrangements*, *External help*, *New income sources*, *Positive outlook* (i.e., they were hopeful that the situation would pass, they conceptualized the situation as a means to grow, etc.), *No description* or *Other*.

Among the 300 participants that experienced a financially desperate situation, 45% sought external help, 36% budgeted, 33% found new income sources, 14% took on a positive outlook on their situation, 10% made arrangements, 3% gave no description and 11% behaved in another way, such as using savings or focusing on developing new skills. Three participants mentioned having to steal as a way to cope with their difficult financial situation. Characteristically, and as we will shortly see, these participants mentioned having to steal after asking for help or borrowing did not suffice.

Seeking external help was the main coping strategy when experiencing financial adversity in our survey sample. Participants that knew someone that experienced financially desperate situations also listed seeking external help as the main coping strategy for their acquaintances, way ahead of seeking new income sources or budgeting. Here, we display just a few quotes to illustrate how important external help can be, since this will also be an important theme emerging from the interviews:

- “*I coped very badly, I was homeless for about two weeks and slept rough at the airport. [...] I was fortunate enough to be housed in emergency accommodation until I found a job.*” (43-year-old man, living by himself).
- “*We were made homeless at a time when I wasn't earning much money, and then my wife lost her job. We ended up sofa-surfing with our daughter for a while, with most of our belongings stored in a friend's garage until we could find somewhere to live.*” (47-year-old man, living with his partner).
- “*I currently don't have adequate heating and sometimes don't have enough food without resorting to food banks, free meals, etc. This can mean missing the odd meal as these options are not available every day [...]. I have several friends in a similar situation, we help each other out, share when we have extra, and generally support each other.*” (49-year-old woman, living by herself).

Similar results emerged from the interviews. Participants sometimes skipped meals, had their bank account overdrawn or worked more to make ends meet. Yet, managing alone was usually not possible when in extreme financial adversity. All 14 participants told us that they rely and depend on external help, be it informal or institutional. Here we display just three quotes, but similar ones can be found in all interviews:

- *“After giving birth, I looked for work for 6 months, but I couldn’t find any. It was very complicated. I didn’t want to, but I even had to go to the Restaurants du Coeur [a charity organizing food distribution for people in need], it was the last resort.”* (39-year-old woman with two children, employed and undocumented, living with her partner and children in an apartment, arrived in France in 2019).
- *“I have a friend who saves me every time, if we haven’t received my husband’s pay on time, or if we have to pay charges, she saves me.”* (33-year-old woman with three children, unemployed and undocumented, living with her partner and children in social housing, arrived in France in 2022).
- *“Even if we don’t have the means to buy, [...] we are given food, to eat.”* (26-year-old woman with one child, unemployed and undocumented, housed with her partner and child by an acquaintance, arrived in France in 2021).

Our results imply that people draw upon a larger set of resources than just their personal income or wealth under financial adversity. With respect to the concept of the desperation threshold, we can therefore ask: what happens when help is not readily available, and people have to manage by themselves? This, we think, captures the essence of a desperate situation, since it acknowledges that external help is also an important resource that can be drawn upon.

How do people cope when help is not readily available?

There are not many examples of desperate situations in our sample, exactly because most of the time people get access to external help. However, when this situation does occur, people do perform actions that are commonly described as risky or anti-social (RQ4):

- *“One day, I didn’t know where to sleep, and I had to trust someone I’d just met. I didn’t sleep, but at least I was warm. I had no choice.”* (interviewee: 30-year-old woman with one child, unemployed and undocumented, living with her partner and child in social housing, arrived in France in 2002).
- *“In these situations, you beg, borrow and steal.”* (survey participant: 44-year-old man, living with two other adults).
- *“I would try and borrowing off friends and family, if that didn’t work I would steal food to survive until payday.”* (survey participant: 62-year-old man, living by himself).
- *“When my children were in care and I was asked to bring them some clothes, [...] I didn’t have much. I thought that if I didn’t bring the clothes, people would think I was incapable of looking after my children. So, at the shop, I put some clothes in my coat and the shop’s alarm rang.”* (interviewee: 37-year-old woman with three

children, unemployed and undocumented, housed with her partner and children by a charity, arrived in France in 2012).

