Research Article

WHAT ARE THE CAUSES OF GLOBAL INEQUALITY? AN EXPLORATION OF GLOBAL INEQUALITY ATTRIBUTIONS IN GERMANY AND ARGENTINA

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In two studies, we explored explanations for global inequality in samples from Germany (N = 152) and Argentina (N = 138) using a qualitative approach. We visualized global inequality non-verbally through distorted world maps such that no causal attributions were inherent to the stimulus material. The maps depicted absolute poverty, child mortality, number of deaths due to floodings and access to drinking water. After the presentation of the maps, participants were asked to give explanations for the situations shown. The answers were coded and categorized using content analysis. We identified seven categories which were identical in both samples. The categories extend existing frameworks for poverty attribution and allow for a more fine-grained differentiation of the attribution dimensions. Moreover, we found differences in the frequencies with which the respective categories were mentioned. The German sample attributed more responsibility to the Global North, while the Argentinean sample focused more strongly on responsibilities of the Global South. The article presents a comprehensive set of qualitative data which can help to deepen our understanding of Global North as well as Global South citizens' global inequality attributions and serves as a basis for future quantitative studies in this realm.

Keywords: *attributions, global inequality, qualitative, poverty, cross-cultural*

1. Global inequality as a research gap in psychology

The perpetuation of inequality between the Global North and South as well as the destruction of nature and the environment can be considered an inherent characteristic of our current social and economic system. According to *Our World in Data* (Roser, 2019), the average income adjusted for price differences between the respective countries is 87 times higher in Switzerland than it is in the Central African Republic, which means that a person in the latter country can spend in seven years what can be spent by a Swiss person in just a month. For children who are born in one of the countries with the worst health statistics, such as Somalia, the probability of dying before the age of five is 60 times higher than for children born in Iceland, which is considered the healthiest country (Roser, 2019). The Global North is responsible for 92% of emissions in excess of the planetary boundary when including consumption-based emissions (Hickel, 2020) and has long exceeded its share of the 1.5°C carbon budget, whereas the Global South remains well within its share (Fanning & Hickel, 2023). Yet, it is people in the Global South who are suffering most from the consequences of

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climate change. In short, the place where we are born largely determines what the conditions of our lives will be.

There is an urgent need for a research agenda examining what can be done from a psychological perspective to promote global equality (Jetten & Peters, 2019). Yet, while psychological processes related to global inequality are an important and promising area of research (Olson, 1997), studies on this matter remain scarce. What is more, psychologists themselves tend to engage in what has been termed WEIRD psychology – a psychology rooted in predominantly Western, Educated, Industrial, Rich and Democratic societies (Henrich et al., 2010). This contributes to proliferating the notion that these societies somehow constitute a norm to be applied to "the others". Based on an analysis of top journals in different psychological subdisciplines between 2003 and 2007, Arnett (2008) concluded that 95% of samples came from countries which represent only 12% of the world population, mostly in North America and Europe. A follow-up analysis of publications from 2014 to 2018 by Thalmayer and colleagues (2021) showed that the decrease in the share of US samples was mainly due to an increase in samples from other English-speaking countries and Western Europe, while representation of the majority world has not increased much.

The present research addresses the question of which causal explanations people provide for global inequality. It is distinctive in that it seeks to incorporate perspectives from both the Global South and the Global North using a qualitative approach. Causal attributions should be an important factor when it comes to challenging global inequality since they are theoretically and empirically linked to emotional reactions as well as action tendencies (Weiner, 1985; Zucker & Weiner, 1993). Moreover, it has been shown that causal attributions in the context of poverty are malleable through a variety of means such as social policy education (Delavega et al., 2017) or writing exercises and simulations (Piff et al., 2020; Waddell et al., 2023). Hence, they constitute a potentially powerful resource in motivating individuals to act in favor of more global equality.

2.1. Attribution theory

As defined by Fiske and Taylor (1991, p. 23), "[a]ttribution theory deals with how the social perceiver uses information to arrive at causal explanations for events. It examines what information is gathered and how it is combined to form a causal judgment". Heider's (1958) original work on attribution theory distinguished between dispositional and situational attributions. Drawing upon this, the study of attributions for poverty goes back to Feagin (1972), who differentiated among individualistic, structural and fatalistic attributions, i.e. characteristics of the poor, characteristics of the social and economic system and (bad) luck, fate, or God´s will, respectively. As these categories are mutually exclusive and thus do not allow for a classification system that makes strong distinctions (Weiner et al., 2011), a more complex classification system was developed by Weiner (1985).

In his theory of achievement motivation and emotion, Weiner (1985) differentiated between three attributional dimensions, namely locus (internal/external), stability (stable/unstable) and controllability (personal control/external control). Each cause can be located on each of these dimensions. He further proposed a cognition-emotion-behavior process whereby distinct sets of attributions lead to specific emotions, which in turn influence behavior (Weiner, 1980, 1985). Namely, attributions to internal and/or controllable causes should be associated with negative emotions such as anger or disgust and inhibit helping behavior, whereas attributions to external and/or incontrollable causes should be associated with feelings such as pity or sympathy, which will increase helping behavior (Hine & Montiel,

1999). These well-established approaches to attribution research have already led to an array of interesting findings in the realm of poverty and social inequality.

2.2 Attributions for poverty and inequality

Studies in the field of poverty attributions have consistently shown that attributional processes are related to support for certain public policies. Those who attribute poverty to structural or external causes tend to desire equity among social classes (Piff et al., 2020), manifest higher support for redistributive policies and welfare (Bullock, 1999; Kluegel & Smith, 1986) and governmental programs to reduce poverty (Delavega et al., 2017). Furthermore, structural as opposed to individualistic attributions have been found to be associated with anti-poverty activism (Hine & Montiel, 1999), behavioral intentions to help the poor (Zucker & Weiner, 1993) and more egalitarian behavior (Pfiff et al., 2020).

