

## Poverty Attributions and the © American Sociological Association 2015 Perceived Justice of Income Inequality: A Comparison of **East and West Germany**

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#### Abstract

Though the concept of social justice is widely used in the social sciences, we know little about the amount of income inequality that is perceived as just and why perceptions vary across social contexts. In this paper, we argue the ways people define the causes of poverty are related to how they perceive and justify existing income inequality. We examine internal and external attributions of poverty using survey data from the 2006 International Social Justice Project (ISJP). We compare two culturally and structurally distinct regions—East and West Germany. The results support our hypothesis that the amount of income inequality people perceive as just is related to how they explain the causes of poverty, that is, internal and/or external attributions. Poverty attributions are crucial mediators and explain contextual differences in the perceived justice of income inequality between East and West Germany.

## **Keywords**

income inequality, social justice, social attributions, structural equation modeling

Growing economic inequalities within and between societies constitute a major topic in contemporary sociological thought, leading researchers to seek explanations for the maintenance of social structures that do not appear to benefit the majority. Why some people tolerate and even justify a distributive system that generates economic inequality is discussed in a plethora of sociological theories, from classical Marxism to functionalism (Grusky 1994; Kerbo 1983; Lenski 1966), and in some novel social psychological approaches (e.g., Hegtvedt and Johnson 2009; Jost and Major 2001; Tyler 2006). Encouraged by the theoretical debate, this empirical study investigates the amount of perceived justice in income inequality, which is understood here to be a gradual concept that is quantifiable as the distance between the factual condition, the status quo (income inequality as it is perceived by the individual), and the preferred or ideal condition (income inequality as it is justified by the individual). The distance between the two categories defines what we call the amount of inequality perceived as just by the

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individual. But how can we explain contextual variation in the amount of perceived justice? This study points to the significance of poverty attributions, these being the explanations people choose for the existence of poverty in society. We argue that poverty attributions constitute justification patterns that help us understand how much income inequality individuals perceive as just and why we observe contextual differences.

From a sociological perspective, cultural norms, perceptions, and beliefs about inequality are key components of current debates. On the one hand, several studies have shed light on factors related to distributive beliefs and perceptions of inequality across social contexts (e.g., Aalberg 2003; Evans, Kelley, and Peoples 2010; Osberg and Smeeding 2006). On the other hand, survey research on poverty beliefs has strongly relied on the concept of attribution, which identifies the main causes associated to poverty (e.g., da Costa and Dias 2014; Kallio and Niemelä 2014; Lepianka, Gelissen, and van Oorschot 2010). Despite evident conceptual links, research on distributive justice beliefs and research on poverty attribution have developed parallel agendas. Lepianka, van Oorschot, and Gelissen (2009:422) point out:

The public's views on the poor and the reasons for poverty provide important insights into the legitimacy of social and economic inequality. . . . [R]esearch on popular perceptions of the poor and lay attributions for living in need appears relatively infrequent.

There are some exceptions to this broad generalization (e.g., Bullock 1999; Bullock, Williams, and Limbert 2003; Kluegel and Smith 1986; Stephenson 2000; Zucker and Weiner 1993); these previous studies typically examine the relationship between attributions and justice

attitudes, with the latter often measured as public support for government intervention. The present work extends previous studies on attributions and broader justice attitudes to include considerations of the specific amount of income inequality that is perceived as just.

The first objective of the present study is, therefore, to analyze the extent to which the amount of perceived justice of income inequality is influenced by differences in how individuals explain the causes of poverty. We argue that internal attributions of poverty are related to greater congruence between what is perceived as fact and what is considered just, as individuals are seen as responsible of their own situation. Conversely, the opposite is true for external attributions that explain poverty by situational and contextual factors rather than personal failings.

The second objective of this study is to explore contextual variations in poverty attributions and their effects on justice perceptions. The influence of social context on attributions has recently gained attention in the literature. Researchers report, for example, different patterns of poverty attribution depending on a country's religious traditions and level of poverty (Lepianka et al. 2010) or social development (da Costa and Dias 2014). Despite this critical attention to context, attempts to explain contextual variations in the perceived justice of income inequality by accounting for differences in poverty attributions remain sparse. The present study contributes to this area by exploring the contextual variations in the amount of perceived justice in income inequality and the role of poverty attributions in explaining these contextual differences. Social context is thereby understood to be the political culture and social structure of an individual's surroundings, and this is linked to regional and national boundaries.

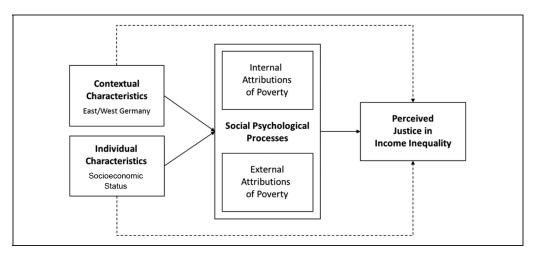


Figure 1. Research Model on the Perceived Justice of Income Inequality

Germany presents an ideal test bed for this investigation. Despite the fall of the Berlin Wall in 1989, research shows cultural and structural differences between East and West Germany persist. This makes Germany an ideal setting in which to analyze the impact of cultural and structural influences on individual perceptions and beliefs about poverty and economic inequality (Alesina and Fuchs-Schündeln 2006; Kreidl 2000; Verwiebe and Wegener 2000).

Figure 1 summarizes the study's main objectives in a schematic way. We begin by addressing the concept of poverty attribution and how it is related to the amount of perceived justice in income inequality. We then discuss contextual variation in attribution patterns and reflect on its consequences for the perceived justice of income inequalities. We test the model depicted in Figure 1 using data from the 2006 wave of the International Social Justice Project.

