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Which Duration of Unemployment Benefits is Perceived as Being Just for Which Groups? Results from a Factorial Survey Experiment in Germany

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Welfare states allocate and redistribute resources across different groups. For the social legitimacy of welfare states, public support of redistributive processes and outcomes is crucial. An important aspect in this context is the deservingness or non-deservingness of benefit recipients from the perspective of those who both financially contribute to the system and potentially benefit from it. We invited a random sample of the German labour force to participate in an online-survey. Using a factorial survey experiment, we described fictitious unemployed persons with different attributes and asked survey participants on the just maximum benefit duration for each particular case. Judgements regarding just benefit durations vary along the criteria of reciprocity, control, attitude and need: Respondents grant longer unemployment benefits to older jobseekers, as well as to jobseekers who became involuntarily unemployed, had stable employment careers, have to care for the elderly or are sole earners in the household.

Keywords: Unemployment insurance, benefit receipt, welfare state, factorial survey experiment, deservingness.

Introduction

Welfare states allocate and redistribute resources from and to various social groups in many ways. Such redistributive processes in a society have to be rooted in common ideas and principles regarding what is just (Rothstein, 1998; Roosma *et al.*, 2013), while at the same time they might enforce common perceptions of what is just (Alesina

and Fuchs-Schündeln, 2007). In this context, one relevant aspect is the public perception of benefit claimants. Citizens of welfare states have ideas about who should receive what kind of financial support and how much they should receive. This topic is the subject of a growing number of studies aiming to investigate public opinion on different kinds of social policies targeted at different social groups. Many of these studies refer to the deservingness approach (van Oorschot, 2000; van Oorschot *et al.*, 2017), which builds on the normative justice principles of equality, equity and need (Meuleman *et al.*, 2020). The above literature has identified certain criteria that people use as decision heuristics when judging the legitimacy of public support for certain groups of the population.

This article focuses on a specific, but important dimension of the welfare state that has not yet been explored in the literature – the maximum duration of unemployment benefits perceived as being just. While pension systems and disability assistance in particular address social risks that are usually perceived as external to the beneficiary's responsibility, unemployed people are more likely to be held responsible for their situation, and doubts about the proper use of benefits are more widespread (van Oorschot, 2006: 25). Therefore, the regulations concerning public support for unemployed people are often subject to political and public controversy (Jensen and Petersen, 2016).

In order to investigate which duration of unemployment benefits is perceived as being just for which groups, we conducted a factorial survey experiment (vignette analysis) based on deservingness theory, describing fictitious unemployed persons with randomly varying attributes. Survey participants then had to determine which maximum duration of unemployment benefits they would perceive as being just for the persons described.

Our empirical analysis combines survey data with high-quality administrative data. The results show that the potential duration of unemployment benefits which people consider to be just varies strongly with the characteristics of the unemployed persons. In their assessment of the just benefit duration, respondents take the principles of reciprocity, control, attitude and need (explained in detail in section 2) into account. They would assign longer unemployment benefit durations to both older jobseekers and jobseekers who have to care for relatives. Moreover, respondents are more generous to unemployed persons who lost their jobs because the company they worked for went bankrupt and to those who were in continuous employment in the past. If there is a spouse who is able to cover the needs of the household, respondents are less generous.

A short review of the literature

Welfare states build on peoples' support of certain norms of reciprocity and obligations (Mau, 2004), while preferences and norms are also shaped by institutions in turn (e.g. Alesina and Fuchs-Schündeln, 2007). From this perspective, the question arises as to which potential unemployment benefit durations people perceive as being just. The classical normative principles of distributive justice are equality, equity and need (e.g. Reeskens and van Oorschot, 2013). Deservingness theory is rooted in these principles (Meuleman *et al.*, 2020), but focuses on the distinction between deserving and non-deserving benefit recipients and provides a further elaboration of underlying principles. Building on previous work by Cook (1979), de Swaan (1988) and Will (1993), the deservingness approach deals with the following questions: (1) how worthy does the public regard different social groups of receiving (financial) support from the welfare state,

and (2) on what criteria are these decisions regarding deservingness based? Or, as van Oorschot (2000) puts it, 'who should get what, and why?'

The criteria on which decisions regarding deservingness are based are often summarised in the CARIN model – an acronym made up of the first letters of the five criteria: control, attitude, reciprocity, identity and need (van Oorschot, 2000; van Oorschot et al., 2017; Meuleman et al., 2020). Benefit recipients are perceived as being more or less deserving depending on their control over their situation. This criterion focuses on the person's individual responsibility for a situation. The more individuals would be able to change their situation, the less deserving they are perceived to be. Attitude refers to the level of gratitude for or compliance with the system: a 'better' attitude - in the sense of behaving humbly - and high degree of compliance are considered to render an individual more deserving. Reciprocity is the extent to which benefit recipients have 'earned' public support (Reeskens and van der Meer, 2019; van Oorschot, 2000) – that is, whether they give something in return for leaning on others' solidarity or the extent to which they contributed to the system previously. The more they give or have given, the more deserving they are perceived to be. As Meuleman et al. (2020) write, reciprocity echoes the concept of equity, which underlies social insurance schemes, *Identity* stands for group membership or perceived proximity – in terms of similar personal characteristics, for example - to the evaluators (the feeling of them being 'one of us'). The last criterion in the classic model is benefit recipients' actual or perceived need. The more in need a person is, the more deserving he or she is perceived as being. Heuer and Zimmermann (2020) recently added a sixth criterion, which they call social investment, which refers to the potential future gains of (financial) investments in individuals or groups. The higher the potential future gains, the more deserving the individual is perceived as being.

