Chapter 4: What is Fair? Empirical Results

In the following chapter, the results of the analyses will be shown separately for each of the four distributional survey experiments depicting either a situation with friends, at work, among family or regarding public goods. We will look at how need, merit and equality considerations affect distributions for each of these settings. While the findings will be presented for each individual situation, the main point of interest lies in comparing how the settings of the DSEs translate into different distribution patterns in regard to allocation norms. Additionally, we will look into whether and how the social class and gender of the respondents affect their distributive choices.

Most of the analyses are based on the data from the Swiss general population sample. However, to test for effects of context, the data from the two student samples comes into play. Using the student samples, we can test whether students from Switzerland (University of Bern) and the United States (Princeton University) have different conceptions of distributive justice.

A. To Each According to Needs or Merit?

The results are presented and discussed for each of the distributional survey experiments, each depicting a specific situation, separately. We will start by looking at the role of need and merit for people's distribution decisions in the four DSEs. Since the importance of equality cannot be directly tested through the DSE dimensions, findings on this principle of justice will be discussed separately in subchapter *Who distributes equally and when?* While all variables making up a DSE are included in the analyses, the focus will lie on the dimensions operationalising need and merit. In a next step, the respondent level variables are included in the analyses to see whether respondents with different characteristics differ in their perceptions of what constitutes a just distribution.

However, before diving into the analyses, we shall start with a short description of the main characteristics of the respondents. We will then move on to the results from the multivariate analyses using data from the Swiss general population sample.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

I. Descriptive Statistics of Respondent Attributes in the General Population Sample

Table 4.1 summarises the general population sample in terms of gender, class, education, region and age of respondents. We see that women are

	mean	sd	N
Gender			
female	.546	.498	1732
male	.451	.498	1732
other	.00346	.0588	1732
Class			
EGP I	.257	.437	1518
EGP II	.284	.451	1518
EGP IIIa	.179	.383	1518
EGP IIIb - V	.159	.366	1518
EGP VI - VIIb	.121	.326	1518
Education			
at most compulsory education	.0722	.259	1677
vocational education & training	.415	.493	1677
general education	.096	.295	1677
higher vocational education	.176	.381	1677
university (of applied sciences)	.241	.428	1677
Region			
German-speaking region	.612	.488	1782
French-speaking region	.185	.388	1782
Italian-speaking region	.204	.403	1782
Age	51.8	17.6	1717

Table 4.1: Respondent characteristics in the general population sample

slightly overrepresented compared to men[1]. The respondents' class was

1 Because of the low number of those identifying with "other", these cases were excluded from the analyses differentiating by gender

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

constructed using the ISCO-08 classification system for their occupation, and then converting it into the Erikson-Goldthorpe-Portocarero (EGP) class scheme (Erikson and Goldthorpe 1992). EGP-class was then categorised into five groups of comparable size. The high number of upper class respondents is rather representative of the Swiss context (FSO 2020), as is the fact that a large majority has undergone vocational education and training. Respondents living in the German-speaking region represent the biggest group, followed by those from the Italian-speaking region[2] and the French-speaking region. The mean age of the respondents in the general population sample is 52 years old.

II. Need and Merit – Different Situations, same Principles?

To account for the fact, that the three outcomes of a DSE are interdependent, all analyses are based on multilevel models. The interdependence is a consequence of the design: in the DSEs, respondents distributed a prespecified sum among three hypothetical people situated in different settings. This makes each outcome dependent on the other two; one (hypothetical) person's gain was another's loss, since the amount to be distributed was limited. Depending on the given conditions, the estimates are obtained from random effects, fixed effects or hybrid multilevel models.

To begin with, we will look at the basic models including just the DSE / level 1 variables for each of the four situations. The data is based on the Swiss general population sample. Figures 4.1 to 4.8 show coefficient plots from multilevel models including just the DSE variables with the share of the total received as the dependent variable. While figures 4.5 and 4.6 show the results from random effects models, all others are fixed effects models[3]. For easier readability, the variables are grouped according to whether they operationalise need or merit or the ascriptive characteristics ethnic background and gender.

2 As mentioned in the methods section, this group was oversampled to allow for separate analyses by region.

3 The Hausman test indicated significant differences between the random effects and fixed effects estimates, which is why the more conservative approach was chosen.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

1. Friends: Justice in an Equality Matching Setting

The distributional survey experiment we will look at first represents a solidarity-oriented relationship as is typically found among friends (Deutsch 1985). Friendships are ideally created and cultivated as an end in itself, enabling its participants to enjoy each other's company and the many social as well as psychological benefits of a cooperative and benevolent relationship (Badhwar 1993). Because it is the main goal of people interacting in such a solidarity-oriented relationship to maintain and foster these enjoyable social relations, we would expect *equality matching* (EM) to be a dominant strategy in allocation problems (Fiske 1992; Deutsch 1985). Following EM logic, which requires a carefully regulated balancing of reciprocal exchanges, we would expect people to divide resources equally among three of their friends, since this would mean treating the people they are in reciprocal relationships with as equals (hypothesis 3.b). In the introductory text to this DSE, the respondents were invited to imagine they had won a sizeable sum in the lottery and wanted to redistribute some of it among their three friends. Figure 4.1 shows the results as average effects of the included dimensions on the shares they received of the total sum (here 1 is 100% of the total). The results were computed using a fixed effects multilevel model with data from the Swiss general population sample.

While the need and merit indicators are key for distinguishing which principle of justice was followed, the name, conveying information on gender as well as ethnic origin enables us to additionally test for potential discrimination effects. We see that while gender did not affect the allocation decisions, there are negative effects for minority groups. While the negative effects for friends with a Slavic name are not significant at the 5% level, friends with an Arabic name received significantly smaller shares compared to those with a Swiss name. The non-local names presumably conveyed stereotypical information, leading to a more negative evaluation of the person and thus to lower amounts.

Following the theoretical arguments in chapter 2, in this situation involving friends, respondents were expected to distribute equally (hypothesis 3.b). However, we see at first glance that we have to refute this hypothesis: equality was clearly not the most relevant allocation norm. Contrary to our expectation, both merit and need factors were highly relevant for the allocator. When it comes to need, we see that all variables signalling that the friend has higher needs show positive effects. While singles receive 3 percentage points (pp) higher shares than those living with a partner, those with two children receive

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

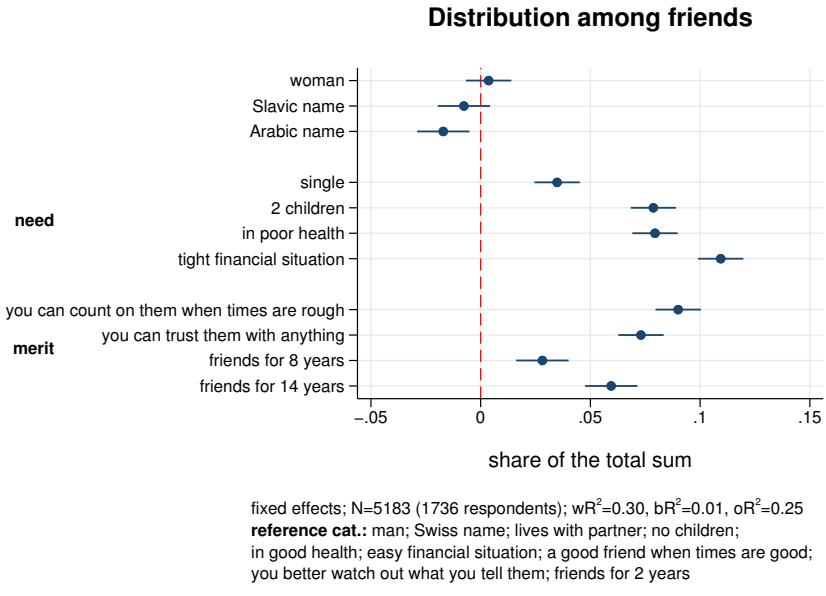


Figure 4.1: DSE 1 – Share of sum distributed among friends

8 pp higher shares. Friends in poor health are also given higher amounts by 8 pp. Hypothetical friends in a tight financial situation receive 11 pp higher shares, which is also the strongest effect of all the manipulated dimensions in this DSE. However, next to the effects of need, we also see comparable effects for variables operationalising the friend's merit. With 9 pp, a friend's reliability has the highest effect of the merit variables on the apportioned share. This is closely followed by trust with 7 pp and duration of friendship, with long-term friends of 14 years receiving 6 percentage points higher shares and friends of eight years receiving 3 pp more than friends of only two years.