It is important to note that much of the research in the realm of poverty attributions to date has focused on domestic poverty within countries of the Global North (see Bastias, Peter et al., 2024 for a recent systematic review on measurements of poverty attributions), such that the above-mentioned phenomenon of WEIRD psychology also applies to this field of research (Yúdica et al., 2021). However, there are some notable exceptions, namely the work of Nasser, Abouchedid and colleagues (e.g., Abouchedid & Nasser, 2001; Nasser, 2007; Nasser et al., 2002; Nasser et al., 2005), who examined attributions for poverty in various countries of the Global South such as Lebanon, South Africa and India and, importantly, also took into consideration the role of religious affiliation (Abouchedid & Nasser, 2001). Further countries that have been considered by a variety of authors include Argentina (e.g. Bastias et al., 2019; Reyna et al., 2018), Mexico (Vilchis Carrillo, 2022), Nicaragua (Panadero & Vázquez, 2008), Turkey (Morçöl, 1997; Özpinar & Akdede, 2022), Ethiopia (Wollie, 2009) and the Philippines (Hine & Montiel, 1999). Still, systematic study of attributions for poverty in the Global South remains comparatively scarce. Moreover, the prevailing focus on domestic poverty implies that international actors and factors such as the history of colonialism or the impact of large corporations, international trade agreements and man-made climate change are disregarded.

A further limitation of the research on poverty attributions concerns the scales that are used. The majority of studies investigating attributions for poverty in the Global South are based on items developed by Feagin (1972) in the United States fifty years ago, or adaptions thereof such as the Causes of Third World Poverty Questionnaire (CTWPQ) by Harper and colleagues (1990; e.g. Bolitho et al., 2007; Hine & Montiel, 1999; Panadero & Vazquéz, 2008). To date, very few attempts have been made to collect up-to-date qualitative data (see Hine & Montiel, 1999; Hine et al., 2005; Pinazo et al., 2010).

Finally, research in this field has traditionally focused on poverty and failed to look at inequality in a broader sense, which in addition to economic factors includes further aspects such as consequences of the climate crisis, inequality of opportunities and a variety of supranational factors as mentioned above. Inequality, as opposed to poverty, is a relationship which implies a link between the advantaged and the disadvantaged (Prentice & Shelton, 2012).

When thinking about attributions for global inequality, it is important to consider what the actual reasons for this inequality are. One central factor contributing to this inequality is the historical exploitation and colonization of other parts of the world by European countries (Milanovic, 2016). As pointed out by Licata and Volpato (2010), the colonial past still deeply influences social and cultural identities as well as intra- and intergroup dynamics. Importantly, colonial history has a twofold implication for research on attributions for global inequality. On

the one hand, it represents one of the actual causal explanations for today's inequalities. On the other hand, power relations and identities rooted in former colonial structures can be assumed to affect attributions for global inequality to this day. In the current era, these inequalities are reproduced by a globalized economic system and consumer patterns in the Global North.

1.3. The present research

The present research seeks to identify current attributions for global inequality in samples from the Global South and Global North using a qualitative approach. This allows us to investigate participants' reasoning with regard to global inequality without the constraints of a scale imposed by the researchers. Moreover, with this approach, we can determine whether different categories emerge for the different samples and if there are differences in the extent to which the different categories are mentioned across countries. As pointed out above, studies in this vein are scarce to non-existent. We therefore hope to gain new insights into the causal explanations people give for global inequality as well as whether these differ across different populations.

We chose to conduct our study in two historically and economically distinct countries. On the one hand, Germany, a European country which counts among the strongest economies in the world (GDP per capita 45,723.60; The World Bank, n.d.). On the other hand, Argentina, which experienced European colonization and today is considered a developing country economically (GDP per capita 8,441.90; The World Bank, n.d.). As a result of these and other differences, explanations for global inequality may differ between the two countries, as has previously been found in research on poverty attributions. Da Costa and Dias (2014), for example, conducted a study among 15 European countries and found that the economically weaker countries explained poverty with structural factors, whereas richer countries tended to emphasize individualistic and fatalistic causes. A qualitative and exploratory approach including perspectives from different regions of the world will help to determine similarities and potential differences in attributions for global inequality.

Both studies were preregistered on aspredicted.org (https://aspredicted.org/132_22B; https://aspredicted.org/TTR_35L). We report all measures and data exclusions. Anonymized data, preregistrations, and questionnaires are stored in an OSF project (https://osf.io/w6j8g/?view_only=33d096fb39b34cf2b9febf094129543f).

2. Study 1

The first study was conducted in Germany and addressed the question of which attributions for global inequality are present in a Global North sample. Data collection took place in 2020.

2.1. Participants and procedure

In order to cover diverse perspectives, we attempted to collect data from 150 participants (see preregistration). A total of 152 students completed an online questionnaire and received partial course credit in return. We excluded twelve participants from the analysis since they either failed the attention test, indicated they had not responded to the questions in a sincere manner or did not agree to the usage of their data. Of the remaining 140 participants, 74% were female, 26% were male and one person identified as non-binary. Age ranged from 18 to

70 (*M* = 30, *SD* = 9.41). A total of 29% of participants reported having an immigrant background, 40% had lived in a foreign country or spent a considerable amount of time abroad, 62% reported volunteer experience and 54% had participated in demonstrations, and 50% reported their political orientation to be left of center, whereas 33% reported it to be right of center (*M* = 4.62, *SD* = 1.89, 11-point-scale; min 1, max 11; ZA & ZUMA, 2002).