Research on deservingness perceptions has shown that public attitudes towards welfare support show differences between groups of welfare claimants. Van Oorschot (2006) points out that unemployed people are perceived as being less deserving than the elderly, sick or disabled, but more deserving than immigrants. Reeskens and van der Meer (2019) analyse the importance of different deservingness criteria by using vignettes in a Dutch sample and asking respondents about their preferred levels of unemployment benefits. Their results show that in relation to one another, reciprocity, control and foreign origin matter most. Hörstermann and Andreß (2015) and Buss (2019) find that there are important differences in perceived deservingness within the group of the unemployed. Hörstermann and Andreß (2015) investigate which criteria the participants of an online study use to assess the deservingness of recipients of Germany's means-tested basic income support. Their results show that respondents vary the level of basic income support they consider appropriate according to the number of people in the household, the cause of and reaction to unemployment, age and nationality, and the region in which the unemployed live. In addition, in the German context, Buss (2019) analyses which level of unemployment benefits is perceived as being appropriate after the first year of unemployment. He shows that respondents are more generous to older unemployed people, those with children in the household, those with a name signalling German origin and those who are actively looking for a job.

While most of the studies use the amount of benefits as an outcome variable, Buss (2019) shows that respondents also vary their judgements regarding the harshness of sanctions and the conditions for benefit receipts according to the criteria identified by

deservingness theory. Moreover, Osiander and Senghaas (2020) find that judgements of what is considered to be suitable employment depend, among other things, on the level of control that unemployed individuals have over their situation and on whether they have been unemployed in the past.

Economic literature provides a complementary perspective on institutions. Regarding the unemployment benefit duration, the focus is on its effect on job-finding rates and job quality. On the one hand, long unemployment benefit durations provide people with adverse incentives to reduce their job search efforts and to increase their reservation wage. The longer unemployment benefit durations are, the longer jobseekers can afford to turn down job offers that do not suit them well (Holmlund, 2015). In consequence, unemployment duration increases (Schmieder *et al.*, 2012; Riphahn and Schrader, 2020) and human capital may become devaluated. On the other hand, longer unemployment benefit durations provide more time to search for an adequate job and may thus improve match quality (Caliendo *et al.*, 2013; Nekoei and Weber, 2017).

The unemployment insurance system in Germany

The study presented in this article refers to the maximum duration of benefit receipt in the German unemployment insurance system. Unemployment insurance is one of two tiers in Germany's system of unemployment protection. Employers and regular employees each pay half of the financial contributions, which amount to a total of 2.4 per cent of an employee's gross monthly wage up to a certain threshold. Individuals are entitled to unemployment benefits if they meet certain criteria: first, they must be unemployed, which is legally defined as not being employed or working for fewer than fifteen hours per week, making efforts to end unemployment, and being available for job placement by the local employment agency. Second, they have to have registered with the local employment agency as being unemployed, and third, they have to have been employed for at least twelve months within the last thirty months (up to the end of 2019: twenty-four months) in order to be entitled to unemployment benefits.

Individuals who are not eligible for unemployment benefit receipt – because their benefits have expired, for example – can apply for tax-funded, means-tested basic income support. Moreover, jobseekers can apply for additional basic income support if their level of unemployment benefits does not cover the minimum living expenses of the household. Financial support from this second tier of unemployment protection is called 'unemployment benefit II'. In many cases, this type of benefit is considerably lower than unemployment benefits from the unemployment insurance system and is linked to more rigid obligations.²

If individuals are eligible for financial support under the unemployment insurance system, the maximum duration of unemployment benefits depends on

- a. time spent in employment subject to social security contributions during the five years preceding the start of the unemployment spell and
- b. the jobseeker's age at the time unemployment benefits were claimed.

Table 1 provides an overview of the legal regulations on the maximum unemployment benefit duration. These have remained basically the same since 1 January 2008.

Individuals who are under fifty years of age and were in employment subject to social security contributions for at least twenty-four months in the five years preceding their

Table 1 Maximum unemployment benefit receipt depending on former employment and age

Age	Maximum unemployment benefit receipt (in months)
	6
	8
	10
	12
50	15
55	18
58	24
	50 55

Source. Authors' own illustration based on BMAS (2019)

claim are entitled to a maximum of twelve months of unemployment benefits. The maximum unemployment benefit duration increases to fifteen months for those between the ages of fifty and fifty-four, eighteen months for those between fifty-five and fifty-seven, and a maximum of twenty-four months for those over fifty-seven. For individuals without dependent children, the replacement rate is sixty per cent of their last net wage. However, unemployment benefits also include elements that go beyond the principle of risk insurance and include aspects of need: jobseekers with dependent children are granted a sixty-seven per cent replacement rate.