Participants sometimes recognized that they were acting against their own principles when performing risky or antisocial actions, but argued that they had no other choice:

- *“I haven’t charged my Navigo pass [a public transportation pass for Paris and surrounding areas] for 4 years. I don’t pay, I cheat, but because I can’t afford to pay 85 euros a month.”* (interviewee: 31-year-old woman with three children, unemployed and undocumented, living with her children in social housing, arrived in France in 2017).
- *“At the moment, I don’t have an underground ticket, but I know that’s not right. It’s because I’ve got nothing. If I get arrested, I say I’ve got nothing. But I know that’s not ok, that it’s not right at all.”* (interviewee: 34-year-old woman with two children, unemployed and undocumented, living with her children in a hotel, arrived in France in 2019).
- *“If the person is really in a critical, critical situation, even if they [had said in the past] ‘this I’m never going to allow myself to do’, in the actual event, it’s different.”* (interviewee: 30-year-old woman with one child, unemployed and undocumented, living with her partner and child in social housing, arrived in France in 2002).

People can usually rely on help (from friends, family, charities, institutions) as a last resort, which makes experiences of desperate situations quite infrequent. Yet, we found some evidence that experiencing desperate situations can lead to what can be considered risky or antisocial behavior (stealing, cheating) when help is not available. Interestingly, those indulging in antisocial behavior recognize it but argue that they have no alternatives.

Feelings, social relationships and inter-correlations between variables

We asked additional questions about feelings related to experiencing desperation, the effects of desperation on social relationships, and the correlations between coping strategies, feelings, and relationship consequences. These analyses are reported in full in the Supplementary Materials.

Briefly, survey and interview data converge in showing how financially desperate situations are predictably associated with negative emotional experiences. In our survey, a significant proportion of participants reported feeling depressed or withdrawn (37%), followed by stress or anxiety (28%), low self-worth (23%), irritability or anger (15%), and, to a lesser extent, hopelessness or fear (7%). This suggests that depressive and anxiety-related states are a central component of such experiences. The interview data further corroborate this pattern, with participants describing persistent stress, sleep disturbances, loss of appetite, and intrusive negative thoughts.

The survey and interview data also indicate that financially desperate situations are associated with changes in the dynamics of social relationships. In the survey, a majority of participants reported withdrawing from social interactions (58%), while

smaller proportions reported strained relationships (12%), feelings of embarrassment (11%), or others withdrawing from them (6%). Only a minority reported no change (15%) or improvements in relationships (7%). This suggests that financial adversity can lead to social withdrawal, whether through material constraints on participation in social life or psychological factors such as shame and diminished well-being. Interview data further highlight both the erosion of existing ties and a growing dependence on others when alternatives are limited.

Finally, after having corrected for multiple comparisons, most of the correlations between coping strategies, feelings and social relationship consequences were statistically non-significant. Having budgeted while in financially desperate situations was however significantly associated with having felt stressed or anxious, while feeling depressed was significantly associated with having withdrawn from social relationships.

General discussion

The Desperation Threshold Model (DTM) was developed to explain the paradoxical effects of poverty on risk taking behavior (de Courson et al., 2026). The model makes assumptions about people's experiences of need and scarcity, and from these assumptions makes predictions. There have been no investigations into the grounding of the assumptions and predictions in everyday life experience among people with low resources in high-income countries. The results from both our survey and our interviews suggest that (i) the DTM's assumptions are empirically grounded but (ii) the model's assumptions and predictions need to be qualified in specific ways and (iii) the qualified predictions received further, albeit qualitative, empirical support.

There was almost complete convergence on essential material resources (food, water, shelter, etc.) being listed as constituting basic needs. This suggests that the DTM's core assumption that the notion of basic needs captures something stable and real is justified. However, some participants mentioned under basic needs things that were specific to their own context, such as leisure for survey participants or having papers for our undocumented interviewees. Therefore, our results imply that basic needs have both a context-general component and context-specific elaborations that may need to be taken into account when applying the DTM. This is in line with recent findings about the context-specific nature of basic needs in conditions of extreme poverty (Bellet & Colson-Sihra, 2025).

Whereas presentations of the DTM assume that the resources required to satisfy basic needs come only from personal resources or wealth, our results show that people can draw on a variety of other resources under financial adversity. In particular, our participants predictably turned to social (friends, family) and institutional (charities, government) resources when they could not cope by themselves anymore. Therefore, only measuring personal income or wealth might not tell us the whole story about the resources available to people, and hence might not accurately predict their behaviour. Our findings are in line with previous research showing that social support is a crucial resource for people experiencing poverty (Lubbers et al., 2020; Richards, 2016) as well as an important buffer against the detrimental health

and well-being consequences of experiencing poverty (Davis et al., 2025; Nettle et al., 2025). This also aligns with results from the *Human Generosity Project* describing how humans in societies around the world manage risk socially, mainly through systems of risk pooling using need-based transfers (Cronk et al., 2019).