#### **POVERTY ATTRIBUTIONS**

Broadly stated, social attribution can be conceptualized as consisting of internal (or individualistic) and external (or

structural) patterns (Heider 1958). Internal attributions relate poverty to personal characteristics, such as a lack of abilities and/or effort, thus squarely blaming the individual for his or her situation. External attributions, on the other hand, equate poverty with the failure of the economic system, unequal opportunities, and/or discrimination. In short, internal attributions emphasize personal disposition, whereas external ones attribute blame to the social environment for economic inequalities in society. In the main, empirical studies accept this distinction and analyze the structure of poverty attributions and its determinants (e.g., Cozzarelli, Wilkinson, and Tagler 2001; Niemelä 2008; Robinson 2009; Saunders 2003).

<sup>&</sup>lt;sup>1</sup>Feagin (1972, 1975) points to fatalistic attributions that ascribe poverty to luck and fate, what others call the fate-blame dimension of poverty attribution (da Costa and Dias 2014; Lepianka, Gelissen, and van Oorschot 2010; van Oorschot and Halman 2000). We rely on the traditional two-dimensional attribution structure (Heider 1958) because it best reflects our hypotheses, but we do not claim this structure is exceptional.

Although internal and external attributions appear to be conceptual opposites, empirical evidence (e.g., Hunt 1996, 2004; Kreidl 2000; Robinson 2009) shows they do not necessarily "form a neat, unidimensional continuum: that is, a dispositional [internal] attribution is not necessarily the opposite of a situational [external] attribution" (Pettigrew 1979:464). This proposition, often neglected in research on poverty explanations (Lepianka et al. 2009), finds support in social psychological theory. In their split-consciousness approach, Kluegel and Smith (1986) propose that people can hold different, even contradictory views, although these may appear as logically incoherent. Others speak of this phenomenon as "dual consciousness" (Hunt 1996:296) or as the result of an "overlap" of competing metatheories (Smith and Stone 1989:104).

# Attributions and the Perceived Justice of Income Inequality

Whether we blame the individual for his or her social disadvantages or hold the distributive responsible system unequal outcomes affects how economic inequalities are perceived. As Kluegel and colleagues (1995:179) note, "[The public's perceptions of the rich and the poor provide a vehicle for studying how the public evaluates existential macrojustice." Furthermore, Mikula's (2003)attribution-of-blame model views responsibility, control, and blame as essential components of perceived injustice. If both propositions are true, the study of poverty attributions may help us understand why some people perceive higher levels of inequality as just while others do not.

The logic of market justice (Lane 1986) holds that the position occupied by individuals on the social hierarchy is a product of their efforts and merits. Within this framework, people get what they

deserve (Lerner 1980). The poor are responsible for their poverty, and the rich deserve their wealth (e.g., Krull et al. 1999; Lee, Hallahan, and Herzog 1996; Smith and Stone 1989; Yzerbyt and Rogier 2001). Some people challenge the system if they believe these distributive principles are not implemented correctly. If discrimination, lack of equal opportunities, or the failure of the market itself are recognized as factors leading to inequalities in society, these inequalities are likely to be considered unjustified.

Empirical studies support this assumption and find internal attributions to reduce and external attributions to support an individual's call for more redistributive government intervention (e.g., Bullock 1999; Bullock et al. 2003; Kluegel Smith 1986; Stephenson 2000; Zucker and Weiner 1993). External attributions are also positively correlated with a person's view of poverty as unjust (Lepianka et al. 2009). Others who suggest reverse causation between attributions and justice principles find that beliefs in the mechanisms that create inequality (e.g., effort, need, equal opportunity structures) influence how people think about the reasons for poverty (Burgoyne, Routh, and Sidorenko-Stephenson 1999; Kreidl 2000; Stephenson 2000).

Although the aforementioned findings suggest attributions are connected with a general belief in distributive justice, none of these empirical studies show whether poverty attributions also affect the specific amount of income inequality individuals perceive as just. On the one hand, as internal attributions are associated with market rules, blaming the poor for their disadvantaged position should lead to a higher perception of justice in income inequality. External attributions, on the other hand, challenge the implementation of the dominant distributive rules and therefore also challenge their outcome, namely,

inequality. As a result, two predictions for our own investigative results can be formulated for the amount of perceived justice of income inequality, based on previous research within the field of attribution and justice attitudes:

Hypothesis 1a: An increase in internal poverty attributions will result in an increase in the amount of perceived justice of income inequality.

Hypothesis 1b: An increase in external poverty attributions will result in a decrease in the amount of perceived justice of income inequality.

#### Context and Attribution

Given the coexistence of internal and external attributions and the different roles they play in justifying income inequality, poverty attributions share common features with what Kluegel and Smith (1986) call dominant and challenging beliefs. Like dominant beliefs, internal attributions are rooted in the institutional structure of individualistic-meritocratic societies, support the distributive system, and are widely shared across different social groups (e.g., Kluegel and Smith 1986; Krull et al. 1999; Lee et al. 1996; Smith 1985; Smith and Stone 1989). External attributions constitute challenging beliefs as they criticize the distributive system; are less widely shared among its members, particularly among socially disadvantaged groups; and show more interindividual variation (e.g., Bullock 1999; Hunt 1996; Kluegel et al. 1995; Kreidl 2000; Niemelä 2008).