In contrast to most of the studies referred to above, we focus on unemployment benefit duration and not on the net replacement rate. The net replacement rate of unemployment insurance has remained relatively stable during the last decades. The maximum benefit duration, in contrast, has been subject to much political reform. In the mid-1980s, the maximum duration for older jobseekers was gradually extended. Older applicants were entitled to benefits for a maximum of eighteen to thirty-two months. In 2006, the maximum duration of benefit entitlement was reduced to eighteen months in the course of the 'Hartz' reforms (Dlugosz et al., 2014; Blank, 2020: 514). After intense discussion, the maximum unemployment benefit duration was increased again to twenty-four months in 2008. During the COVID-19 pandemic, the maximum benefit receipt has been temporarily extended by three months for all age groups.

Despite these reforms, or maybe precisely because of them, there has been recurring political controversy concerning the maximum duration of unemployment benefit receipt. German left-wing political parties in particular argue for an extension of the maximum unemployment benefit duration for recipients with long contribution records (DIE LINKE, 2019; SPD, 2019). The German Trade Union Confederation, an umbrella organisation representing eight German trade unions, proposes that certain periods of child care and care for frail relatives should be treated as equivalent to periods of employment (DGB, 2019). In the context of this debate, it is sometimes pointed out that other contributions to the public good, such as bringing up children or unpaid care work in the household, also need to be accounted for when designing the duration of unemployment benefits (Klammer, 2004; Schulze Buschoff and Schmidt, 2009; Eichhorst and Marx, 2010).

Vignettes and hypotheses

To investigate which potential benefit duration is perceived as being just for which groups of unemployed persons, we use a factorial survey experiment (for an introduction, see Auspurg and Hinz, 2015; Beck and Opp, 2001). Respondents have to evaluate several different scenarios – also called vignettes. Vignettes describe hypothetical situations, people or objects. Essential characteristics of the scenario (called 'factors' or 'dimensions') are varied randomly as they would be in an experiment. The random variation of dimensions allows the researcher to identify their causal effect on ratings (compared to a reference situation and a reference respondent). Vignettes have proven to be a suitable approach to use in various research contexts (Finch, 1987; Wallander, 2009; Auspurg and Hinz, 2015). They are also well established in empirical justice research (Jasso, 2006; Liebig et al., 2015). In the social policy field, they have recently been applied to varied research questions, such as perceptions of fairness regarding wage settlements (Pfeifer et al., 2017) and the perceived deservingness of welfare claimants (Hörstermann and Andreß, 2015; Buss, 2019; Reeskens and van der Meer, 2019).

Each of our vignettes describes a fictitious jobseeker who has recently become unemployed and has different attributes that are relevant from a theory perspective. These attributes reflect different dimensions of deservingness and institutional regulations.

First, we vary the age of the jobseekers. We chose four levels (forty-eight, fifty-two, fifty-six and sixty years of age). To avoid illogical combinations with other vignette dimensions (adult children, see below), we include only hypothetical individuals who are in their forties or older. There is, nonetheless, substantial variation regarding the age of the hypothetical benefit recipients, and the variations reflect different maximum benefit durations in the German unemployment insurance system (also see Table 1). Older persons are generally perceived as being more deserving (van Oorschot, 2006). In our context, age can be perceived as a proxy for *reciprocity*. Older jobseekers are assumed to have paid contributions into the system for longer on average. Furthermore, there is evidence that obstacles to finding a new job increase with age (e.g. Homrighausen and Wolf, 2018). This indicates that older workers have less *control* over the potential results of their job search. Finally, older workers might also be perceived as more in *need*, as health often declines with age. We therefore theoretically expect older unemployed persons to be treated more generously:

H1: Older unemployed persons are granted longer maximum unemployment benefit durations.

Second, we use the triggering event for unemployment entry as an indicator for *control* and/or *attitude*. We distinguish two variants of this dimension: in the first case, the (former) employee is laid off because the company he or she works for goes bankrupt – a situation over which an individual worker only has very limited influence or none at all. In the second variant, the company does not extend the employee's fixed-term contract because he or she often arrived late for work. Although there may be reasons for being late that lie beyond the employee's control, he or she is normally largely responsible for being unpunctual. Hence, being late reflects more control over the situation. Moreover, losing a job because of frequently being late might also indicate a poor work ethic.³ Both effects point in the same direction, so we formulate Hypothesis H2 as follows:

H2: Unemployed persons who bear no responsibility for losing their jobs are granted longer maximum unemployment benefit durations.

Third, jobseekers differ as regards their employment histories. They were either employed continuously and therefore made contributions to the system regularly or they were employed irregularly. The employment history can be interpreted as a form of financial *reciprocity* with regard to the unemployment insurance system. Regarding normative principles of redistributive justice, this dimension mirrors the equity principle underlying all social insurance schemes. From a theoretical point of view, those who contribute for longer should also be granted entitlements for longer.

H3: Unemployed persons who were steadily employed in the past are granted longer maximum unemployment benefit durations.

Fourth, the jobseekers in our vignettes contribute to society in different non-monetary ways. In a broader sense, these are also aspects of *reciprocity*. Here, we distinguish three variants: in the first case, there is little or no reciprocity because the fictitious jobseeker has no children. In the second case, he or she has two adult children. While young children living in the household may also indicate a particular neediness, it is plausible to assume that individuals with adult children are perceived as having contributed to society in the past by raising children. In the third case, the father of the person described is currently in need of care, which is a current case of reciprocity. Caring for frail relatives might also be interpreted as a situation where a person is in immediate *need* of financial support.