2.2 Material

Participants were presented with a set of world maps as found on the website *Worldmapper* (n.d.; see Figure 1). One map served as a reference and displayed countries in their regular proportion, whereas the other maps showed a distorted view of the world. Namely, the respective countries' size was altered depending on different factors such as lack of access to clean water, child mortality rate, number of people who live on $1.90 a day or less and number of people who have died due to floods within a certain period of time. After viewing the maps, participants were asked to answer a set of open questions in order to explore their reactions to global inequality[1]. The question analyzed below was "What do you consider to be the causes of the situation depicted in the maps?"

2.3 Results and Discussion

We conducted content analysis using the method by Rössler (2005) and used a bottom-up approach in developing the coding scheme. Categories were developed by coder 1, the first author of this article, based on content similarity. Many answers referred to more than one category and were therefore coded into several categories. Subsequently, coder 2 (a student research assistant, see acknowledgements) was trained to apply the coding scheme. After coding a subset of answers, the coding scheme was discussed and refined among the two coders. Both coders independently rated which categories were present for each answer. Interrater reliability was substantial (Cohen's kappa ranged between .70 and .82). In a final step, any discrepancies between the two coders were discussed and agreed upon. The final coding scheme consisted of seven categories. Examples, number of mentions and Cohen's kappa coefficients can be found in Table 1.

The first category, termed *structural-North,* referred to the historical as well as current systematic exploitation of the Global South by the Global North, e.g. (neo-)colonialism and the exploitation of workers and land by international corporations. This category was mentioned most frequently by far and maps onto the factor *blame exploitation* identified in previous research on poverty in the Global South using the CTWPQ (Harper et al., 1990; e.g. Bolitho et al., 2007; Hine & Montiel, 1999; Panadero & Vázquez, 2008).

The second category named *population-North* referred to ideas, values and behaviors associated with Western individualism and lifestyle. It constitutes a new dimension not found in previous research. Participants mentioned, amongst others, greediness, ignorance and indifference as well as egocentrism, a lack of empathy and consumerism.

The structural dimension regarding the Global South fell into two distinct categories, namely *politics-South* and *situation-South.* The former referred to problems like corruption, government mismanagement and dictatorship, whereas the latter referred to problems with infrastructure, services and the economy. Participants here referred, for example, to a lack of education, insufficient healthcare or poverty itself. The category regarding politics in the Global South has previously been identified and termed *blame third-world governments* in the CTWPQ (Harper et al., 1990). However, the category regarding the situation in the South is

only comparable to a factor found in a single previous study to the author's knowledge, namely *blame attributed to developing countries' services* (Vázquez et al., 2010).