This distinction is less clear in other contexts, for example post-communist societies, "due to a combination of the previous with the current dominant ideologies" (Kreidl 2000:173) and structural challenges, such as high rates of unemployment, rising poverty, and a decrease in real market incomes (Kluegel, Mason,

and Wegener 1999). This ideological and structure milieu is reflected in poverty attributions. Studies of post-communist societies find a high support for internal attributions—sometimes reported to be even stronger than in Western individualistic societies (Kluegel et al. 1995; Kreidl 2000). At the same time, the belief in external attributions is extreme. Some report external attributions prevail over internal attributions within most postcommunist countries, a finding often rationalized by citing structural maladjustment (Kreidl 2000; Stephenson 2000), while others find individuals of post-communist countries favor internal ones over other explanations of poverty (Kallio and Niemellä 2014; van Oorschot and Halman 2000). Internal and external attributions, just like dominant and challenging beliefs, are therefore likely to be rooted in specific settings, including cultural systems and social structures.

Broadly stated, Germany combines sociopolitical differences within one country, with the post-communist East pitted against the individualistic West (Gerlitz et al. 2012; Wegener and Liebig 2000). West Germany represents an ideal example for individualistic-meritocratic societies in which dominant individualistic beliefs prevail over egalitarian beliefs that challenge the system. In contrast, East Germans show less support for individualistic beliefs and a strong preference for egalitarian beliefs, long after the transition. Against this backdrop, we expect to find the following pattern in poverty attribution for East and West Germany.

In West Germany, as in other individualistic-meritocratic societies, internal attributions, similar to dominant ideologies, are likely to be institutionally anchored within the individualistic Western culture and supported by most members of society. External attributions (like challenging beliefs) are a strong indicator of system disapproval and are expected to

be mainly supported by socially disadvantaged groups.

Hypothesis 2a: In West Germany, internal poverty attributions will prevail over external poverty attributions.

Hypothesis 2b: In West Germany, external poverty attributions will vary more strongly between individuals of different socioeconomic position than internal poverty attributions.

In East Germany, as in other postcommunist countries, the distinction dominant and between challenging beliefs is less clear. Thus, the support for internal and external attributions and their variation between individuals is less distinct. Therefore, we expect individualistic beliefs to be less strongly rooted in the cultural setting, resulting in lower support but greater variation in internal attributions in East than West Germany. At the same time, and given the long-lasting structural deficits faced by East Germans, together with its sociopolitical history, we expect to find a higher level of approval for external attributions in East than West Germany.

Hypothesis 3a: In East Germany, internal poverty attributions will be weaker and vary more strongly between individuals than in West Germany.

Hypothesis 3b: In East Germany, external poverty attributions will be stronger than in West Germany.

## Mediating Contextual Variation in the Perceived Justice of Income Inequality

Following the previous reasoning, individuals who live in contexts promoting internal poverty attributions are expected to justify larger income inequalities, while individuals who live in contexts promoting

external poverty attributions are expected to justify smaller income inequalities. If this is the case, this contextual variation in poverty attribution may explain why individuals in some contexts perceive more or less justice in income inequality. In other words, poverty attributions may function as *mediators* through which contextual differences in the amount of perceived justice of income inequality are explained (as presented in Figure 1).

If so, and applied to the German case, West Germans are likely to justify larger inequalities due to the strong (weak) belief in internal (external) attribution patterns compared to East Germans. This reasoning leads to the prediction that differences in poverty attributions between East and West Germany account for the contextual variation we find in the perceived justice of income inequality. This prediction is, however, only valid if internal and external poverty attributions affect the perceived justice of income inequality in the predicted direction in both East and West Germany (Hypotheses 1a and 1b) and if East-West differences in poverty attributions are observed as predicted by Hypothesis 3a and 3b. If these criteria are met, poverty attributions then help explain why West Germans justify larger inequalities than East Germans so long after reunification.

Hypothesis 4: Differences in the belief in poverty attributions between East and West Germany will mediate the contextual variation in the perceived justice of income inequality.

#### **METHODS**

#### Data

Analysis is based on German data from the 2006 International Social Justice Project (ISJP). The ISJP, an international collaborative research project, began in 1991. It includes data from representative national surveys for 1991, 1996, 2000, and 2006. The surveys were carried out via face-to-face interviews with citizens between the ages of 18 and 99 living in private households. Based on stratified probability samples, 3,059 people participated in the project in Germany in 2006.<sup>2</sup> The sample includes 715 analyzable cases for East Germany and 2,344 cases for West Germany (Infas 2006).

#### **Variables**

The amount of perceived justice in income inequality is measured by the just inequality ratio. This ratio combines the perceived level of income inequality and the justified level of income inequality based on the nonreflexive justice evaluation function developed by Jasso (2007). According to Jasso (1978, 1980, 2007), feelings about distributive justice can be determined by establishing a ratio comparing what individuals perceive others actually earn to what they think they should earn. Following this rationale, the justice of rewards can be conceptualized as the distance between what people

<sup>2</sup>Differences in the measurement of our dependent variable (the truncation of perceived and justified earnings for managers and workers) across years force us to restrict our analysis to the most recent study.

<sup>3</sup>Beliefs on inequality have been studied within the framework of social justice research, especially work dealing with the justice of rewards (Wegener 1995). This particular area of research is concerned with the perception and evaluation of rewards (i.e., earnings) for different occupations. Building on research traditions ranging from the equity and exchange perspective (Homans 1961, 1976) and status value theory (Berger, Zelditch, and Anderson 1972) to the later understanding of the justice evaluation function (Jasso 1978, 1999; Jasso and Wegener 1997), the justice of rewards literature offers several possibilities for measuring perceptions of and beliefs about economic distributions. The present study falls within this framework.

perceive various occupational groups actually earn and what they should earn, assuming that individuals create different reward expectations based on relevant occupational status characteristics (Melamed 2012). The just inequality ratio extends Jasso's justice evaluation term by adding a distributive element. Instead of having a perceived reward divided by a just reward, we propose a ratio between the perceived inequality and the justified inequality.