To illustrate, the average share of a Swiss man who is a single parent of two children, has poor health, is in a tight financial situation and is a very reliable and trustworthy friend of 14 years, would receive, on average, 60% of the total. His counterpart, a woman with an Arabic name who lives with her partner, has no children, enjoys good health, has a relaxed financial situation, has not always been completely reliable and trustworthy during the two year friendship, receives on average only 7%. This is roughly a tenth of what the first person, with both high need and merit, receives.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

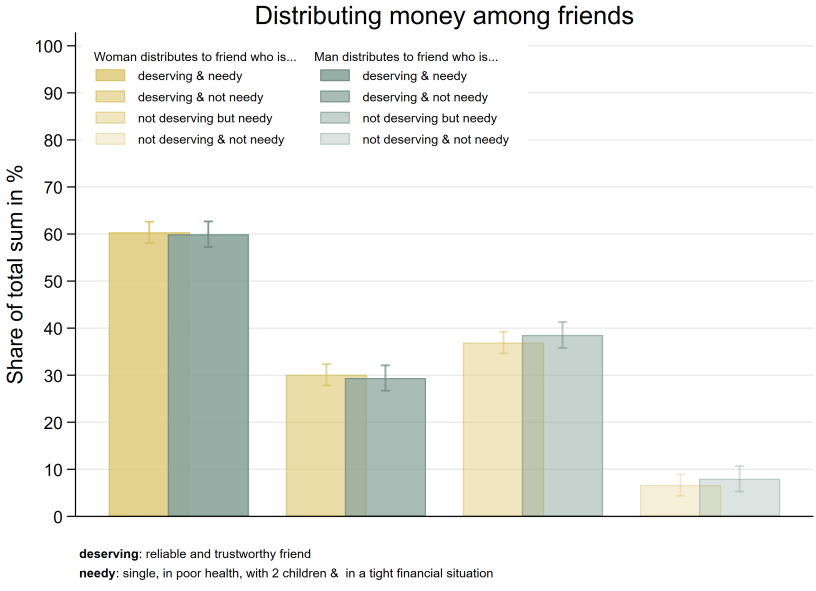


Figure 4.2: Predicted shares for different merit & need combinations in the friends setting

Summing up, while we find no significant effects of gender, there seems to be a slight bias based on ethnic origin. All else equal, those with an Arabic name were apportioned less than friends with a Swiss name. Also, and contrary to expectations, both need and merit factors are relevant for justice evaluations in this situation involving friends. To examine these effects of need and merit in more detail, the average shares for the four need-merit combinations: high merit - high need (deserving and needy); high merit - low need (deserving and not needy); low merit - high need (not deserving but needy) and low merit - low need (not deserving and not needy) were computed. Figure 4.2 illustrates the results for each of the combinations of need and merit holding the variables ethnic origin and gender constant at Swiss male. The bars show the overall predictive margins for each of these combinations differentiated by gender of respondent: teal for men and yellow for women.

It is striking that there seem to be high requirements for both merit and need, so that a friend in need and who has proven deserving over the years

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

receives 60% of the total, while a friend with low need and merit values receives an average of only 7%. Furthermore, a friend with high need and low merit receives higher shares, on average, than a friend with low need and high merit. Looking at these distributions by respondent's gender, we see that there are no significant differences. The above results clearly contradict hypothesis 3.b suggesting equality as the dominant allocation strategy among friends. Instead, respondents weighed up both deservingness and neediness factors to reach their decisions.

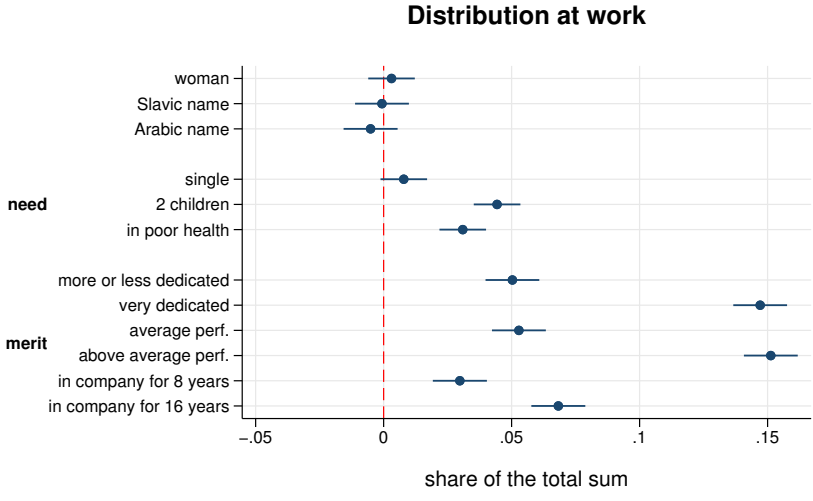
2. Work: Justice in a Market Pricing Setting

The second distributional survey experiment depicts a workplace setting in which the respondent was asked to imagine they are the boss of the three described people and that they can decide how to distribute a prespecified sum among them as end of year bonus money. The workplace setting, which is the most common setting in survey experiments on distributive justice (Jasso and Rossi 1977; Alves and Rossi 1978; Sauer et al. 2009; Auspurg, Hinz, and Sauer 2017), depicts a situation in which people are economically oriented (Deutsch 1975) and the *market-pricing* (MP) (Fiske 1992) relational mode applies. The goal of social interactions in an MP setting is to raise economic productivity and, with some exceptions (such as when high levels of cooperation are necessary), this can usually be achieved effectively with a system that rewards according to contributions (Leventhal 1976). In other words, people interacting in MP mode seek proportionality in terms of cost-benefit ratios (Fiske 1992), and a merit-based approach is functional in terms of these goals and intentions. It is thus to be expected that, in this workplace setting, resources are predominantly allocated according to merit (hypothesis 3.a).

Figure 4.3 summarises the results for the Swiss general population sample in the form of average effects of the employee characteristics on the total sum they were apportioned by respondents. The estimates were obtained using a fixed effects multilevel model. In this setting, we find no effects of the hypothetical employee's gender and ethnic origin. However, we see, at first glance, that the variables operationalising merit have the strongest effects on the distributions. In the workplace setting, merit is more important than need and it also seems to be more relevant for allocations than in the friends situation. With an additional 5 pp for an average performance and dedication level and around 15 pp for a high performance and dedication level compared

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

to low performance and dedication, these two merit indicators have the largest effects on the distribution of bonus money among employees at work.



fixed effects; N=5183 (1736 respondents); wR^2=0.35, bR^2=0.01, oR^2=0.32
reference cat.: man; Swiss name; lives with partner; no children; in good health; not very dedicated; below average performance; in company for 2 years

Figure 4.3: DSE 2 – Share of sum distributed among employees

For a better illustration of the effects of need and merit, we again compare two cases: A Swiss single father with health problems and who is very dedicated to his job, has a high performance level and has been in the company for 16 years receives an average of 35%. Note that this is just two percentage points more than he would have received in the case of an equal split. By contrast, a healthy woman with an Arabic name, living with her partner, who is not very dedicated to her work, has below-average performance levels and has been in the company for only two years, receives only 12% of the total.

To see how different combinations of need and merit influence allocations in a workplace situation, figure 4.4, showing the average shares of people with the four need-merit combinations — high merit - high need (deserving and needy); high merit - low need (deserving and not needy); low merit - high need (not deserving but needy) and low merit - low need (not deserving and not needy) — is informative. Once again, the results were obtained by computing the predictive margins from the fixed effects multilevel model

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

introduced above for the four combinations of merit and need. Gender and ethnic origin are held constant at Swiss male.