With respect to the main predictions of the DTM, our results suggest that people can recognize when their financial situation approaches a “danger zone” and that they adjust their behavior accordingly. They do this mainly by planning, budgeting and in general being cautious and taking a safety-first approach. These strategies also emerged from a study of the coping strategies of financially fragile households in the United States (Lusardi et al., 2011). Since we started from the premise that cautious, careful or prudent behavior can be interpreted as evidence for risk aversion, the results suggest that people mainly exhibit risk-averse behavior when close (but above) the desperation threshold. Seeking external help is relatively rare when people feel that they can still manage by themselves, suggesting that reaching out to others for help is used as a last recourse. Turning to aid from others may use up finite stocks of social capital, or even be mildly risky in terms of unpredictable outcomes for the relationship. Hence, people prefer not to do so if they can avoid it. Yet, when people cannot cope by themselves anymore, they tend to turn to external help and can usually find it. This explains why we have so few examples of risky or antisocial behavior in our sample. In fact, the results suggest that it is only when people experience financially desperate situations *and* they have no help available that they behave in ways commonly described as risky or antisocial (cheating, stealing). This latter point needs to be taken with caution since there are very few examples in our dataset. However, it constitutes a testable prediction for future, larger-scale research. Low personal income will predict risk-seeking, *only when* available social support is low or has been used up.

Our results also speak to how people feel when in financially desperate situations and to how their social relationships are affected when experiencing such situations. People mainly experienced negative emotions, such as feeling depressed or anxious, when experiencing financially desperate situations (see Supplementary Materials). People often withdrew from socializing in such situations, principally due to a lack of resources or to not feeling in the right state of mind to interact with others. The interviewees stressed how their difficult financial situation made them dependent on others and how this could add another layer of uncertainty to an already stressful condition. Our data are not fine-grained enough to delve into these questions further, but future work could investigate the ways in which the strategies and resources available to people when in financially desperate situations influence how they feel when in such situations (and vice-versa). The results of our study also raise the following important question: under what circumstances will people get access to help when they need it? Having a strong social support network appears to be an important safety net for people living in conditions of poverty. Yet, this support usually can not be taken as given and people often have to weigh in effort to develop and maintain their relationships. Future work could delve deeper into the strategies that people living in poverty deploy to build and maintain social relationships, and how their objectively difficult financial situation might interfere with these strategies.

We finish by placing our results within the broader literature on the drivers of risk taking behavior. The fact that we have observed risk taking behavior only when people could not satisfy their most basic needs—and no help was available—suggests that participants engaged in risk taking to meet basic needs requirements. This is a central prediction of the DTM, which was initially inspired by Risk-Sensitivity Theory (Stephens, 1981). Risk-Sensitivity Theory predicts that individuals will engage in risk taking when low-risk options are unlikely to meet their needs. The Relative State Model (Mishra et al., 2017), also inspired by Risk-Sensitivity Theory, similarly predicts greater risk taking when basic needs cannot be met anymore, through what is called the *need-based* account of risk taking. Our results can therefore be taken as evidence for both the Risk-Sensitivity Theory and the Relative State Model. The Relative State Model is however more general than the DTM, since it assumes that risk taking also has a *relative* component: it predicts that individuals will not only be sensitive to their distance from the desperation threshold, but also to their competitive advantage or disadvantage relative to others. The Relative State Model then predicts greater risk taking for people living in poverty through an additional channel: their *relative disadvantage* compared to others. Through this channel, one should observe a gradual (linear) increase in risk taking, the lower one gets on the income distribution. Our results however suggest that participants exhibited cautious behavior and took a safety-first approach close to (but above) the desperation threshold, and turned to risk-seeking or antisocial behavior only when basic needs were not met anymore. Although our study is descriptive rather than a formal test between different models, we suggest that our findings speak against accounts of risk taking behavior based on *relative* comparisons. Rather, our participants' concern seemed to be mostly with their absolute basic needs, such as material and security needs.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s12110-026-09524-1>.

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Data Availability All our materials (survey questionnaire, interview guide and survey data) can be accessed online at <https://osf.io/hj6yff/>. The full interviews are not released due to privacy concerns.

Declarations

Ethics approval Our online study was approved by the Institutional Review Board of Paris School of Economics (IRB Number: #2024-022). Our semi-structured qualitative interviews were approved by the Institutional Review Board of Paris School of Economics (#2024-029).

Consent to participate Informed consent was obtained from all individual participants included in our study and interviews. Survey participants first read the consent form and had to agree to start the questionnaire. Interviewees met in person provided written consent after reading the consent form. Interviewees met on the phone provided verbal consent.

Competing interests The authors declare no competing interests.

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