H4: Unemployed persons who have raised children (H4a) or care for the elderly (H4b) are granted longer unemployment benefit durations.

Fifth, we include another aspect of *need* in the vignettes. The jobseekers in all our scenarios have a spouse whose employment situation has an effect on the household's needs. The spouse described has either no income of his or her own or can partly or fully cover the needs of the household.

H5: Unemployed persons whose spouse is able to partly (H5a) or fully (H5b) cover the needs of the household are granted shorter maximum unemployment benefit durations.

We do not make specific hypotheses for the criterion identity. Table 2 shows the varying dimensions and their levels. An example of a vignette is outlined below. The phrases in italics were also highlighted visually for the respondents. We also vary gender, which is not linked to any particular hypothesis.

A forty-eight-year-old woman has recently become unemployed. Her employment contract was not extended because she was often late. She has been regularly employed since the age of twenty-two and has paid unemployment insurance contributions. She takes care of her father, who is in need of care. Her husband can partly cover their household's needs with his income.

The vignette universe – all possible combinations of levels – consists of 2*4*2*2*3*3 = 288 combinations. We use the entire universe (full factorial design).

Table 2 Dimensions and levels of the vignettes

Dimension	Deservingness criteria	Levels	No. of levels
Gender	_	Male	2
		Female	
Age	Reciprocity/Control/	48	4
	Need	52	
		56	
		60	
Reason for	Control/Attitude	Employer has gone bankrupt	2
unemployment		Employment contract was not extended because he/she was often late	
Employment history	Reciprocity	Employed regularly in the past and paid contributions regularly Employed irregularly in the past	2
Contributions to	Do aire no aite / No a al	and paid contributions irregularly	2
	Reciprocity/Need	Two adult children	3
society		Father in need of care	
Spauso's income	Need		3
Spouse's income	neea	Spouse has no income Spouse's income can partly cover household's needs	3
		Spouse's income can fully cover household's needs	

Source. Authors' own illustration

Respondents had to indicate the maximum unemployment benefit duration they perceived as being just for the jobseeker described. Respondents could fill in the number of months in a text field. The range was limited to values between 0 and 99 months. Each respondent received four randomly selected vignettes.

Furthermore, we provided information about the current legal regulations randomly to about half of the respondents before presenting the vignettes (see Table 3). We use this information to analyse whether anchoring effects influence respondents' judgements. We assume that only some of the respondents actually knew the current legal regulations in detail. The respondents who were given this information were therefore more likely to use the current legal situation as a reference point for their judgements. While we cannot test this in our analysis, existing legal norms will probably shape individual perceptions of what is just to a certain degree. If the information has an effect, it is also important to find out whether it leads to more or less generous judgements.

Data

We use two random samples that were drawn from a two per cent sample of the Integrated Employment Biographies (IEB V13.01.00-181010). The IEB cover all registered spells of

Table 3 Anchoring information

Regular employees pay unemployment insurance contributions into the unemployment insurance system in Germany. Jobseekers applying for unemployment benefits have to register with their local employment agency as being unemployed. The maximum unemployment benefit duration depends on age: Jobseekers ...

```
... up to the age of 49
... between the ages of 50 and 54
... between the ages of 55 and 57
... over the age of 57
... receive a maximum of 12 months of unemployment benefits.
... receive a maximum of 15 months of unemployment benefits.
... receive a maximum of 18 months of unemployment benefits.
... receive a maximum of 24 months of unemployment benefits.
```

Source. Authors' own illustration

employment subject to social security contributions (including marginal employment), unemployment, unemployment benefit receipt, job search and participation in active labour market programmes in Germany. Since we address the population that is eligible to vote in federal elections and we wanted to avoid contacting people who do not speak German well, we restricted our sample to German citizens and to individuals who were at least eighteen years old at the time of data collection.

The data was collected between 4 November 2019 and 7 January 2020. We considered individuals that had an IEB spell during 2017 and at least one employment spell during the period from 2013 to 2017 (as we were interested in information on the individuals' last job). We drew two different samples that were to be contacted through different channels (see Osiander et al., 2020). The first sample consisted of individuals who were (at least temporarily) registered as jobseekers, benefit recipients or participants on active labour market programmes during the 2013-17 period. This group received an email if an e-mail address was provided in the data. The second sample included individuals who had at least one employment spell during 2013 to 2017, but no episodes of job search, unemployment benefit receipt or programme participation. This group received a letter of invitation. This procedure ensured that we captured the perspectives of both those who had paid contributions to the unemployment insurance system regularly and those who had received unemployment benefits during previous years, at least temporarily.