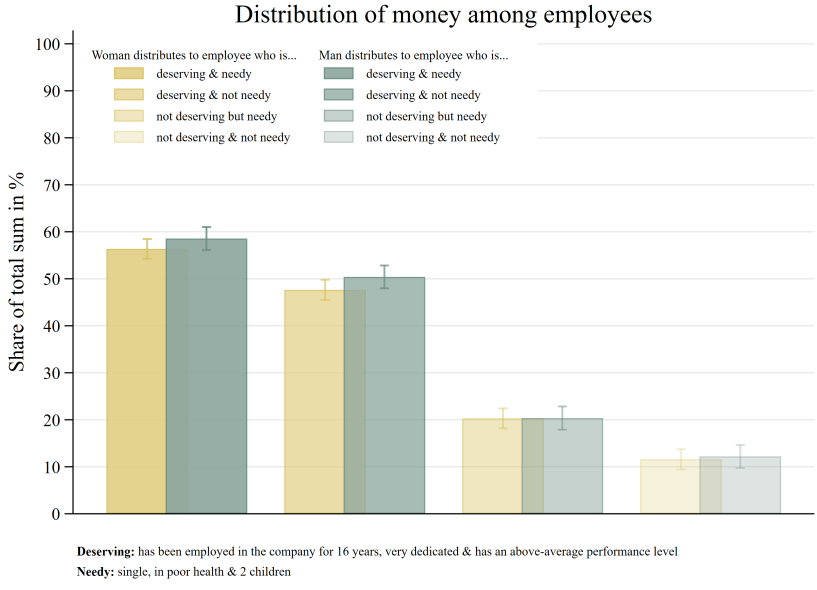


Figure 4.4: Predicted shares for different merit & need combinations among employees

With a range of 12% for the low merit - low need combination to 57% for the high merit - high need combination, we see that equal splits are far from normal in the work scenario. Following our theoretical reasoning and hypothesis 3.a, we would expect merit-based distributions to dominate in the workplace setting. While we see that, as in the friends setting, employees with high levels of both merit and need receive the highest shares (57% on average), contrary to the friends situation, those with high merit and low need are next in line with an average of 48%. Employees with low levels of merit receive 20% on average if their need values are high and otherwise 12%. Or put differently, those with the highest merit values receive 57% or 48%, on average, depending on whether they are also in need, while those with low merit values receive 20% (high need) or 12% (low need), on average. These findings show that merit is much more important than need or equality in the work situation and confirm hypothesis 3.a. Once again, there

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

are no significant gender differences in the respondents' weighting of the two principles of justice. Respondents of both genders seem to be in agreement in their assessments of the relative importance of need and merit.

3. Family: Justice in a Communal Sharing Setting

In the third distributional survey experiment, respondents were asked to imagine they were distributing inheritance money among their grown-up children. Because families are ideally places where group members are interested in and work towards fostering the well-being and development of each other (Deutsch 1985), the primary relational mode they interact in is *communal sharing* (Fiske 1992). As an example of a caring-oriented setting (Deutsch 1985), need was expected to be the predominant criterion for the distribution of resources in families (hypothesis 3.c).

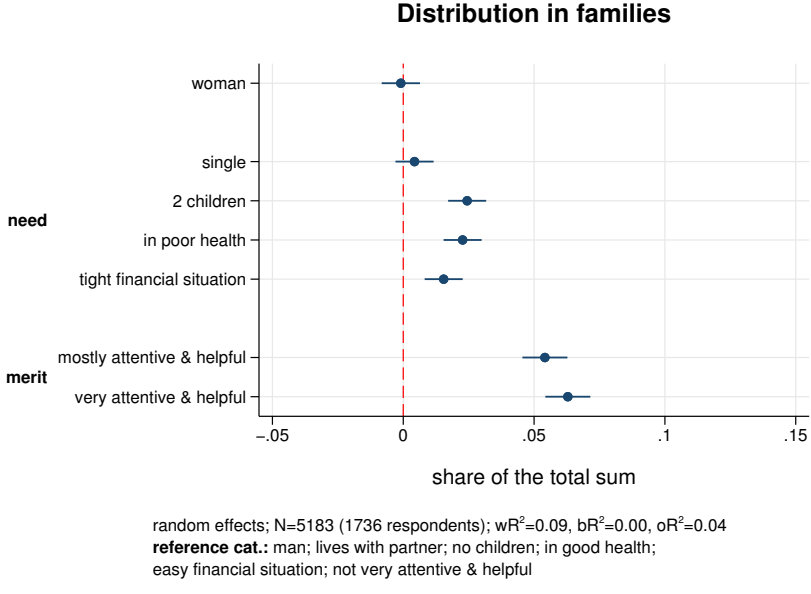


Figure 4.5: DSE 3 – Share of sum distributed among family

In this DSE, people were described using information on gender as well as various need and merit indicators. Ethnic origin was not included, as it

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

would not make sense to alternate this variable in the setting of a family. Figure 4.5 shows the average effects of the attributes of these hypothetical siblings obtained using a random effects multilevel model for the Swiss general population sample. While the gender of the person described in the DSE has no effect, we see that all the need indicators, except for the variable indicating whether someone is single or lives with a partner, have positive effects in the expected direction. However, the effects are relatively small: Those with two children receive, on average, 3 pp more than those without; those with poor health receive 2 pp more than those who are healthy and those with financial troubles receive only 1 pp more than their better off siblings. Attentiveness and helpfulness in the past, on the other hand, which serves as a merit indicator, leads to 5 pp (mostly attentive and helpful) and 6 pp (very attentive and helpful) higher shares compared to those who failed to be attentive and helpful in the past. However, it should be noted that compared to the friends and work situations, all the DSE factors have relatively small effects on the chosen distributions. This is because the strategy of splitting equally was particularly common in the family setting[4] as we will see in figure 4.9.

These results were not expected and are surprising for two reasons. Following Deutsch (1975) and Fiske (1992), we expected need to be the dominant principle in a family setting (hypothesis 3.c). We can refute this hypothesis for two reasons. On the one hand, with roughly 60% equal splits, equality is clearly the dominant principle most people use to guide their allocation decisions among family members, at least in this particular example. On the other hand, the information given on a person's merit proved more important than the factors operationalising need. While equality seems to be a strong social norm in the family setting, when people deviate from strict equality, the scales tip more in favour of those who have been meritorious in the past than towards the needy.

Figure 4.6 illustrates this slight difference in the relative importance of merit and need in more detail. Holding gender constant at male, the predicted shares for the four combinations: "deserving and needy"; "deserving and not needy"; "not deserving but needy" and "not deserving and not needy" are shown. The results shown in figure 4.6 further highlight the above finding that, compared to the situations involving friends and in the work settings, merit and need have only minimal effects on distributions within families.