Different methods have been proposed to calculate the distance in earning differentials between status groups and to relate the perceived with the justified earning differential (e.g., Lippl 1999; Osberg and Smeeding 2006; Verwiebe and Wegener 2000). We propose a formula closely tied to distributive justice theory and the perceived and just reward distribution (Jasso and Wegener 1997). We obtain the just inequality ratio by comparing the ratios of perceived and justified earnings<sup>4</sup> of *high status* (managing directors of large corporations) and low status (unskilled workers) groups (see Castillo 2009; Schneider 2012):

Just Inequality Ratio =

 $ln\frac{\left(perceived\ reward_{\textit{high\ status}}/perceived\ reward_{\textit{low\ status}}\right)}{\left(just\ reward_{\textit{high\ status}}/just\ reward_{\textit{low\ status}}\right)}$ 

This formula can also be written as the difference between the logarithms of the two ratios, that is, the perceived and the justified inequality ratio:

 $Just\,Inequality\,Ratio =$ 

 $ln \frac{\text{perceived reward}_{\textit{high status}}}{\text{perceived reward}_{\textit{low status}}}$ 

-ln just reward<sub>high status</sub> just reward<sub>low status</sub>

<sup>4</sup>We measure income inequality by differences in occupational earnings. Earnings serve as a proxy for income. Throughout the paper, *earnings* and *income* are used as interchangeable terms.

If perceived inequality exceeds justified inequality, the value of the ratio term increases. We multiply the ratio by -1 for ease of interpretation so that an increase in the justice of income inequality is reflected in an increased ratio. This ratio is the dependent variable in the analysis.

The just inequality ratio is measured using four questions asked in the ISJP. To determine perceived earnings for high- and low-status occupations, the study participants were asked the following: "What do you think a chairman or a managing director of a large corporation (or an unskilled worker) earns per month on average?" Based on the two responses, we calculated a ratio on the perceived income inequality. The logarithmic function of the ratio is used in the following analyses to adjust for the nonlinearity of larger differences in the earning structure (see Jasso 2007).

The respondents were subsequently asked questions on the amount of inequality they perceived to be just: "[Now] tell me what you think a just and fair average monthly income for a chairman or managing director of a large corporation (or an unskilled worker) would be." Based on the two responses, we calculated a ratio for the justified income inequality. As described previously, the logarithmic function of the ratio is used in the analyses.

Attributions of poverty are considered in relation to the perceived justice of income inequality. Study participants were asked the following: "In your view, how often is each of the following factors a reason why there are poor people in Germany today? How often is lack of ability or talent, lack of effort by the poor themselves, prejudice and discrimination against certain groups, lack of equal opportunities, and failure of the economic system a reason why there are poor people in Germany today?" Respondents

rated the impact of the possible causes on a scale from 1 = very often to 5 = never.Responses were reverse coded for our analyses so that the higher the value, the higher the perceived frequency of different causes of poverty. Internal attributions are characterized by an overall perception of individualistic features, that is, lack of ability or talent and/or lack of effort by the poor, whereas external attributions, such as prejudice and discrimination against certain groups, lack of equal opportunities, and/or the failure of the economic system, point to social closure mechanisms that hinder the poor's economic mobilization.

Finally, to measure the influence of socioeconomic characteristics, we include measures of income, education, employment, and subjective social standing. The income variable consists of the quartiles of household income equalized for the size and age of household members, following recommendations from the Organisation for Economic Co-operation and Development (OECD) (weights for adults = .5; weights for children = .3). For the measurement of education, we use the CASMIN classification (Hoffmeyer-Zlotnik 2003), which ranks from 1 = "no formal education," to 7 = "higher tertiary (vocational) training." squared term of the education variable is included to account for the u-shaped relationship between education and justice perception. The measure for employment status differentiates between fulland part-time employment, registered unemployment, and a summary category for "other" employment statuses, for example, pensioners and students. The self-assigned social standing question asks respondents to place themselves within a social hierarchy, ranging from 1, indicating low social standing, to 10, indicating high social standing (Kreidl 2000; Stephenson 2000). We include gender and age (in years) as control

Table 1. Descriptive Statistics

Indicator	Observations	Mean	SD	Minimum	Maximum	
Just inequality ratio	2,484	-1.08	1.06	-8.70	4.79	
Perceived inequality (ln)	2,628	3.65	1.55	18	11.51	
Justified inequality (ln)	2,550	2.55	1.38	-1.08	11.51	
Poverty external: discrimination	2,964	3.08	.97	1	5	
Poverty external: no equal opportunities	3,003	3.30	1.00	1	5	
Poverty external: economic system	2,931	3.43	1.13	1	5	
Poverty internal: no ability/talent	3,007	3.11	.99	1	5	
Poverty internal: no effort	3,012	3.27	.95	1	5	
East/West Germany	3,059	.23	.42	0	1	
Age	3,051	48.76	18.63	17	86	
Gender $(0 = male, 1 = female)$	3,059	.51	.50	0	1	
Education (CASMIN classification)	3,010	3.97	1.46	1	7	
Perceived social standing	3,035	5.44	1.76	1	10	
Employment	3,015	2.10	.96	1	3	
Household income (equivalent)	2,297	14,08.10	1,057.36	96.15	35,000	

*Note:* International Social Justice Project reports for all variables the number of observations, the mean levels, the standard deviation (SD), and the minimum and maximum values.

variables. The region of residency (East or West Germany) accounts for regional differences based on differing sociopolitical and structural contexts. Table 1 provides an overview on the variables used in the analysis, together with the number of observations and standard distribution characteristics.