In accordance with the AAPOR guidelines (AAPOR, 2016), we calculate the net response rate conservatively as the minimum response rate (number of completed questionnaires divided by the number of all questionnaires plus the number of non-questionnaires plus all cases of unknown eligibility), which is 2.7 per cent for invitations via e-mail, and 6.7 per cent for letters of invitation. This lies in the range of what can be expected using these contact channels. Overall, we achieved a net response rate of 3.8 per cent. While the samples of participants are not representative of the German workforce, we are able to give a detailed account of selectivity with regard to the survey (Osiander et al., 2020) – which is more than can be said for most other surveys. Among those individuals who completed the survey, individuals from Eastern Germany are slightly underrepresented, while individuals aged fifty to fifty-nine are slightly overrepresented and individuals aged sixty or

Table 4 Gross and net samples

	Sample 'e-mail'		Sample 'post'		Total	
	N	In %	N	In %	N	In %
Gross sample (e-mails/letters of invitation)	25,000		10,000		35,000	
Non-eligible (non-delivered e-mails/letters of invitation)	56		454		510	
Adjusted gross sample (e-mails/letters of invitation minus non-delivered e-mails/letters of invitation)	24,944	100.0	9,546	100.0	34,490	100.0
Incomplete questionnaires	259	1.0	90	0.9	349	1.0
Completed questionnaires/ Minimum response rate	682	2.7	638	6.7	1,320	3.8

Source. Authors' own illustration

older are underrepresented. Furthermore, the probability of participation increases with the level of education and the complexity of the individual's most recent job. More years spent in employment and with unemployment benefits having been received in the past increase the participation rate, while years spent in marginal employment reduce it. The share of participants was significantly higher among those contacted by post, even after controlling for characteristics of participants.⁴

Both the e-mail and the letter of invitation contained a brief description of the research project and information on data protection regulations. The e-mail contained an individualised link to the online survey, the letter a short link with an individual password and a QR code. More detailed information was available on the research project website and also via an e-mail inbox supervised by the researchers involved.

Around half of the samples described in Osiander *et al.* (2020) received vignettes related to unemployment benefit duration. The overview of the gross and net samples and the following information relate to this group only.

Table 4 gives an overview of the gross and net samples.

To link the survey data with detailed personal information from the Integrated Employment Biographies (IEB V14.00.00-190927), the explicit consent of the respondents is required.⁵ Altogether, 77 per cent of the respondents agreed to the record linkage. For all respondents, we also collected some socio-demographic information that was not (sufficiently) covered by the IEB: current employment status, number of children, number of people living in the household, and classified net household income. The questionnaire also contained a question on political party preference and two items on attitudes regarding the responsibility for unemployment. Employees were also asked how likely they thought it would be that they would be unemployed in the next twelve months, at least temporarily. The questionnaire was pretested intensively by several colleagues and a group of experienced interviewers.

We restrict our analysis to respondents with no item nonresponse and those who agreed to record linkage. Therefore, all subsequent analyses are carried out

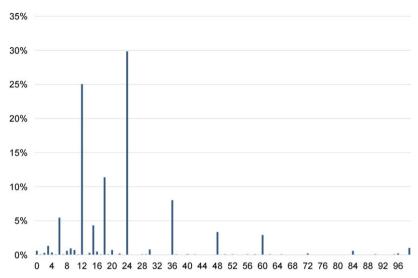


Figure 1. Distribution of unemployment benefit durations

Source. Authors' own illustration

Note. N (respondents) = 906; N (responses) = 3,624

with 906 persons. Table A1 in the Appendix presents descriptive statistics of the sample.

Of the individuals in our net sample, 80 per cent are employed subject to social security contributions, 6 per cent are unemployed, 3 per cent are no longer part of the labour force and 1 per cent have another status. The IEB cover pupils and students, retirees and self-employed persons if they have paid social security contributions or registered with the Federal Employment Agency as a jobseeker or as unemployed; these groups together account for 10 per cent of all respondents. Our results therefore mostly reflect the perspective of those who contribute to the unemployment insurance system financially and/or may receive financial support from it, and the descriptive results should be interpreted with caution.

In the following empirical analysis, we use 3,624 vignette judgements from 906 respondents. Correlations between vignette dimensions are close to zero, which confirms that the random assignment to respondents was successful. As each participant in the survey was asked to evaluate four vignettes, the data has a multilevel structure. We take this structure into account (Hox *et al.*, 1991) by estimating models with varying intercepts across individuals. A Hausman test prefers random effects over fixed effects, so we are going to present results of random effects estimates.

Empirical results

Across all vignettes, respondents granted unemployment benefits for about twenty-two months on average, the median being somewhat lower at eighteen months. Figure 1 displays the distribution of ratings. The mode is twenty-four months in about 30 per cent of the cases, followed by twelve months in about 25 per cent of the cases and eighteen months in 11 per cent of the cases. Around 80 per cent of the respondents suggested

Table 5 Effects of vignette dimensions and respondents' attributes on the maximum benefit duration (in months) considered to be just