4 With 26 pp, the constant (not shown) is close to the equal split of a third, or roughly 33% per person.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

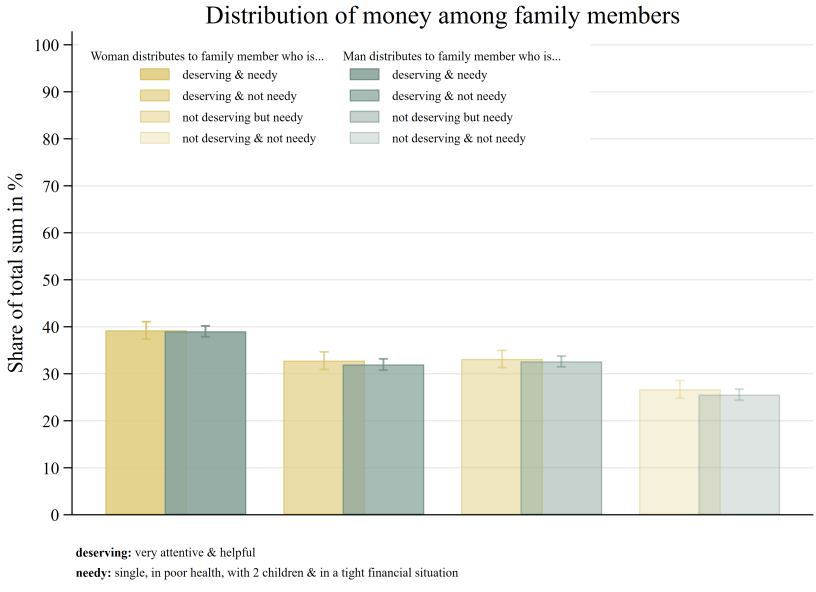


Figure 4.6: Predicted shares for different merit & need combinations among family

With a range of average shares between 26%, for those with low need and low merit, and 39% for those with both high levels of merit and need, we see that there is clearly a large tendency towards equal distributions and that neither merit nor need are regarded as very important factors guiding the distribution. As was the case above in the friends and work settings, both male and female respondents are in agreement when it comes to honouring merit and need in the family setting. Contrary to predictions — that need would be especially important — the predominant strategy was dividing the pie equally among family members and thus disregarding their neediness and deservingness in terms of merit. We must therefore reject hypothesis 3.c.

4. Scholarship: Justice in a Public Goods Setting

Finally, the results of the fourth distributional survey experiment representing a public goods scenario, and using data from the Swiss general population

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

sample, are presented. In this DSE, respondents were asked to distribute scholarship money among hypothetical students. Because this is a situation involving public goods, both merit and need considerations were expected to matter more than equality. This is because giving scholarships can be seen as fulfilling two purposes with different goals. First, public investments usually need to satisfy some level of efficiency in order to be supported by the people. Efficiency considerations would lead us to expect people to reward merit. On the other hand, public investments in education also serve the purpose of equalising opportunities, so that we would also expect need to matter. In any case, both merit and need will likely be taken into consideration for the allocation of public goods and these two principles are expected to dominate the equality principle (hypothesis 3.d).

Figure 4.7 shows the results for the public goods setting using a fixed effects multilevel model. For one thing, we see that the gender and ethnic origin of the student described in the DSE had no effects. Turning our attention to the variables operationalising need and merit, we notice that both principles seem to affect justice evaluations much more than in the previous DSE in the family setting. With an up to 13 pp higher average share for those whose parents have low financial means, it is clear that need considerations are considered rather relevant in the public goods situation examined here. Additionally, those students whose parents have lower educational degrees receive higher shares (3 pp) than students whose parents are university graduates. Furthermore, scholarship applicants who have to move out of their parents' house for their studies, and thus have to pay for accommodation, are given larger average shares (by 9 pp) compared to those who can stay at home.

Looking at the merit indicators, which were operationalised through school leaving grade point averages and industriousness, we see that these factors also influence the distributions, although to a lesser extent than the need indicators. Those with the highest grade (5.5 out of 6) received, on average, 2 percentage points higher shares than those with a 4.5. In the same vein, very hard-working students received 6 pp higher shares than their peers who were described as not very hard-working. Furthermore, to make the situation more lifelike[5] and to see whether putting in the effort of earning money with a side job has an effect on the distribution, we examine whether there are differences across working hours per week. This variable is neither an obvious need nor merit indicator but depends on the perspective and the attitudes of the respondent. Working more hours could be seen as raising merit, since the

5 With 75%, a large majority of students in Switzerland have a part-time job.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

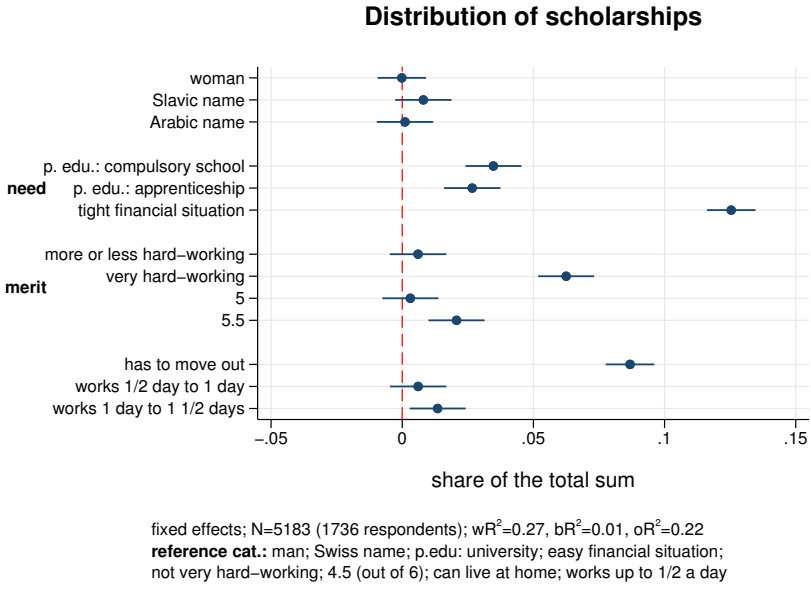


Figure 4.7: DSE 4 – Share of sum distributed among applicants for a scholarship

students are putting in an effort. On the other hand, since it is possible for the students to earn money themselves, working more hours could have the effect of lowering their perceived need for public assistance in the form of scholarship money. We see that, with an increase of only 1 pp for the highest number of working hours per week, whether students are earning money on the side only seems to have a small effect on allocation decisions. A possible explanation for this finding could be that the need and merit signals of the variable on working hours could cancel each other out.

For a better understanding of the relative importance of the merit and need indicators in this particular situation, once again the predicted shares were computed for each of the four need and merit combinations: high merit - high need (deserving and needy); high merit - low need (deserving and not needy); low merit - high need (not deserving but needy) and low merit - low need (not deserving and not needy). Figure 4.8 shows the average shares for the hypothetical students by these four categories in the public goods situation. Ethnic background and gender of the student are kept constant at Swiss and

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

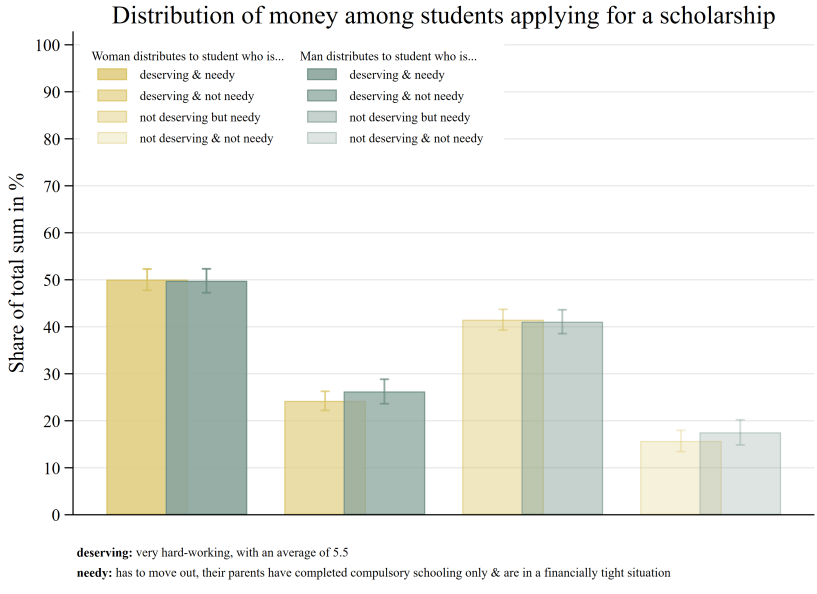


Figure 4.8: Predicted shares for different merit & need combinations in the public goods setting

male. With an average share of 49% of the total, a person that combines the highest merit and the highest need receives the most. This is followed relatively closely (41%) by a person with high need and low merit. A person with low need receives an average of 25% in the case of high merit values or else 16% if they score low on the merit indicators as well. This shows that need is clearly considered most important, but merit is rewarded as well. In this situation also, the gender of the respondent makes no difference in the importance attributed to merit and need. All in all, since both merit and need indicators were important for distributions in the scholarship setting, so far, we have support for hypothesis 3.d. We will next take a look at equal distributions.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