#### Methods

The descriptive analysis is followed by explanatory models that use structural equation modeling (SEM) techniques (Bollen 1989). SEM allows us to obtain better estimates of the relationship between manifest indicators and latent constructs (Brown 2006) and specifies the structural determination of the endogenous latent variables within the same model (here, poverty attribution). The specification of direct and indirect effects is another advantage over other estimation techniques as well as the testing of nonrecursive paths. To assure representative estimations of the German population, we apply standard weights. Since our estimations are based on cross-sectional data, assumptions about the causality of our models are solely based on theoretical reasoning and are tested within a time-invariant correlational setting.

#### **RESULTS**

#### **Poverty Attribution**

Structure of poverty attributions. Most respondents in Germany believe poverty is produced by the failure of the economic system (M = 3.4, SD = 1.1), followed by a lack of equal opportunities (M = 3.3,SD = 1.0), a lack of effort (M = 3.3, SD =.9), prejudice and discrimination (M = 3.1, SD = 1.0), and a lack of ability and talent (M = 3.1, SD = 1.0). Differences between East and West Germany are most prevalent in the external attribution items, including the failure of the economic system  $(M_{[West]} = 3.3, SD_{[West]} = 1.1;$  $M_{[East]} = 3.9, SD_{[East]} = 1.0; p < .001),$ a lack of opportunities  $(M_{[West]} = 3.2,$  $SD_{[West]} = 1.0; M_{[East]} = 3.5, SD_{[East]} = 1.1;$ p < .001), and prejudice and discrimination

Explanations for poverty	External	Internal
Lack of ability or talent	_	.51
Lack of effort by the poor themselves	_	.54
Prejudice and discrimination against certain groups	.56	_
Lack of equal opportunity	.87	_
Failure of the economic system	.55	_

Table 2. Confirmatory Factor Analysis: Poverty Attributions

Note: International Social Justice Project reports standardized b coefficients; standard weights applied; analysis requires MLR estimation; N = 3,051; for reasons of identification, factor scores of internal attribution dimension were set to be equal. Model fit:  $\chi^2$  = 50.877, df(5), p = .00; Scaling Correction Factor for MLR = 1.51; Comparative Fit Index [CFI] = .96; Tucker-Lewis Index [TLI] = .93; Root Mean Square Error of Approximation [RMSEA] = .06; Standardized Root Mean Square Residual [SRMR] = .03.

 $(M_{[West]}=3.0,\ SD_{[West]}=.9;\ M_{[East]}=3.3,\ SD_{[East]}=1.1; p<.001).^5$  When we compare external and internal attribution items across regions, we find East Germans favor external reasons over internal ones, with West Germans remaining more balanced in their views.

In line with previous research on poverty attributions, the confirmatory factor analysis (CFA) shows two distinct dimensions of attribution patterns with adequate fit indices (Table 2). The first factor represents what we have called internal attributions of poverty, such as lack of effort or a lack of ability and talent. The second factor is comprised of three items pointing to external explanations: discrimination, unequal opportunities, and the failure of the economic system. The two factors are weakly negatively interrelated (correlation among factors: –.19).

Using a multigroup analysis (East vs. West Germany), we test whether the factor structure (configural invariance), the factor loadings (metric invariance), and the intercepts (scalar invariance) are invariant across groups to ensure construct equivalence across German regions. The  $\chi^2$  difference test ensures metric invariance between regions ( $\chi^2$  difference = 2.466; scaling correction [cd] = 1.691; Satorra-Bentler

scaled difference test [TRD] = 1.458; df difference = 3; p = .692) and is used to confirm the two attribution patterns are similarly understood in both parts of Germany, thus allowing the comparative analysis.

Figure 2 shows the distribution of factor scores for the internal and external attribution patterns across the two regions. It illustrates the regional differences in the level of support and the size of variation of the two attributions. As predicted in Hypotheses 2a/b and 3a/b, the belief in internal (external) attributions is weaker (stronger) in East than West Germany. West Germans tend to favor internal (M = .04, SD = .65) over external attributions (M = -.06, SD = .86), whereas East Germans support external (M = .26, SD = .93) over internal attributions (M = -.18, SD = .76). Differences between attributions are more distinct in East Germany, with West German views appearing more balanced. Furthermore, individuals vary more widely in their belief in external than internal causes if we consider the distance between the median and the extreme values, an interesting finding that holds for both parts of Germany.

Individual variability in poverty attributions. Table 3 presents the parameter estimates for the structural factors of internal and external attributions. Model 1 reports

 $<sup>^5{</sup>m The}$  significance between group means was tested using the Difference-Bonferroni test.

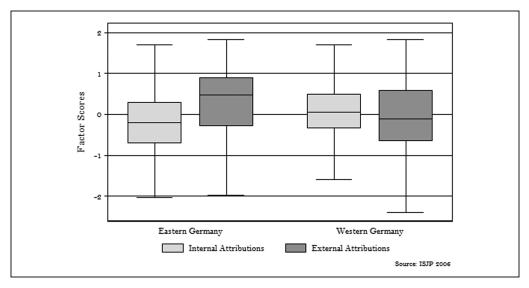


Figure 2. Level and Variance of Poverty Attributions in East and West Germany

the influence of individual socioeconomic characteristics on *internal attributions*. We find a positive linear effect for household income and social standing, while higher education leads to less internal attribution.<sup>6</sup> As anticipated in Hypothesis 3a, significant differences are reported between the regions; East Germans believe internal causes for poverty to be less likely than do West Germans.

Model 2 presents the parameter estimates for the structural variables related to external attributions. Again, we observe a strong effect of household income and social standing on support for external attributions. This time, the effect is negative, suggesting that the higher the income and the social standing of the individual, the lower his or her

belief in external attributions of poverty. Differences between East and West Germans are again significant; East Germans tend to believe in external factors more strongly than West Germans, as predicted in Hypothesis 3b.