	Model 1		Model 2	
	coef.	s.e.	coef.	s.e.
Vignette dimensions				
Male (ref.: female)	-0.240	0.307	-0.230	0.307
48 years old (ref.)			_	
52 years old	1.837***	0.417	1.838***	0.416
56 years old	3.181***	0.417	3.168***	0.416
60 years old	6.420***	0.445	6.415***	0.444
Bankrupt employer (ref.: contract not extended	3.697***	0.297	3.715***	0.297
because he/she was often late)				
Regularly employed (ref.: employed irregularly)	5.500***	0.305	5.499***	0.305
No children (ref.)		_		
Two adult children	1.180***	0.383	1.152***	0.382
Father in need of care	3.670***	0.380	3.659***	0.379
Spouse has no income (ref.)	_	_	_	_
Spouse's income partly covers needs	-0.824**	0.360	-0.847**	0.360
Spouse's income fully covers needs	-4.035***	0.380	-4.044***	0.380
Respondents' attributes		0.000		0.000
Anchoring information (ref.: none)			-3.278***	0.855
Male (ref.: female)			2.353**	0.953
Age			-0.000	0.048
Children (ref.: none)			1.400	1.234
Eastern Germany (ref.: Western Germany)			-3.152***	1.174
Number of persons in household			3.132	1.17
1-person household (ref.)				
2-person household			-0.658	1.326
3-person household			-1.199	1.666
4-person household			-2.100	1.829
5-person household			-1.035	2.454
Monthly household net income			-1.033	2.737
Less than €1,500			3.485*	1.871
€1,500 to less than €2,000			0.939	1.714
€2,000 to less than €3,000			1.136	1.350
€3,000 to less than €4,000 (ref.)			1.130	1.550
			1.387	 1.464
€4,000 to less than €5,000			-1.276	1.450
€5,000 or more				
No information on net income			1.060	1.907
Party preference				
Christian conservative party (ref.)			1 214	1 (00
Social democratic party			1.314	1.680
Right-wing populist party (AfD)			0.0220	2.395
Liberal democratic party			-1.686	2.378
Left-wing party (DIE LINKE)			4.603**	1.912
Green party			0.796	1.383
Other party			3.121	2.290

Table 5 (Continued)

	Model 1		Model 2	
	coef.	s.e.	coef.	s.e.
No party preference			3.706**	1.743
Apolitical			-0.001	2.319
No information on party preference			1.712	1.608
General attitudes				
'The individual is not to blame for his or her unemployment'			2.506**	1.136
'It is up to every unemployed person to change their own professional situation'			-4.741***	0.924
Subjective probability of being temporarily unemployed			-1.385	1.306
Vocational degree				
No vocational degree			-2.342	1.997
Vocational degree (ref.)				_
University degree			1.472	1.008
Labour market history between 2013 and 2017				
Regular employment in the last 6 years (in years)			0.317	0.316
Ever received unemployment benefits			0.387	0.948
Ever received means-tested unemployment benefit			2.680**	1.158
Dummy: last job = part-time			0.138	1.143
Last daily wage			-0.015	0.015
Constant	16.830***	0.824	15.498***	3.242
Responses (vignettes)	3,624		3,624	
Respondents	906		906	
Pseudo R ²	0.094		0.183	

Source. Authors' own calculations, random intercept models Note. coef. = coefficient; s.e. = standard error.

The vignette position was controlled for in both models and showed no effect.

unemployment benefit durations ranging from twelve to thirty-six months. The limitation to a maximum of ninety-nine months obviously did not have a major impact on the results. It should be noted that this does not necessarily imply that respondents would be more generous on average than the German welfare state, as we focus on particular scenarios. Thus, our focus is on differential assessment by vignette features.

Table 5 presents two random effects estimates. Model 1 includes only the vignette dimensions, while Model 2 also takes respondents' characteristics into account. In both models, the vignette characteristics have almost identical effects. Model 1, with vignette dimensions, has a Pseudo-R² of 0.094, while for Model 2, with respondents' attributes, it is 0.183. The coefficients can be interpreted as changes in maximum unemployment benefit duration measured in months compared to the respective reference category.

^{* =} p < 0.10; ** = p < 0.05; *** = p < 0.01.

Effects of vignette dimensions

As expected, the age of the hypothetical benefit recipient plays an important role in respondents' judgements: the respondents are more generous to all age groups of unemployed persons other than those aged forty-eight. The size of the effect ranges from roughly two months of additional benefit duration for fifty-two-year-old unemployed persons to more than six months for those aged sixty. All effects are highly significant, with the latter being the largest coefficient in the whole model. This is in line with our theoretical expectations from H1 and demonstrates that reciprocity, control and need – for which age is an indicator – have an impact on the maximum benefit duration perceived as being just for a particular group of unemployed persons. However, respondents vary maximum durations of benefit receipt less according to age than the legislature does. Moreover, it is also plausible that we would see a somewhat greater differentiation by age if we also had included younger hypothetical jobseekers.

Other indicators of reciprocity are important too: respondents are more generous to unemployed individuals who were in continuous employment in the past. The effect is substantial (five-and-a-half months-plus compared to those who were irregularly employed) and highly significant. This is in line with expectations from Hypothesis H3. Moreover, unemployed individuals who have raised children in the past are granted unemployment benefits for about a month longer than those without children. The effect is highly significant, but relatively small. A father in need of care seems to be a stronger and/ or more immediate indicator for reciprocity – the respondents are willing to give those unemployed persons an additional benefit duration of three-and-a-half months, which is also highly significant. This is in line with expectations from both Hypothesis H4a and Hypothesis H4b. Furthermore, it suggests that immediate reciprocity is given particularly high priority by the respondents.