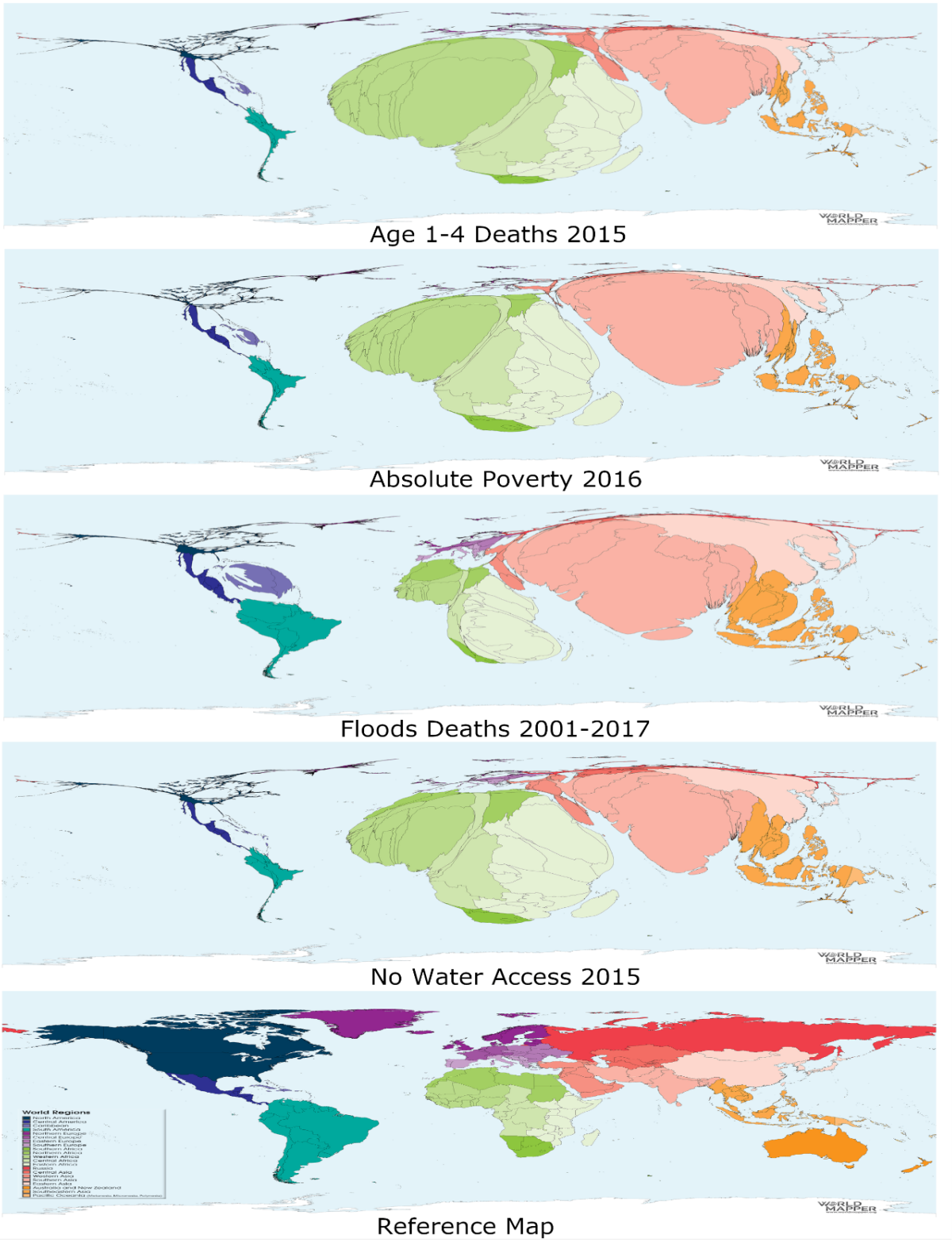

Figure 1. Maps depicting global inequality presented to participants as stimulus material
Country size is shown in proportion to the respective factor, e.g. child mortality, absolute poverty. Copyright: Worldmapper (n.d)., format slightly altered to fit the page.

The fifth category, termed *population-South,* referred to religious and cultural customs and the overall purported behavior of people in countries of the Global South. Answers here included, amongst others, refusing to see practitioners of Western medicine, a high birth rate and a general lack of motivation. This category maps quite closely onto the factor *blame the poor* in the CTWPQ (Harper et al., 1990).

Table 1. Attribution categories

Category	Examples	Study 1		Study 2	
		N	κ	N	κ
Structural – North Systematic exploitation of the Global South by the Global North	"globalization could provide a cue here" "colonization, [...], further developed countries exploit less developed countries" "companies like Nestle which exploit developing countries and give nothing in return"	72	.77	29	.71
Population – North Responsibility of the population and society in the Global North	"the explicitly selfish behavior that has become so modern" "the idea of separation […], the belief that there is not enough for everyone" "in our day-to-day lives in Europe, we do not think about having children work for us (consumerism, e.g. clothing)"	31	.82	13	.64
Politics – South Political problems in the Global South	"in many regions, there are no democratic structures" "dictatorships and corruption in some of the poor countries" "governments of developing countries"	28	.74	61	.57
Situation – South Description of circumstances in the Global South regarding infrastructure, services, economy, etc.	"poverty. Lack of education, jobs, insufficient healthcare…" "lack of resources, lack of support, lack of infrastructure" "there is not enough food and water"	37	.70	48	.76
Population – South Responsibility of the population and society in the Global South	"in the way people in those places think and act" "but also small tribes which still believe in spirits, witches and they like and prefer traditional medicine men over doctors" "that people in developing countries aren't able to work together in a cooperative/utilitarian way in their own country (example: […] nepotism)"	17	.79	23	.61
Nature Unchangeable natural circumstances	"the geographical location" "depends on the weather" "the poorer regions generally are in a more difficult situation regarding the climate, i.e. it is hard to survive there (heat, drought, and now strong repercussions of climate change)"	37	.79	12	.73
Conflict Wars and other conflicts	"(civil) wars" "wars as a big business which those who are not affected do not want to miss" "war"	11	.76	7	1.00

Note: κ = Cohen's kappa (interrater reliability)

The final two categories were called *nature*, referring to unchangeable circumstances such as geographical location and climate, and *conflict*, which referred both to wars within countries of the Global South but also indirect support of these by the Global North, e.g. by supplying arms. *Blame nature* formed part of the original CTWPQ (Harper et al., 1990), whereas *conflict* or *war* was added in some of the later studies (Bolitho et al., 2007; Hine & Montiel, 1999; Panadero & Vázquez, 2008).

In terms of frequency, the category mentioned most often by participants was *structural-North* (51%), followed by *situation-South* (26%), *nature* (26%), *population-North* (22%), *politics-South* (20%), *population-South* (17%) and *conflict* (8%) (see Table 1). Participants' responses partially depended on their gender. Men mentioned *structural-North* more often

than women, while women mentioned *situation-South* and *nature* more frequently than men (see Supplemental Material).

Overall, we could confirm all of the categories previously identified in research on poverty in the Global South. Importantly though, we could establish a further category termed *population-North*, which attributes responsibility to individual citizens of the Global North. This differentiation between individual and structural causes both in the Global South *and* the Global North implies that we are now able to present a set of categories which can be structured more neatly along Weiner's (1985) attributional dimensions of locus (external vs. internal) and controllability. Moreover, although most of the categories might seem similar, the actual content of the answers differs widely from the items used in previous research. Taken together, these are important findings with regard to future studies investigating attributions of global inequality and behavioral consequences thereof, which might also serve to inform potential interventions.

3. Study 2

The second study constitutes a replication[2] of the first using a sample from Argentina and addressed the question of which attributions for global inequality are present in a Global South sample. Data collection took place in 2021.

3.1 Participants and procedure

A total of 138 students from a private university in Argentina completed an online questionnaire without any further incentive. One participant was excluded from the analysis since they did not agree to the usage of their data. Of the remaining 137 participants, 81% were female and 19% were male. Age ranged from 19 to 50 (M = 23, SD = 4.72). Twelve percent of participants reported having an immigrant background, 10% had lived in a foreign country or spent a considerable amount of time abroad, 37% reported volunteer experience and 59% had participated in demonstrations, and 48% reported their political orientation to be left of center, whereas 52% reported it to be right of center (M = 6.10, SD = 1.90, 10-point-scale; min 1, max 10; ZA & ZUMA, 2002).