B. *Who distributes equally and when?*

Following the theory of Deutsch (1975) and Fiske (1992), we expected equality to be the principle of choice among friends. This was expected because in solidarity-oriented groups, the goal of people's interaction is to foster enjoyable social relations, and equal treatment works towards this goal. In Fiske's (1992) framework, friendships are understood as relationships that are built and taken care of through an elaborate series of interactions in *equality matching* mode. Equality was not expected to be a dominant strategy in any other situation. In the work setting, we expected merit to be the dominant principle of distributive justice, since it is an obvious example of a *market pricing* situation (Fiske 1993). Due to efficiency considerations, the public goods situation can also be regarded as economically oriented. Thus, as a further example of a situation functioning in market pricing logic, merit was assumed to be an important factor in people's assessments of just distributions of scholarship money. However, from the point of view of the ideal of equal opportunities, need considerations were also expected to be important in this situation. For the family situation, we expected need to be the dominant principle because, according to Fiske (1992), this is an example where the psychological model of *communal sharing* applies. Likewise, in Deutsch's (1975) terminology, this is a situation where people interact in a caring-oriented way.

We also expected differences along class lines (hypothesis 1.b) and gender (hypothesis 2). We will first focus on gender and then turn our attention to social class.

I. Gender Differences

Figure 4.9 shows the percentages of equal splits separately for women and men and for each of the four DSE situations. We see that women and men have similar preferences for equal distributions across the different situations. Both genders show much lower probabilities of distributing equally in the situations involving friends, work and scholarships than in families. In the case of scholarships, there is no gender difference. Furthermore, this is the situation with the lowest number of egalitarian distributions, thus offering further support for hypothesis 3.d assuming that in the public goods situation need and merit considerations are more important than equality.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND – https://www.nomos-elibrary.de/agb

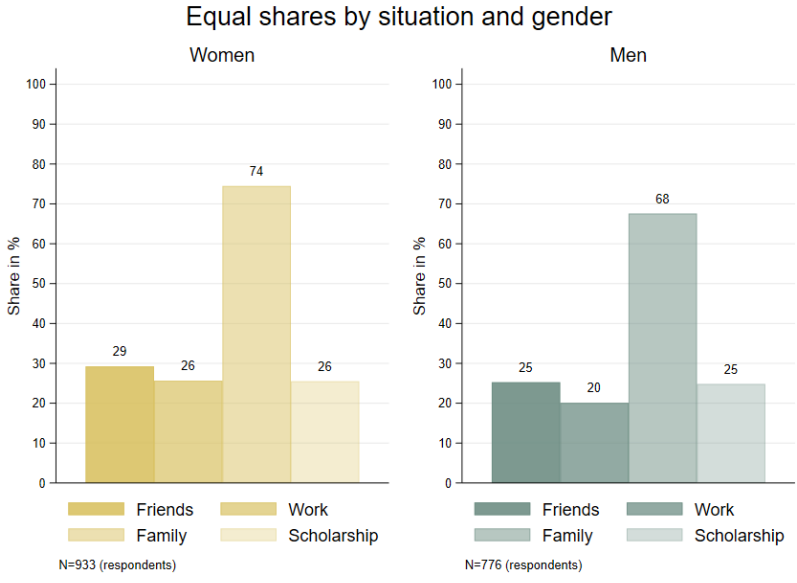


Figure 4.9: Percentage of equal splits by situation & gender

When it comes to differences by gender; with a range of 20% to 25% for men and 26% to 29% for women across the first three mentioned situations, and 74% (women) versus 68% (men) in the family situation, we see that women are overall more likely to distribute equally. With the exceptions of the scholarship setting (Pr(T > t) = 0.3799), where there are no significant differences between men and women, these gender differences are highly significant. We can thus conclude that, in agreement with hypothesis 2, women do seem to have a higher preference for equality. In a next step, we will investigate whether respondents differ in their allocation decisions by social class.

II. Class Differences

Next to gender, we assumed that the social class of respondents would affect their attitudes towards distributive justice. In line with the theoretical background presented in chapter 2, we expect people from lower social classes

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

to have a higher propensity for distributing equally than people from higher social classes (hypothesis 1.b).

Figure 4.10: Percentage of equal splits by self-proclaimed class

Figure 4.10 shows the share of equal splits by respondents' self-proclaimed class for each situation separately. We see that across all four situations, respondents who self-identify as lower class are consistently more likely to distribute equally than those who self-identify as higher class. However, this difference is only significant for the work (Pr(T > t) = 0.0025) and scholarship (Pr(T > t) = 0.0007) situations. In the friends and family situations, the shares of equal splits do not differ substantially across self-proclaimed class background.

If we take a look at the Erikson-Goldthorpe-Portocarero (EGP) (Erikson, Goldthorpe, and Portocarero 1979) class measure[6], as an indicator of the objective class position, the results are somewhat different. Although here too, it seems the greatest variation is found in the work and scholarship

6 This measure was obtained by classifying respondent's jobs into the respective ISCO08 (International Standard Classification of Occupations) codes and then converting these into EGP categories.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

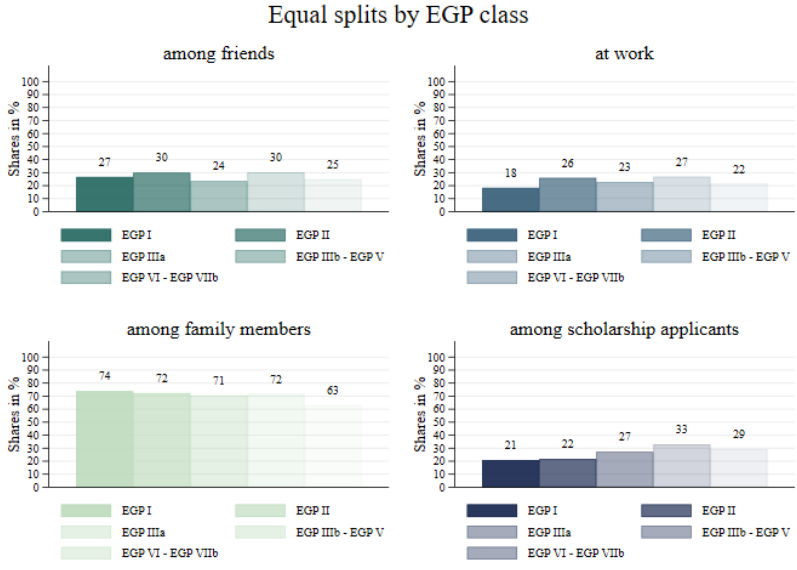


Figure 4.11: Percentage of equal splits by EGP class

situations, the differences are not significant. Only in the family situation do we see significant class differences (Pr(T > t) = 0.0042) between the highest (EGP I) and lowest EGP groups (EGP VI - EGP VIIb). This effect runs contrary to our expectation of higher propensities for equality in lower social classes (hypothesis 1.b). However, a potential explanation is that there is more money to distribute in wealthy families and so, for example, even if everyone receives an equal share, the person in need will be provided for. When there is less money to distribute, people might feel a more pressing urge to prioritise those in need[7]. Furthermore, needy relatives are more likely in families with less privileged backgrounds.

A possible reason why the results using self-proclaimed class are more in line with hypothesis 1.b, is that the mechanism behind our expectation was self-interest. And beliefs pertaining to class position are arguably more central for this mechanism to take effect than objective class. However, since the hypothesis assumed effects of actual class position, in the following, we shall focus on the objective class measure.