The explanatory power of the external attribution model reaches 12.9 percent, which exceeds the amount of variance explained by the internal attribution model of 8.5 percent.

These salient and significant differences in the determination of attribution between regions suggest attribution patterns depend on the cultural and structural context. Findings for West Germany (Models 3 and 4) replicate findings for unified Germany (Models 1 and 2). Differences in the explained variance are again relatively straightforward: internal attribution depends less on socioeconomic factors (with an explained variance of 4.6 percent) than does external attribution (9.2 percent). This finding supports Hypothesis 2b that external attributions are more strongly related to the socioeconomic position of individuals than are

<sup>&</sup>lt;sup>6</sup>The study's results for education are, at first sight, counterintuitive but support what Robinson and Bell (1978) call the principle of enlightenment—higher educated individuals are more informed about the reality of distributive procedures and thus are aware of the failure of market economies to reward individuals for personal effort and skill (see also Kreidl 2000).

 $\mathbb{R}^2$ 

	Gerr	nany	West Germany		East Germany	
	Internal attribution (1)	External attribution (2)	Internal attribution (3)	External attribution (4)	Internal attribution (5)	External attribution (6)
Female (reference male)	.00	.14***	.01	.15***	04	.09
	(00)	(5.17)	(.39)	(4.70)	(63)	(1.69)
Age	00*	00***	00	00***	01*	00
	(-2.30)	(-3.78)	(-1.45)	(-3.69)	(-2.53)	(-1.01)
Household income (reference fir	st quartile)					
Second quartile	.13**	09*	.10	10	.19*	06
	(2.59)	(-1.97)	(1.76)	(-1.75)	(1.97)	(69)
Third quartile	.14*	18***	.12*	21***	.17	01
	(2.56)	(-3.65)	(1.99)	(-3.76)	(1.44)	(14)
Fourth quartile	.20***	20***	.17**	20**	.26	23*
	(3.57)	(-3.77)	(2.81)	(-3.27)	(1.94)	(-2.01)
Education (CASMIN, 7-point)	04**	.01	03*	.01	08**	.01
	(-2.90)	(.87)	(-2.01)	(.93)	(-2.58)	(.38)
Social standing (10-point)	.05***	06***	.05***	06***	.06**	07**
	(4.86)	(-6.48)	(3.89)	(-5.41)	(2.78)	(-3.32)
Employment (reference employe	ed)					
Unemployed	.03	.13	.17	.02	26*	.36**
	(.38)	(1.80)	(1.84)	(.22)	(-1.98)	(3.19)
Other employment status	.05	.01	.05	02	.04	.15*
	(1.40)	(.24)	(1.23)	(66)	(.57)	(2.18)
East Germany (reference West)	18***	.19***	_	_	_	_
	(-4.56)	(5.40)				

Table 3. Internal and External Attributions on Status and Regional Differences

Note: International Social Justice Project reports unstandardized  $\beta$  coefficients; MLR estimation; N = 3,059 (East = 715; West = 2,344); z values in parenthesis; for model fits, see Table 4, analysis controls for respondents with "no income information"; correlation between factors: correlation = -.13; correlation<sub>(West)</sub> = -.10; correlation<sub>(East)</sub> = -.20.

4.6

9.2

12.8

13.8

12.9

8.5

\*p < .05. \*\*p < .01. \*\*\*p < .001, two-tailed test.

internal attributions. In other words, external attributions share characteristics of challenging beliefs grounded in the socioeconomic position of the individual, whereas internal attributions are closer to dominant beliefs anchored in the individualistic-meritocratic culture and supported by the larger society.

The results for East Germany (Models 5 and 6) are different. Socioeconomic characteristics, such as income, unemployment, social standing, and level of education, predict internal and external attribution patterns almost equally well, with R<sup>2</sup> values of 12.8 percent and 13.8 percent, respectively. In general, the

direction of the estimates matches the previous results for unified Germany. They also show that the unemployed believe more strongly in internal and less strongly in external poverty attributions than the full-time and part-time employed do. Finally, pensioners and students tend to support external attributions more strongly than the employed reference group.

## The Amount of Perceived Justice of Income Inequality in Germany

Answers to questions on occupational earnings reveal managing directors of

large corporations are expected to earn 30,000 Euros per month (median); unskilled workers are estimated to bring in about 1,000 Euros.<sup>7</sup> When asked for their preferences, respondents favored 400 Euros more for unskilled workers (median = 1,400 Euros) and a cut of almost 50 percent for higher-status groups (median = 15,000 Euros). Clearly, income inequality—the gap between managers and workers' incomes—is perceived to be higher than individuals accept to be justified.

Poverty attributions and the perceived justice of income inequality. Next, we examine if poverty attributions are related to the perceived justice of income inequality. If so, can we make any conclusions about the ideological and/or structural roots of this perception?

The baseline model (Model 1) in Table 4 reports findings on the direct sociostructural determinants of the perceived justice of income inequality. The outcome variable measures the distance between perceived and justified differences in income between managers and unskilled workers: the higher the value, the lower the distance and the higher the perceived justice of the unequal earning structure. Findings show that individuals with higher levels of social standing consider perceived income inequalities to be more just than those with lower social standing. The coefficients for education suggest a u-shaped relationship: people with an average level of education justify lower inequalities more so than the higher and lower educated. Furthermore, Table 4 shows a higher sense of the injustice of income inequality in East than West Germany. We find no significant differences for income.