3.2 Material

We used the same approach and materials as in Study 1. The questionnaire was translated by the first and second authors independently. Subsequently, together with the third author, the respective translations were discussed concerning accuracy and cultural adaptation and a final version was determined.

3.3 Results and discussion

We used a similar approach to code the data as in Study 1, with one of the co-authors from Argentina as a second coder. However, we combined a top-down and bottom-up approach by using the coding scheme already developed and simultaneously looking out for potential new categories in the data. Cohen's kappa varied between .57 and 1.00, which can be considered moderate to perfect agreement (Landis & Koch, 1977; O'Connor & Joffe, 2020).

We found the same categories in this sample as we did in the German one (see Table 1)[3]. The category mentioned most often was *politics-South* (45%), followed by *situation-South* (35%), *structural-North* (21%), *population-South* (17%), *population-North* (9%), *nature* (9%) and *conflict* (5%). Thus, we found a clear difference in the frequency with which certain categories were mentioned. While there was a strong focus on systematic exploitation of the Global South by the Global North in the German sample, the category most mentioned in the Argentinean sample was politics in the South. Overall, there was a tendency towards the Southern categories in this sample, while in contrast, the Global North was less frequently mentioned. Hence, there seemed to be an attributional bias depending on group membership. We found gender differences only for the category *nature*, which was mentioned more frequently by men than women (see Supplemental Material).

4. General discussion

The present research examined attributions for global inequality in samples from Germany and Argentina using a qualitative, exploratory approach. We identified seven categories which can be structured along the individual, structural or fatalistic dimensions following Feagin (1972), but also map onto Weiner's (1985) dimensions of locus (internal/external) and controllability (personal control/external control).[4] As pointed out by Weiner (2011), causes can therefore be placed into various dimensions simultaneously rather than one exclusive category as suggested by Feagin (1972). Hence, the categories found are in line with previous research on poverty attributions in the Global South, but allow for an extension and a more nuanced differentiation.

In particular, we identified a category referring to the population in the North, which means that attributions regarding both the Global South *and* the Global North can be divided into structural and individual categories, respectively. They can also be structured along Weiner's (1985) dimensions of locus and controllability on a continuum depending on the perspective, i.e., whether participants are from the Global South or the Global North. For example, the category blaming the population in the Global South could be categorized as individualistic according to Feagin (1972). For participants from the Global South, this category would be internal and controllable according to Weiner (1985), while causes located in the Global North would represent the opposite extreme of the locus and controllability dimension.

The newly identified category regarding the population of the Global North is also interesting because it stresses the importance of specific acts of daily life contributing to global inequality. As mentioned above, alongside structural factors, a consumerist mindset and daily individual consumer choices across countries of the Global North are one of the driving factors presumably perpetuating global inequality.

Our results indicate that the same categories arise across both samples. Hence, they represent evidence that overall, the same causes of inequality are perceived in different parts of the world. However, we found differences in the extent to which people embrace them. Each sample showed a tendency to hold their own region and specifically their own governments and structures more accountable than those of the respective other region. Namely, there was a stronger focus on responsibilities of the Global North in the German sample, whereas Argentinean participants stressed responsibilities of the Global South. Both samples mentioned structural causes more frequently than individual ones. Nature as an uncontrollable circumstance was mentioned more frequently in the Northern sample.

The latter findings seem surprising insofar as they are in line with neither the actor-observer bias (Jones & Nisbett, 1972) nor with the ultimate attribution error (Pettigrew, 1979; see Hewstone, 1990 for a review). The former postulates that observers tend to attribute actors' behavior individually, while actors themselves tend to attribute their own behavior more structurally. The latter refers to a systematic misattribution in the intergroup context that is partially based on prejudice and serves to maintain a negatively stereotyped view of the outgroup (Pettigrew, 1979; Hewstone, 1990). In contrast to these theories, both our samples focused on structural causes more than on individual ones and both our samples attributed more responsibility to their ingroup than to the respective outgroup.

One explanation for this pattern might be that participants did not necessarily perceive themselves as members of these large, very inclusive groups. Since we did not describe global inequality verbally, but through images, and did not mention either of the groups explicitly in our questions, they might simply not have been salient. However, our results partially concur with Hine and Montiel (1999), who found that Filipinos blamed poverty more strongly on governments of the Global South and the poor, whereas Canadians blamed conflict and natural causes more strongly. They are also in line with the reversal of the actor-observer bias observed by Carr and Maclachlan (1998) when comparing psychology students' attributions for poverty in Malawi and Australia. Malawians attributed poverty in the Global South more individualistically, whereas Australians attributed it more structurally. The authors specifically point out that these results are different from those obtained with a previous sample of market shoppers, where the expected pattern for actors and observers was confirmed. Hence, similar to the reasoning brought forward by Hine and Montiel (1999), it might be that due to the presumably higher-than-average socioeconomic status (SES) of the Argentinean sample, participants might not have identified with the respective groups and adopted an observer's rather than an actor's point of view. Moreover, there is evidence that higher education and in particular social science careers are associated with an increase in structural attributions (Bastias et al., 2019; Guimond & Palmer, 1990), which further helps to explain the pattern of results found in our studies.