7 Additional analyses (not shown), provide support for this explanation.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

III. Class Differences Regarding Merit

Based on the theoretical considerations discussed in chapter 2, we expect to find class differentials in the relative weight of the merit principle. Figures 4.12 to 4.15 show the interaction of objective class and merit for all four distributional survey experiments. All models, except for in the family situation, where a random effects model was computed[8], control for unobserved heterogeneity by including respondent fixed effects. To test hypothesis 1.a claiming that people from higher social classes place a higher value on merit than people from lower classes, interaction terms of respondent's social class and the merit scale variable were included in the models. As described in the methods chapter, the merit variable was constructed by adding up the values of all merit indicators that were included in the distributional survey experiments.

1. Class and Merit in the Friends Setting

In the friends situation the merit scale variable was constructed using information on the reliability and trustworthiness of the friend, as well as how long they have been friends for. The scale variable took on values of 3, for the lowest values in all three merit variables (*a good friend when times are good*, *you better watch out what you tell them*, *friends for 2 years*), to 7, for the highest values in all three variables (*you can count on them when times are rough*, *you can trust them with anything*, *friends for 14 years*). For the analysis, this merit-scale variable was interacted with EGP as an objective class measure, to see whether people from different social classes differ in the importance they attribute to merit. Figure 4.12 shows the plotted results from a fixed effects multilevel model for the friend situation. The graph shows the effect of merit — being a trustworthy, reliable and long-term friend — on the linear prediction for each value of EGP class. Even though there is a general tendency for a declining value of merit across class background, the effects are not significant (overlapping confidence intervals). This means that, in the setting of friends, people from different socio-economic backgrounds do

8 The random effects model is more efficient and, since the Hausman-test indicated no significant difference between the unbiased fixed effect estimates and those of the random effects model, the latter was computed (Hausman 1978).

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

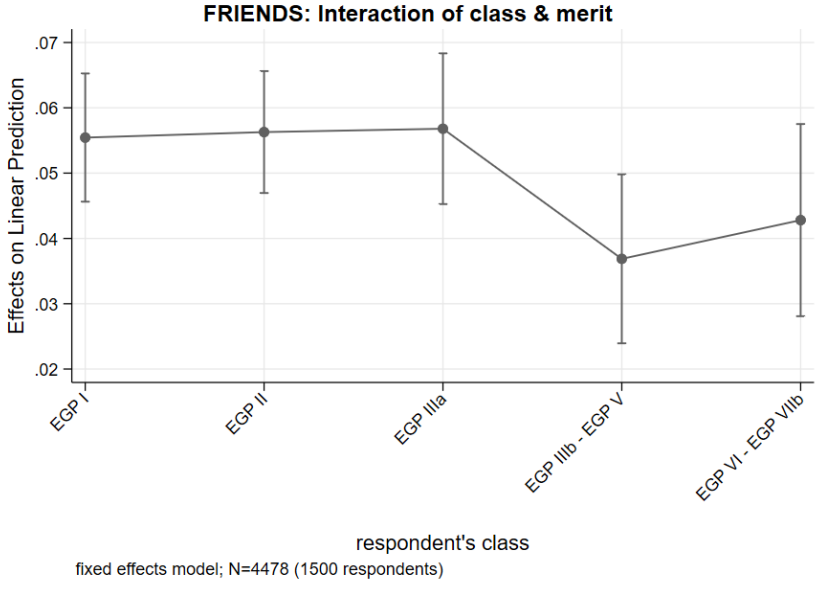


Figure 4.12: Effects of merit on linear prediction by class in the friends setting

not react in substantially different ways to merit. The findings are thus not supportive of hypothesis 1.a.

2. Class and Merit in the Work Setting

In the work setting, the values of the merit scale variable range from 3 for the lowest level of merit, to 9 for the highest level of merit of the hypothetical employee. An employee with the highest score is very dedicated to their job, demonstrates above average performance levels and has been in the company for 16 years. Figure 4.13 depicts the interaction effects of merit and EGP class in the work situation. The estimates were once again obtained using a fixed effects model to account for the multi-level structure. We see a general tendency for a declining importance of merit across social class. The differences between the effects of merit on the distributed shares are

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

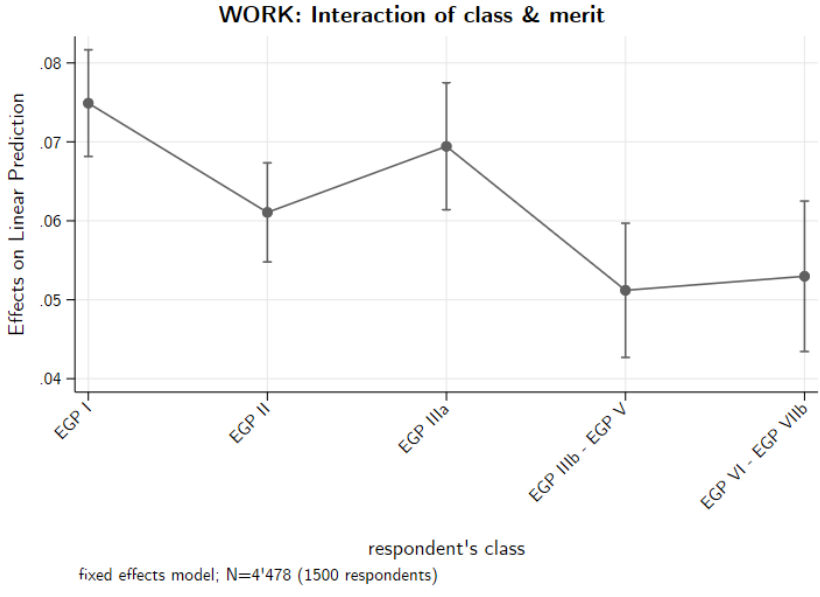


Figure 4.13: Effects of merit on linear prediction by class in the workplace setting

significant for the highest (EGP I) versus the lowest two EGP categories (EGP IIIb-EGP VIIb). This finding is in line with hypothesis 1.a.

3. Class and Merit in the Family Setting

In the family setting, merit was operationalised by the attentiveness and helpfulness of one's child in the past. This variable took on values from 1, not very attentive and helpful, to 3, very attentive and helpful. Figure 4.14 shows the results of the linear predictions for each level of merit by EGP class. The estimates were obtained using a random effects model. Looking at the relatively straight, horizontal lines and overlapping confidence intervals, we see that there are no interaction effects of class and merit in this setting. Hypothesis 1.a is thus not supported in this scenario. However, it would have been surprising to find differences in the effects of merit for different class backgrounds in the family situation. Given that the overwhelming majority

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

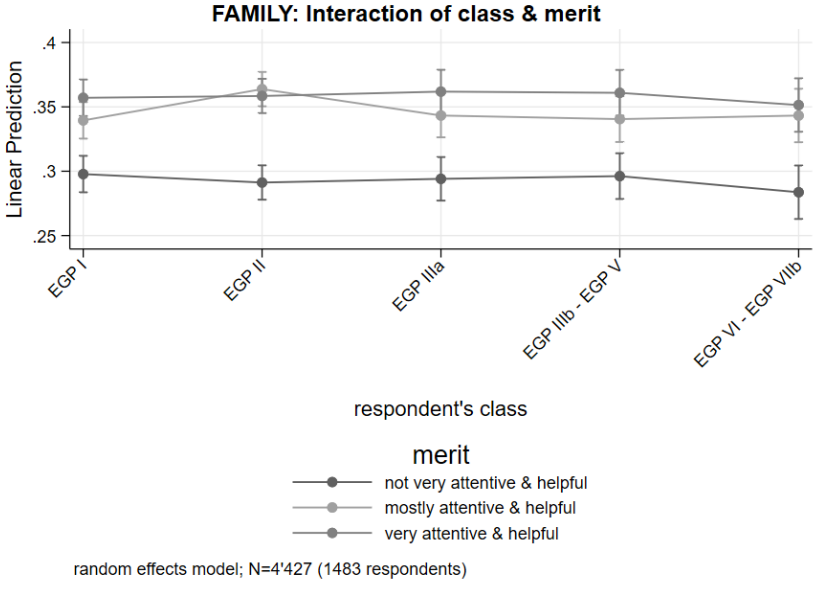


Figure 4.14: Predicted shares by merit & class in the family setting

of respondents distributed equally among family members, the need and merit variables had little effect on the distributions. Additionally, there were only minor class differences in the propensities to distribute equally in this situation, as can be inferred from figure 4.11.