The attitude (positive work ethic) of the unemployed individual and their perceived control over the situation also matter. Compared to unemployed individuals who have lost their jobs because they were often late for work, unemployed persons who were laid off because the company went bankrupt are treated more generously by the respondents. Respondents grant the latter group about three-and-a-half months of additional unemployment benefits. The effect is highly significant and in line with our theoretical expectations from Hypothesis H2. The result underlines the importance of attributing blame to unemployed individuals for the situation they are in.

Furthermore, respondents take the financial situation of the household into account. Respondents are slightly less generous to unemployed persons whose spouse can partly cover the household's financial needs than to those whose spouse does not have their own income. However, the effect is relatively small (-0.8 months). Respondents become much more restrictive if a person's spouse can fully cover the household's needs: in this case they reduce the unemployment benefit duration by about four months, which is highly significant. The latter result is in line with Hypothesis H5b, but there is only weak evidence to support Hypothesis H5a.

Effects of respondents' characteristics

There are some variables on the respondents' level that affect their judgements. As we expected theoretically, providing information on the current legal situation has an effect

on judgements: respondents who were informed about current legislation are less generous, granting unemployment benefits for about three months less than the respondents without this information. This is a medium-sized and highly significant effect. The direction of the effect is no longer surprising in view of the fact that the respondents are already somewhat more generous than the legislature in general. The current legal situation functions as a reference point for the respondents.

Moreover, male respondents are more generous than female respondents, which could be due to the male breadwinner model in Germany, whose importance still persists. The unemployment benefit duration which the former consider to be just is around two-and-a-half months longer than the period women perceive as being just. The effect is significant. Therefore, we also interacted the dummy for males with all other variables (not shown in the tables). There are no significant interaction effects with any other of the attitudes and socio-demographic variables described below, with one exception: the interaction between the male dummy and a relatively low income of between $\pounds 1,500$ and less than $\pounds 2,000$ is substantially negative (-9.6 months) – males with a below-average income are much more restrictive concerning the unemployment benefit duration.

Additionally, respondents from Eastern Germany are more restrictive than those from Western Germany. This is rather unexpected, as the labour market in Eastern Germany has been affected by higher unemployment rates for decades (Destatis, 2019). Higher unemployment reduces re-employment probabilities and implies less individual control over the unemployment situation. However, there may be alternative explanations for this: respondents from Eastern Germany might be more likely to belong to the group that sees itself as economically 'disconnected' or 'left behind' because of the long period of poor labour market opportunities. Therefore, this group might be critical of other, less privileged groups, whom they regard as being 'below them' (see Gross *et al.*, 2020, who report similar results for prejudices against the unemployed by people that suffer disadvantages on the labour market themselves).

Political party preference also affects judgements. Compared to respondents who prefer the Christian conservative party, supporters of the left-wing party DIE LINKE are in favour of longer unemployment benefits (four-and-a-half months-plus). This is also in line with the party's political demands for extended unemployment benefits (DIE LINKE, 2019). Respondents with no party preference at all are also more generous (three-and-a-half months-plus).

Certain general attitudes towards work and employment also have an effect. Respondents who agree with the statement that 'the individual is not to blame for his or her unemployment' are more generous than those who do not agree (two-and-a-half monthsplus). Moreover, respondents who agree that 'it is up to every unemployed person to change their own professional situation' are more restrictive. Only one variable of the employment history has an effect: individuals who have already received means-tested basic income benefits are somewhat more generous than those who have never received those benefits (two-and-a-half months-plus). This is plausible – being affected by unemployment creates a self-interest and is associated with preferences for more generous social policies (Margalit, 2013; Naumann et al., 2016). It might also be related to respondents' own experiences with the means-tested benefit system that lead them to grant longer maximum unemployment benefit durations in order to avoid receiving basic income support.

Conclusion

Welfare states reallocate and redistribute scarce resources from and to various social groups in many ways. The popular support regarding the outcomes of redistributive processes is crucial for the social legitimacy of the welfare state. Citizens of welfare states have ideas about who should receive what kind of financial support and how much of it.

Unemployment insurance is a particularly interesting case, because the risk of becoming unemployed is often seen as not fully outside of the jobseeker's responsibility. Therefore, we analyse deservingness perceptions with regard to different groups of unemployed persons. To do this, we drew a random sample of individuals from German administrative records and asked them to participate in an online survey. Using vignettes, we described fictitious unemployed persons with randomly varied attributes and asked respondents to determine the maximum unemployment benefit duration they considered to be just for these persons. In contrast to previous studies investigating deservingness perceptions in the context of Germany's means-tested basic income support (Hörstermann and Andreß, 2015; Buss, 2019), we do not use the benefit level as an outcome variable but the maximum benefit duration, which is quite often the subject of heated public debate.

Overall, the study shows that there is public support for different maximum unemployment benefit durations for specific groups. Similar to studies using other outcome variables (Buss, 2019; Reeskens and van der Meer, 2019), we find that the unemployed are not perceived as an equally deserving group. Instead, judgements regarding just benefit durations vary along the criteria of reciprocity, control, attitude and need. Confirming results of previous research, which found that elderly people are perceived as particularly deserving (e.g. van Oorschot, 2006), respondents in our study would grant considerably longer potential benefit durations to older jobseekers. Moreover, respondents are more generous to unemployed persons who lost their jobs for reasons beyond their own control and grant longer unemployment benefit durations to jobseekers with steady employment biographies. This reflects the importance of the criteria of control and reciprocity and is also in line with studies conducted in other institutional settings (Buss, 2019; Reeskens and van der Meer, 2019). Furthermore, respondents are more generous to jobseekers who have to care for frail relatives and who have brought up children, indicating that respondents take previous and current care work into account when assessing a just maximum benefit duration. If a partner can contribute to covering the needs of the household, respondents are more restrictive.