4.1. Strengths and limitations

Four important strengths of this research are worth mentioning. First, we conducted a qualitative analysis of attributions, while the bulk of research in this realm has been of quantitative nature based on items developed half a century ago. Secondly, we focused on global inequality rather than poverty in the Global South - a topic neglected by previous researchers. As Prentice and Shelton (2012) point out, inequality is a relationship, and in order to challenge an unequal relationship between groups, it is first necessary to understand how individuals on both sides of the divide experience this relationship. Thirdly, we included perspectives from both the Global South and the Global North rather than focusing on a Northern point of view only, which is important considering the strong tendency in psychological research to mainly work with Global North samples. Finally, our stimulus material allowed for exploring participants' ideas on global inequality with presumably no framing effect (see Iyengar, 1990) inherent in the stimulus material. This can be considered an improvement on previous studies (e.g. Olson, 1997) using written scenarios, which run the risk of already implying certain attributions over others.

The main limitation of this research is that the studies are based on student samples and are not representative of the respective countries' populations. To start challenging WEIRD psychology, it will be important for future research to include participants of lower SES. This

might be especially relevant in the context of inequality attributions, since people of higher and lower SES are likely to differ in this respect, as has been found for a variety of demographic factors in the literature on poverty attributions (see Hine & Montiel, 1999). Moreover, Argentinean participants were students at a private university and might therefore differ from a student sample at a public university. However, Harper (2003) calls for the research on poverty attributions to focus on those who are in a position to effect change. In our current society, it is arguably more likely for the more privileged in terms of education and SES to attain a position of power in the future, making them an important group to research in this context.

4.2. Conclusion and further directions

As pointed out above, while global inequality is reproduced systematically, each individual – particularly those in the more privileged regions of the world – has a choice when it comes to their own responsibility to contribute to more or less global inequality. Causal attributions play an important role in social change since they largely influence people's emotions, behavioral intentions and political preferences with regard to inequality. They can serve as a motivation to engage in behavior aimed at achieving more equality, yet they might also serve as a justification not to do so. The present research thoroughly explores attributions for global inequality in different parts of the world. This constitutes a necessary first step in identifying ways in which individuals can be motivated to act in favor of more global inequality.

Overall, this research lays important groundwork for future quantitative studies in the realm of global inequality. Importantly, future research should further investigate attributional patterns in lower SES groups and in other parts of the world as well as ideological constructs and macro-level variables influencing explanations for global inequality. Moreover, it would be useful to create an up-to-date scale regarding attributions for global inequality. While the categories we identified are in many ways similar to those previously found in research on poverty attributions in the Global South, they are more differentiated and specific to the context of global inequality. Importantly, the qualitative data collected allows for the development of more up-to-date items than those commonly used in research on poverty attributions. Finally, a fruitful approach seems to lie in attempting to alter attribution patterns in order to strengthen people's motivation to contribute to a more equal and ultimately more just world.

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References

Abouchedid, K., & Nasser, R. (2001). Poverty attitudes and their determinants in Lebanon's plural society. *Journal of Economic Psychology*, 22(2), 271-282. https://doi.org/10.1016/S0167-4870(01)00032-0

Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist*, *63*(7), 602-614. https://doi.org/10.1037/0003-066X.63.7.602

Bastias, F., Cañadas, B., Figueroa, M. C., Sosa, V., & Moya, M. J. (2019). Explanations about poverty origin according to professional training Area. *Propósitos y Representaciones, 7*(2), 107-133. https://doi.org/10.20511/pyr2019.v7n2.282

Bastias, F., Peter, N., Goldstein, A., Sánchez-Montañez, S., Rohmann, A., & Landmann, H. Measuring attributions 50 years on: From within-country poverty to global inequality. [Manuscript under review**]**

Bolitho, F. H., Carr, S. C., & Fletcher, R. B. (2007). Public thinking about poverty: Why it matters and how to measure it*. International Journal of Non-profit and Voluntary Sector Marketing*, 12, 13-22. https://doi.org/10.1002/nvsm.220

Bullock, H. (1999). Attributions for poverty: A comparison of middle-class and welfare recipient attitudes. *Journal of Applied Social Psychology*, *29*(10), 2059-2082. https://doi.org/10.1177/1088868310387615

Carr, S. C., & MacLachlan, M. (1998). Actors, observers, and attributions for Third World poverty: Contrasting perspectives from Malawi and Australia. *The Journal of Social Psychology*, *138*(2), 189-202. https://doi.org/10.1080/00224549809600370

Delavega, E., Kindle, P. A., Peterson, S., & Schwartz, C. (2017). The blame index: Exploring the change in social work students' perceptions of poverty. *Journal of Social Work Education*, *53*(4), 664-675. https://doi.org/10.1080/10437797.2017.1287028

Fanning, A. L., & Hickel, J. (2023). Compensation for atmospheric appropriation. *Nature Sustainability*, 6, 1-10. https://doi.org/10.1038/s41893-023-01130-8

Feagin, J. (1972). Poverty: We still believe that God helps those who help themselves. *Psychology Today*, *6*(6), 101-129.

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). McGraw-Hill Book Company.