Model 2 shows how people's poverty attributions are related to their perception of the justice of income inequality. As theorized (Hypotheses 1a and 1b), internal attributions of poverty lead to a greater sense that the perceived income inequality is just, with the opposite holding true for external attributions.<sup>8</sup>

The results presented in Model 2 suggest regional differences between East and West Germany (evidenced in Model 1), which can be linked to the extent to which people attribute poverty to internal and external causes. This is indicated by the drop in the significance of the regional variable when poverty attributions are introduced into the model. This drop anticipates the mediating nature of social attributions, analyzed in more detail in the following section.

To explore whether attributions play similar roles in different social contexts, we run separate analyses for East and West Germany. The results suggest attributions play very similar roles in West (Models 3 and 4) and East Germany (Models 5 and 6). Ultimately, both internal and external attribution patterns influence the perceived justice of income inequality in the predicted manner (Hypotheses 1a and 1b).

The standardized coefficients indicate external attributions, with a coefficient of b = -.21, have a stronger impact on the perceived justice of income inequality

<sup>&</sup>lt;sup>7</sup>Because a cutoff point for maximal earnings estimations (around 100 million Euros for managers) was exceeded by 18 (perceived income) and 11 (justified income) respondents, the average values are underestimated (see Schneider 2012).

<sup>&</sup>lt;sup>8</sup>The items of the internal attribution dimension vary in the conception of personal control. While poverty caused by an individual's lack of ability lies outside the radius of individual control, poverty caused by lack of effort is inside. To test whether the results on internal attributions vary between its items, we ran a separate analysis. The analysis found similar results for both items, negating the argument that the results are biased by a person's control over the situation (results are available upon request).

Table 4.	The Perceived	Justice of	Inequality	Based of	on Status,	Region,	and Soci	al Attributions
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	Germany		West Germany		East Germany	
	(1)	(2)	(3)	(4)	(5)	(6)
Female (reference: male)	.11*	.16**	.09	.154**	.17	.21*
	(2.35)	(3.47)	(1.85)	(2.86)	(1.64)	(2.08)
Age	00**	00**	00	00**	.01**	01**
	(-2.61)	(-2.92)	(-1.43)	(-1.99)	(3.29)	(-2.67)
Household income (reference: firs	t quartile)					
Second quartile	.10	.03	.09	.03	.17	.07
	(1.39)	(.34)	(1.11)	(.31)	(1.13)	(.43)
Third quartile	.07	04	.07	05	.04	04
	(.88)	(53)	(.82)	(49)	(.24)	(26)
Fourth quartile	.10	04	.06	06	.28	.10
	(1.23)	(52)	(.72)	(68)	(1.62)	(.62)
Education (CASMIN, 7-point)	34***	32***	29**	27**	63***	59***
	(-4.08)	(-3.89)	(-3.10)	(-2.96)	(-3.78)	(-3.59)
Education-squared	.04***	.04***	.03**	.03**	.07***	.07***
	(4.05)	(4.05)	(3.09)	(3.09)	(3.68)	(3.68)
Social standing (10-point)	.10***	.06***	.09***	.05**	.12***	.08*
	(6.76)	(3.81)	(5.55)	(3.09)	(3.85)	(2.48)
Employment (reference: employed	l)					
Unemployed	10	07	20	24	.11	.33
• •	(88)	(59)	(-1.44)	(-1.86)	(.52)	(1.53)
Other employment status	07	06	07	05	.05	.07
	(-1.44)	(-1.16)	(-1.34)	(92)	(.40)	(.55)
East Germany (reference: West)	24***	11	_	_	_	_
•	(-3.97)	(-1.73)				
Attributions						
Internal		.33***		.30**		.48***
		(4.27)		(2.93)		(3.70)
External		37***		38***		26*
		(-6.62)		(-6.21)		(-2.42)
$\mathbb{R}^2$	6.1	12.9	4.4	10.6	8.4	17.8

Note: International Social Justice Project reports unstandardized ß coefficients; MLR estimation; N = 3,059 (East = 715; West = 2,344); z values in parenthesis; analysis controls for respondents with "no income information"; model fits:  $\chi^2$  = 254.635, df(46), p = .000; scaling correction factor for MLR = 1.286; CFI = .900, TLI = .811; RMSEA = .039; SRMR = .021; Model fit (West):  $\chi^2$  = 167.455, df(43), p = .000; scaling correction factor for MLR = 1.280; CFI = .908; TLI = .826; RMSEA = .035; SRMR = .021; Model fit (East):  $\chi^2$  = 77.514, df(43), p = .000; scaling correction factor for MLR = 1.30; CFI = .941; TLI = .889; RMSEA = .034; SRMR = .027.

in West Germany than internal attributions (b = .13). In East Germany, this difference is reversed: internal attributions influence the perceived justice (b = .27) more strongly than external attributions (b = -.14). These findings suggest context does not affect the direction in which attributions influence the perceived justice of inequality, but it does affect the strength of that influence.

Direct and indirect effects. The aforementioned findings point to the mediatory nature of social attributions in perceptions of the amount of justice of income inequality. To investigate whether these differences are fully accounted for by internal and external attribution patterns (as predicted by Hypothesis 4), we now differentiate between direct and indirect effects. To

<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001, two-tailed test.

**Table 5.** Direct and Indirect Effects of East-West Differences on the Perceived Justice of Inequality

East/West effect	Perceived justice of inequality
Direct	04
	(-1.72)
Indirect (total)	05***
	(-5.33)
Via internal attribution	02**
	(-3.25)
Via external attribution	03***
	(-3.99)
Total	09***
10001	(-3.95)
	(-0.50)

Note: International Social Justice Project reports standardized β coefficients; MLR estimation; N = 3,059; z values in parenthesis.

this end, we split the total effect of regional East and West differences into direct effects, which capture the pure influence of a region on the perceived justice of income inequality, and indirect effects, which unravel the extent to which social attributions explain this difference between East and West Germans. The results are presented in Table 5.