4. Class and Merit in the Public Goods Setting

In the scholarship setting, the merit scale variable has a range of 2, for the lowest values of merit, to 5, for the highest combination. High merit in this setting means that a student was described as very hard-working and with high grades of 5.5 (6 is the highest grade in the Swiss educational system). Figure 4.15 depicts the effects on the linear prediction of merit across EGP class categories in the scholarship situation. The underlying model is a fixed effects multilevel model. Yet again, we see no significant differences in the effects of merit by social class background. People of all classes had similar

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

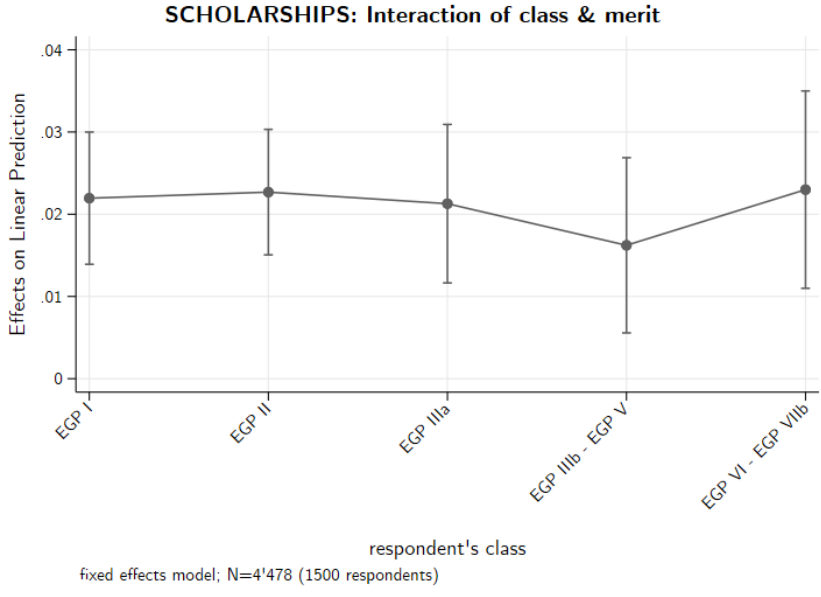


Figure 4.15: Effects of merit on linear prediction by class in the public goods setting

views on how merit should be rewarded in the scholarship situation. This finding contradicts hypothesis 1.a.

Summing up, in three of the four settings of the distributional survey experiments, there are no interaction effects of social class and merit. At least when using the objective class measure operationalised through the EGP class schema (Erikson, Goldthorpe, and Portocarero 1979), there were no significant variations in the way people with different backgrounds reacted to merit while deciding on what constitutes a just distribution. We do, however, find slight class differentials in the DSE depicting a workplace setting. While, all in all, this offers only very weak support for hypothesis 1.a, we are once again reminded of the situation-dependency of justice evaluations.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

C. How Context Matters

Additionally to the general population sample, data from two student populations were collected. There were two reasons for this. First, sampling students at a US university and a university in Switzerland offered the possibility to compare the effects of context on a larger scale. The underlying assumption is that student populations are relatively similar across the world[9] and that differences in (implicit) judgements on distributive justice can be attributed to context. Comparing data from two student surveys in two different populations thus seemed a relatively straightforward and inexpensive way to test for context effects. Second, much research on distributive justice has been conducted using student samples (e.g. Roth et al. 1991; Loewenstein et al. 1993; Charness and Rabin 2000; Fisman, Jakiela, and Kariv 2015; R. H. Thaler 2018; Andreoni and Vesterlund 2001; Mikula 1974). Since we have data on both students as well as the general public, we can use this as a rare opportunity to roughly test their comparability. First, however, we will briefly compare the two samples in regard to the most important respondent characteristics.

I. Descriptive Statistics of Respondent Attributes in the Student Samples

Table 4.2 summarises the descriptive statistics of the participating students by university. Comparing the two student samples, we see that there are almost three times as many respondents from the University of Bern as from Princeton University. Furthermore, while male students are slightly overrepresented in Princeton, in Bern, it is the other way around, with a slight majority of female respondents. Additionally, class was operationalised using a subjective measure of parental class background with values ranging from 0 (low) to 10 (high) on an 11-point scale. We see that the students in both contexts assessed their parents' class background very similarly. When it comes to age, the students in Princeton are a little bit older, since the sample here consisted of graduate students, while in Bern, undergraduates were also invited to participate.

9 However, since studying is much more expensive in the United States, this assumption could be challenged on the grounds of possible prior underlying differences in the populations, notably in social background.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

	Princeton			Bern		
	mean	sd	N	mean	sd	N
Gender						
female	.427	.496	288	.636	.481	888
male	.563	.497	288	.347	.476	888
other	.0104	.102	288	.0169	.129	888
Parental class (0–10)	6.24	1.9	286	6.38	1.74	890
Age	26.9	4.47	283	25.5	5.54	889

Table 4.2: Respondent characteristics by university

II. Effects of Context on Allocation Decisions

In the following, the results for the two student samples are presented and compared. We will look at the results more generally but the focus lies on testing the context-level hypotheses on the differences between students in Switzerland and the US. Differences are expected because the students are socialised in two very different societies with different views on opportunities for social mobility and attainment. Even though they live in a society that is characterised by a, in international comparison, quite low rate of social mobility, Americans have an apparently very unshakeable belief in the *rags to riches* narrative, and are convinced that individual effort is what counts most for success (Bowles and Gintis 2002; Alesina, Di Tella, and MacCulloch 2004). Those who believe that people are responsible for their own fates are less in favour of redistributive policies, that generally benefit the needy and aim to equalise resources to a certain degree (Fong 2001; Fong, Bowles, and Gintis 2006). This is why hypothesis 4.a assumes that merit considerations play a more important role in the conception of a just distribution in the US context than in Switzerland. Similarly, hypothesis 4.b assumes that people in the US are less likely than Swiss people to regard equal distributions as just.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

1. Belief in Meritocracy and Context: Students in Switzerland and the United States compared

In the following, while we will also compare the results of the student populations with those of the Swiss general population[10], we will focus on comparing the results from the two student populations. According to the theoretical considerations on beliefs about the causes of poverty, meritocracy and equal opportunity, we expect to find effects of context. More specifically, we expect merit to be more important as a principle of justice for the Princeton students than those from Bern (hypothesis 4.a). Figures 4.16-4.19 show the predicted shares for the four combinations of need and merit: high merit & high need; high merit & low need; low merit & high need; low merit & low need. The underlying models are fixed effects multilevel models.

a) Students in Bern and Princeton in the Friends Setting

Figure 4.16 depicts the effects of the four merit-need combinations in the friends situation. The pattern is comparable to the results obtained using the Swiss general population sample. We see that friends who are at the same time very needy and deserving (meaning high values of merit), receive, on average, 63% (over both student populations) of the total sum, which is by far the highest outcome. With 39%, this is followed by the combination of low merit and high need, indicating that, like the respondents from the Swiss general population, students also think that need is a more important principle of distributive justice than merit among friends. Very reliable and trustworthy friends who are not in need receive 30%, on average, while those who are neither particularly reliable and trustworthy, nor very needy, receive an average of only 6%.