Da Costa, L. P., & Dias, J. G. (2014). Perceptions of poverty attributions in Europe: A multilevel mixture model approach. *Quality & Quantity*, *48*(3), 1409–1419. https://doi.org/10.1007/s11135-013-9843-3

Guimond, S., & Palmer, D. L. (1990). Type of academic training and causal attributions for social problems. *European Journal of Social Psychology, 20*(1), 61–75. https://doi.org/10.1002/ejsp.2420200106

Harper, D. J. (2003). Poverty and discourse. In S. C. Carr & T. S. Sloan (Eds.), *Poverty and psychology: From global perspective to local practice* (pp. 185–203). Kluwer Academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-0029-2_10

Harper, D. J., Wagstaff, G. F., Newton, J. T. & Harrison, K. R. (1990). Lay causal perceptions of third world poverty and the just world theory. *Social Behavior and Personality: An International Journal, 18*(2), 235–238. https://doi.org/10.2224/sbp.1990.18.2.235

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*(2-3), 61-83. https://doi.org/10.1017/S0140525X0999152X

Heider, F. (1958). *The psychology of interpersonal relations*. John Wiley & Sons Inc. https://doi.org/10.1037/10628-000

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology*, *53*(1), 575-604. https://doi.org/10.1146/annurev.psych.53.100901.135109

Hickel, J. (2020). Quantifying national responsibility for climate breakdown: An equality based attribution approach for carbon dioxide emissions in excess of the planetary boundary. *The Lancet Planetary Health*, *4*(9), e399-e404. https://doi.org/10.1016/S2542-5196(20)30196-0

Hine, D. W., Montiel, C. J., Cooksey, R. W., & Lewko, J. H. (2005). Mental models of poverty in developing nations: A Causal Mapping Analysis using a Canada-Philippines contrast. *Journal of Cross-Cultural Psychology*, *36*(3), 283–303. https://doi.org/10.1177/0022022104273652

Hine, D. W., & Montiel, C. J. (1999). Poverty in developing nations: A cross-cultural attributional analysis. *European Journal of Social Psychology*, *29*(7), 943-959. https://doi.org/10.1002/(SICI)1099-0992(199911)29:7<943::AID-EJSP978>3.0.CO;2-5

Iyengar, S. (1990). Framing responsibility for political issues: The case of poverty. *Political Behavior, 12*(1), 19–40. https://doi.org/10.1007/BF00992330

Jetten, J., & Peters, K. (2019). Putting a social psychological spotlight on economic inequality. In J. Jetten, K. Peters (Eds.), *The Social Psychology of Inequality* (pp. 1-18). Springer. https://doi.org/10.1007/978-3-030-28856-3_1

Jones, E. E., & Nisbett, R. E. (1972). The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 79-94). General Learning Press.

Kluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality: Americans' views of what is and what ought to be*. Aldine de Gruyter.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, *33*(1), 159-174.

Licata, L., & Volpato, C. (2010). Introduction: Collective Memories of Colonial Violence. *International Journal of Conflict and Violence (IJCV)*, *4*(1), 4–10. https://doi.org/10.4119/ijcv-2811

Milanovic, B. (2016). *Global inequality. A new approach for the age of globalization*. Harvard University.

Morçöl, G. (1997). Lay explanations for poverty in Turkey and their determinants. *The Journal of Social Psychology, 137*(6), 728–738. https://doi.org/10.1080/00224549709595494

Nasser, R. N. (2007). Does subjective class predict the causal attribution for poverty? *Journal of Social Sciences*, *3*(4), 197-201. https://doi.org/10.3844/jssp.2007.197.201

Nasser, R., Abouchedid, K., & Khashan, H. (2002). Perceptions of the causes of poverty comparing three national groups: Lebanon, Portugal and South Africa. *Current Research in Social Psychology, 8*(7), 101–119.

Nasser, R., Singhal, S., & Abouchedid, K. (2005). Causal attributions for poverty among Indian youth. *Current Research in Social Psychology, 11*(1), 1–13.

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. *International Journal of Qualitative Methods, 19*. https://doi.org/10.1177/1609406919899220

Özpinar, Ş., & Akdede, S. H. (2022). Determinants of the attribution of poverty in turkey: An empirical analysis. *Social Indicators Research, 164.* https://doi.org/10.1007/s11205-022-02988-5

Olson, J. T. (1997). Perceptions of global inequality: A call for research. *Social Justice Research*, *10*(1), 39-62. https://doi.org/10.1007/s11211-997-0012-5

Panadero, S., & Vázquez, J. J. (2008). Perceived causes of poverty in developing nations: Causes of Third World Poverty Questionnaire in Spanish-speaking samples. *Social Behavior and Personality: An International Journal, 36*(4), 571–576. https://doi.org/10.2224/sbp.2008.36.4.571

Piff, P. K., Wiwad, D., Robinson, A. R, Aknin, L. B., Mercier, B., & Shariff, A. (2020). Shifting attributions for poverty motivates opposition to inequality and enhances egalitarianism. *Natural Human Behavior, 4*(5), 496–505. https://doi.org/10.1038/s41562-020-0835-8

Pinazo, D., Peris, R., & Gámez, M.-J. (2010). Lay beliefs about developing countries in relationship to helping behaviors. *The Journal of Social Psychology*, *150*(4), 393–415. https://doi.org/10.1080/00224540903366685

Prentice, D. A., & Shelton, J. N. (2012). Inequality is a relationship. *Behavioral and Brain Sciences*, *35*(6), 444. https://doi.org/10.1017/S0140525X1200129X

Reyna, C., & Reparaz, M. (2014). Propiedades psicométricas de las escalas de atribuciones sobre las causas de la pobreza y actitudes hacia los pobres [Psychometric properties of the scales of attributions about the causes of poverty and attitudes towards the poor]. *Actualidades en Psicología*, *28*(116), 55–66. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S0258-64442014000100006&lng=pt&tlng=es.

Rössler, P. (2005). *Inhaltsanalyse [Content analysis]*. UVK Verlag.