The criteria derived from deservingness theory are not the only factors influencing judgements regarding just maximum benefit durations, however. Another important variable in our study was whether respondents received information on the current legal situation before assessing the hypothetical scenarios. Our results show that information of this kind functions as a reference point and leads to shorter unemployment benefit durations being perceived as just. This confirms that respondents adjust their judgements according to information presented to them (e.g. Furnham and Boo, 2011; Kahneman, 2012: chapter 11).

As mentioned above, the institutional architecture of the welfare state may also shape common perceptions of what is just. Institutions may convey a certain sense of the 'appropriate' and the 'adequate', and the design of welfare institutions may thereby govern the notions of solidarity and justice prevailing in society (e.g. Rothstein, 1998; Mau, 2004; Larsen, 2008). Furthermore, perceptions of deservingness may vary between social policy

programmes, such as contribution-based social insurance and means-tested social assistance (Laenen, 2018). Our single-case study design does not allow conclusions to be drawn as to such institutional effects. Cross-national studies with varying institutional rules on the duration of unemployment benefits or studies comparing different national social policy programmes are needed in order to shed more light on this aspect in future research.

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Notes

- 1 This threshold is a gross monthly wage of ϵ 7,100 in Western Germany and ϵ 6,700 in Eastern Germany as of January 2021. Any income exceeding this threshold is not taken into account in the calculation of contributions.
- 2 There has been political and public controversy about means-tested basic income support since it came into existence in 2005, which has focused, among other things, on the benefit level, the conditions of benefit receipt, and financial sanctions. These aspects do not form part of our study, which refers exclusively to unemployment insurance.
- 3 'Attitude' could also be interpreted as 'attitude toward the Public Employment Service.' We do not refer to this operationalisation, but it would also be possible.
- 4 We additionally controlled for contact mode in the multivariate analyses, but the dummy was insignificant and did not change the results at all.
- 5 A small number of observations had to be excluded because person identifiers were corrected across IEB versions.

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Appendix

Table A1 Sample means

Variable	Measurement	Mean	
Male (ref.: female)	0/1 = no/yes	0.55	
Age	In years	43.98	
Children (ref.: none)	0/1 = no/yes	0.59	
Eastern Germany (ref.: Western Germany)	,	0.16	
Household size			
1-person household (ref.)	0/1 = no/yes	0.22	
2-person household	0/1 = no/yes	0.38	
3-person household	0/1 = no/yes	0.19	
4-person household	0/1 = no/yes	0.16	
5-person household	0/1 = no/yes	0.05	
Monthly household net income	,		
Less than €1,500	0/1 = no/yes	0.11	
€1,500 to less than €2,000	0/1 = no/yes	0.10	
€2,000 to less than €3,000	0/1 = no/yes	0.20	
€3,000 to less than €4,000 (ref.)	0/1 = no/yes	0.22	
€4,000 to less than €5,000	0/1 = no/yes	0.14	
€5,000 or more	0/1 = no/yes	0.17	
No information on net income	0/1 = no/yes	0.07	
Party preference	,		
Christian conservative party (ref.)	0/1 = no/yes	0.16	
Social democratic party	0/1 = no/yes	0.11	
Right-wing populist party (AfD)	0/1 = no/yes	0.04	
Liberal democratic party	0/1 = no/yes	0.04	
Left-wing party (DIE LINKE)	0/1 = no/yes	0.08	
Green party	0/1 = no/yes	0.25	
Other party	0/1 = no/yes	0.05	
No party preference	0/1 = no/yes	0.04	
Apolitical	0/1 = no/yes	0.10	
No information on party preference	0/1 = no/yes	0.13	
General attitudes	,		
'The individual is not to blame for his or her	1-5 = Fully agree - fully	0.19	
unemployment'	disagree (dummy: $1/2 = 1$;		
1 /	3/4/5 = 0		
'It is up to every unemployed person to change their	1-5 = Fully agree - fully	0.57	
own professional situation'	disagree (dummy: $1/2 = 1$;		
•	3/4/5 = 0		
Subjective probability of being temporarily	1-4 = very high - very low	0.14	
unemployed	(dummy 1/2 = 1; 3/4 = 0)		
Vocational degree			
No vocational degree	0/1 = no/yes	0.07	
Vocational degree (ref.)	0/1 = no/yes	0.52	
University degree	0/1 = no/yes	0.40	

Table A1 (Continued)

- Variable	Measurement	Mean
Labour market history between 2013 and 2017		
Regular employment in the last 6 years (in years)	In years	4.61
Ever received unemployment benefits	0/1 = no/yes	0.61
Ever received means-tested unemployment benefit	0/1 = no/yes	0.20
Dummy: last job = part-time	0/1 = no/yes	0.29
Last daily wage	In euros	109.68

Source. Authors' own calculations

Note. N = 906