As Table 5 shows, the examination of the total effect finds significant differences between East and West Germany in terms of the amount of inequalities people perceive as just. The insignificance of the direct effect and the significance of the indirect effect support our prediction that contextual differences stem from internal and external attribution patterns. The latter function as mediators and seem to be nearly equally important in explaining the contextual differences in the perceived justice of income inequality between East and West Germany.

Our assumption on a causal relationship between poverty and the perceived justice of inequality receives further support from nonrecursive models that assume a two-sided relationship between the two concepts. Results reveal only a negative and significant effect of external poverty attribution on the perceived justice of income inequality; all other effects are nonsignificant (results available upon request). The  $\chi^2$  difference test finds no significant differences in the model fits between the nonrecursive model and the model presented in Table 4 ( $\chi^2$  difference = 3.427; df difference = 2; p < .179). Similar results are obtained for East and West Germany in the subgroup-specific analysis.

#### DISCUSSION

In this study, we aimed to advance empirical understanding of the perceived justice of income inequality and extend previous work on poverty attributions. We suggest attribution processes, in this case, internal and external explanations of why people are poor, strongly determine the amount of income inequality people view as just. Specifically, we argue that internal attributions justify and external attributions challenge existing inequalities. As the support of both is tied to the social context, we further argue that attributions function as mediators through which contextual differences in the perceived justice of income inequality are accounted for. Differences in attributions explain, for example, why East Germans still perceive fewer inequalities than West Germans long after unification.

Using a structural equation model, we empirically test attribution patterns, their potential determinants, and their consequences for the perceived justice of income inequality. Consistent with previous research, internal and external attributions are two distinct and opposing dimensions people can support simultaneously. This two-dimensionality allows the analysis of interesting divergences in the determinants and consequences of

<sup>\*\*</sup>p < .01. \*\*\*p < .001, two-tailed test.

internal and external attributions that would otherwise be ignored.

The findings support Hypotheses 1a and 1b on the significant consequences of poverty attributions on the perceived justice of income inequality. Thus, one of the core propositions of this study is supported: how people view poverty has serious consequences for the amount of income inequality an individual perceives as just. In both parts of Germany, we find internal attributions lead to an acceptance of higher income inequality while external attributions challenge the perceived inequalities.

Attributions depend on the characteristics of the individual and on the social context. When we separate by region, in West Germany, the low variation and the level of explained variance suggest internal attributions are part of a dominant ideology that is widely shared across status groups while external attributions constitute a challenge to common beliefs and depend largely on the socioeconomic position of the individual (as predicted in Hypotheses 2a/b). In East Germany, the distinction between dominant and challenging beliefs is less clear. We observe more variation in internal attributions and a higher dependence on socioeconomic characteristics in East Germany than in West Germany (as predicted in Hypothesis 3a), along with a strong belief in external attributions (as predicted in Hypothesis 3b). This confirms the importance of political culture and structure observed in previous research (Gerlitz et al. 2012; Kreidl 2000), also addressed within the framework of studies on social structure and personality (McLeod and Lively 2003).

This study provides consistent evidence that poverty attributions function as psychological mediators and help explain contextual variations in perceptions of distributive justice. We find strong empirical support for Hypothesis 4,

namely, that regional differences in justifying inequalities are related to internal and external attributions. Specifically, how much inequality people in East and West Germany accept as just is dependent on culturally and structurally embedded attribution patterns.

Despite its contribution, this study has limitations, highlighted here so that they may be addressed in future research. First, research on the perceived justice of income inequality raises the issue of causality, especially when the research is based on data from cross-sectional survev studies. The present work uses rigorous theoretical reasoning, assuming attribution to be a fundamental cognitive concept that occurs prior to the formation of concrete perceptions and justifications of various earning structures. Others assume the reverse to be true, arguing that beliefs in justice principles such as effort, need, and equal opportunity structures influence poverty attributions, which lead to more or less support for government intervention (Burgoyne et al. 1999; Stephenson 2000). In our study, nonrecursive models fail to support reversed causality between poverty and the perceived justice of inequality. But more research seems certainly warranted to answer the causality question in full.

This study limits its analysis to two regions in Germany. Testing the hypotheses in a larger cross-country comparison seems necessary to validate our research findings. This seems especially warranted for post-communist societies, as research points to "considerable differences within the East-central European family" that "call for more analysis of the mechanisms behind the East-central European attitudes" (Kallio and Niemellä 2014:131), not to mention developing societies that rank high in poverty and inequality.

In summary, our findings show there is much to be gained by linking concepts of distributive justice to poverty attributions.

First, we have provided evidence of the association between beliefs about poverty and income inequality, even though poverty and inequality are clearly two conceptually distinct constructs. If poverty is defined in relation to absolute levels of living standard and inequality refers to disparities in levels of living standard, then there can be poverty without inequality and inequality without poverty (Ravallion 2003). Despite the conceptual differences, this study shows poverty attributions provide both reasons for and justifications of inequalities. Second, poverty attributions contribute to the understanding of the perceived justice of income inequality and its contextual dependency, a topic rarely addressed in the literature. As illustrated in the case of East and West Germany, different social contexts evoke different attribution patterns that justify larger or smaller amounts of inequality. This study thereby adds to the literature on social structure and personality showing that cultural and structural differences in attribution habits persist long after the transition. The social context determines what we think about poverty and how much income inequality we perceive to be justified.

These findings lead us to conclude that general social psychological processes, such as attitudes towards poverty, advance our empirical understanding of the perceived justice of income inequality. The examination of poverty attribution constitutes a useful addition to the study of distributive justice. If future research accepts the importance of these processes, we can expect exciting new insights into the interrelatedness of social context, attribution, and perceptions of social justice.

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