Roser, M. (2019). *Global Inequality of Opportunity.* Our World in Data. Retrieved August 22, 2019, from https://ourworldindata.org/global-inequality-of-opportunity

Thalmayer, A. G., Toscanelli, C., & Arnett, J. J. (2021). The neglected 95% revisited: Is American psychology becoming less American? *American Psychologist, 76*(1), 116–129. https://doi.org/10.1037/amp0000622

The World Bank. (n.d.). *GDP per capita (current US$)*. Retrieved October 14, 2021, from https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

Vázquez, J. J., Pascual, I., & Panadero, S. (2010). Developing the "Causes of Poverty in Developing Countries Questionnaire (CPDCQ)" in a Spanish-speaking population. *Social Behavior and Personality: An International Journal*, *38*(9), 1167–1172. https://doi.org/10.2224/sbp.2010.38.9.1167

Vilchis Carrillo, D. E. (2022). Pobreza, desigualdad y religión: creencias religiosas y atribuciones causales de la pobreza en México [Poverty, inequality and religion: Religious beliefs and attributions causes of poverty in Mexico]. *Revista Temas Sociológicos, 30*, 253-285. https://doi.org/10.29344/07196458.30.3204

Waddell, M. W., Wright, S. C., Mendel, J., Dys‐Steenbergen, O., & Bahrami, M. (2023). From passerby to ally: Testing an intervention to challenge attributions for poverty and generate support for poverty-reducing policies and allyship. *Analyses of Social Issues and Public Policy, 23*, 334–362. https://doi.org/10.1111/asap.12348

Weiner, B. (1980). A cognitive (attribution)-emotion-action model of motivated behavior: An analysis of judgments of help-giving. *Journal of Personality and Social Psychology, 39*(2), 186–200. https://doi.org/10.1037/0022-3514.39.2.186

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*(4), 548–573. https://doi.org/10.1037/0033-295X.92.4.548

Weiner, B., Osborne, D., & Rudolph, U. (2011). An attributional analysis of reactions to poverty: the political ideology of the giver and the perceived morality of the receiver. *Personality and Social Psychology Review, 15*(2), 199–213. https://doi.org/10.1177/1088868310387615

Wollie, C. W. (2009). Causal attributions for poverty among youths in Bahir Dar, Amhara Region, Ethiopia. *Journal of Social, Evolutionary, and Cultural Psychology, 3*(3), 251–272. https://doi.org/10.1037/h0099319

Worldmapper. (n.d.). *Absolute Poverty*. Retrieved October 14, 2021, from https://worldmapper.org/maps/absolute-poverty-2016/ (available under public license. https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en)

Worldmapper. (n.d.). *Age 1-4 Deaths*. Retrieved October 14, 2021, from https://worldmapper.org/maps/age-1to4-deaths-2015/ (available under public license. https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en)
Worldmapper. (n.d.). *Flood Deaths 2001-2017*. Retrieved October 14, 2021, from https://worldmapper.org/maps/flood-deaths-2001to2017/ (available under public license. https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en)
Worldmapper. (n.d.). *No Water Access*. Retrieved October 14, 2021, from https://worldmapper.org/maps/housing-no-water-access-2015/ (available under public license. https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en)
Yúdica, L., Bastias, F., & Etchezahar, E. (2021). Poverty attributions and emotions associated with willingness to help and government aid. *Psihologijske teme*, *30*(3), 509-524. https://doi.org/10.31820/pt.30.3.6
ZA, & ZUMA (2002). Links-Rechts-Selbsteinstufung. In A. Glöckner-Rist (Ed.). *ZUMA-Informationssystem. Elektronisches Handbuch sozialwissenschaftlicher Erhebungsinstrumente (Version 6.00*). Mannheim: Zentrum für Umfragen, Methoden und Analysen.
Zucker, G. S., & Weiner, B. (1993). Conservatism and perceptions of poverty: An attributional analysis. *Journal of Applied Social Psychology, 23*(12), 925–943. https://doi.org/10.1111/j.1559-1816.1993.tb01014.x

Footnotes

[1] We asked several further open questions and also used some quantitative measures in this study. The full questionnaire can be found in the supplementary materials online (https://osf.io/w6j8g/?view_only=33d096fb39b34cf2b9febf094129543f).
[2] We replicated the qualitative part of Study 1 only.
[3] We initially formed another category including the terms *discrimination* and *racism.* However, this category was mentioned very rarely (< 5) and it was unclear whether participants were referring to within-country or between-country incidents. Hence, we decided to drop this category.
[4] Weiner (1985) suggests stability as a third dimension. However, in our study, this was less relevant for understanding the responses.

Additional information

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The current research was conducted in accordance with the APA Code of Conduct (American Psychological Association, 2017) and the Declaration of Helsinki (World Medical Association, 2013). The local ethical review board approved the study. Informed consent was obtained from all individual participants. We report all data exclusions, all manipulations, and all measures in the study. Anonymized data, questionnaires and preregistrations are stored in an OSF project (https://osf.io/w6j8g/?view_only=33d096fb39b34cf2b9febf094129543f).

Supplemental Material

To test whether men and women mentioned different attributions more frequently, we conducted Chi² tests for gender by attributions. The results are presented in Table S1. The cross tables can be generated with the SPSS syntax provided in OSF (https://osf.io/w6j8g/?view_only=33d096fb39b34cf2b9febf094129543f).

Table S1. Chi Square Test for gender differences per country

Gender x	Germany		Argentina	
	χ2	p-value	χ2	p-value
Structural North	3.08	.08[t]	.68	.41
Population North	.00	.96	.15	.70
Politics South	.91	.34	2.14	.14
Situation South	5.75	.02*	.55	.46
Population South	.07	.80	.87	.35
Nature	7.56	.01*	4.24	.04*
Conflict	1.80	.18	.11	.74

Note. [t]*p < .10; *p < .05*