When it comes to the differences between students in Princeton and Bern, we see that they differ significantly in only two cases. First, and contrary to our expectation (hypothesis 4.a), students from Bern give, on average, more to the deserving friend who is not needy than Princeton students (32 % compared to 24%). Second, when the friend was described as neither particularly needy nor deserving, they still received 8% from Bernese students compared to

10 This comparison is made as a way of gaining a rough understanding of the potential bias resulting from studies on distributive justice using data from student populations only.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

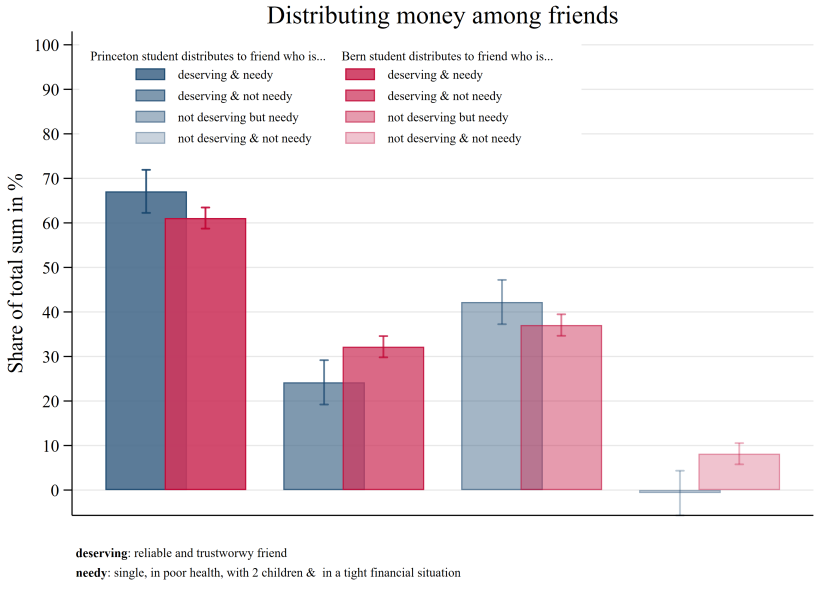


Figure 4.16: Friends – Predicted shares for different merit & need combinations by university

next to nothing (1%), from Princeton students. This could either mean that for students from Princeton need and/or merit is more important than for Bernese students, or that Bernese students are more egalitarian and prefer more equal distributions. Or both statements could be correct.

b) Students in Bern and Princeton in the Work Setting

In the situation at work, depicted in figure 4.17, the pattern is again similar to the results from the Swiss general population. We see that merit counts more than need, since the person who is both deserving and needy receives the most (on average 57%), but not considerably more than the person who is deserving but not needy (on average 50%). With 20%, there is a sharp drop for an employee who is needy but not deserving and, with an average share of merely 12%, employees who are neither particularly needy nor deserving receive the least. This is further support for hypothesis 3.a assuming

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

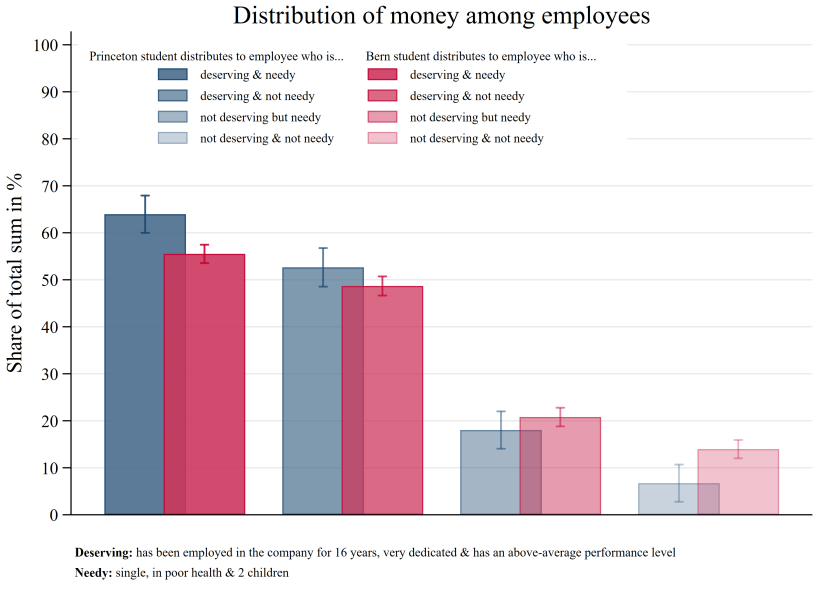


Figure 4.17: Work – Predicted shares for different merit & need combinations by university

that the merit principle dominates in the work setting. When it comes to differences between the two groups of students, we see that, while they are largely in agreement and attach similar weights to need versus merit considerations, there are nonetheless slight differences. For one thing, the students at Princeton seem to generally attach more weight to both the merit and the need principle. While the very deserving and needy employee is rewarded a share of 64% of the bonus money in Princeton, students from Bern assign somewhat less, with an average of 55%. At the same time, while employees who are neither particularly needy nor deserving would still receive 14% of the share, according to students from the university of Bern, Princeton students think they deserve merely half that amount. Also, there is a tendency for Bernese students to react more favourably to the need of the employees and less to merit (combinations *deserving & not needy* and *not deserving but needy*), than is the case for Princeton students. However, these differences are not significant. Consequently, hypothesis 4.a cannot be confirmed for the workplace setting. Overall, the effects in the work situation

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

can be interpreted as weak evidence that equality is less important among students in Princeton than in Bern (hypothesis 4.b).

c) Students in Bern and Princeton in the Family Setting

Figure 4.18 shows the results of the students' preferred distributions in the family situation. Again, the results are very similar to the results obtained

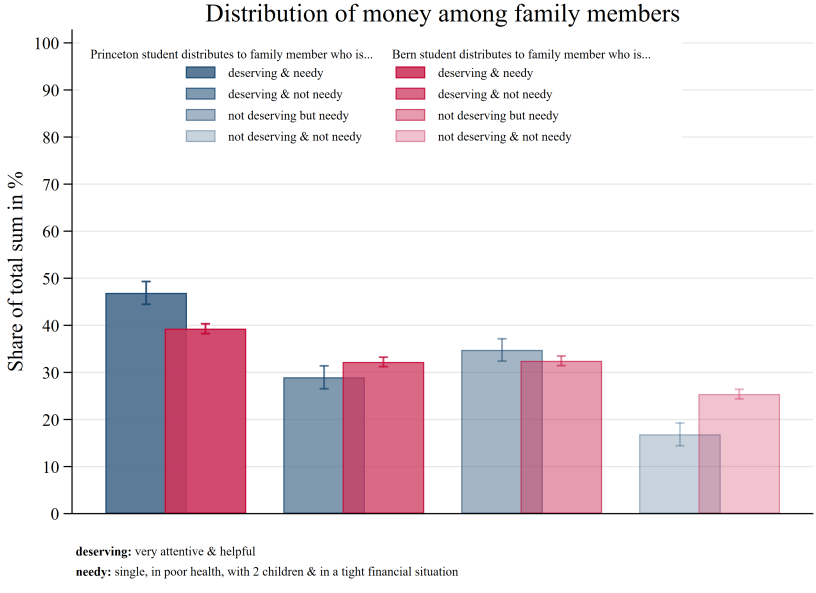


Figure 4.18: Family – Predicted shares for different merit & need combinations by university

using the data from the Swiss general population survey. Since there is an overriding tendency to distribute equally among family members, the differences across the four combinations of need and merit are comparatively small. However, the range of the distributions is much wider for the student populations. While family members with the combination high need and high merit receive 42% of the total amount, those with the combination low need and low merit receive only 23%. Consequently, students are less egalitarian

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

than the Swiss general population, where a smaller range of 26% to 39% was observed in the same situation.

With regard to differences between the student populations, we see a similar pattern to that in the friends situation. In line with expectations (hypothesis 4.b), Bernese students appear to be more egalitarian, having a smaller overall range of outcomes. However, again, we cannot confirm hypothesis 4.a stating that merit is more important in the US context than in Switzerland. On the contrary, it seems that the Princeton students attached a higher relative importance to the principle of need in this situation (family members with the combination of *low merit - high need* received more than those with the combination *high merit - low need*).

d) Students in Bern and Princeton in the Public Goods Setting

The results of the fourth DSE, in which respondents were asked to distribute scholarship money among three applicants, are depicted in figure 4.19. Com-

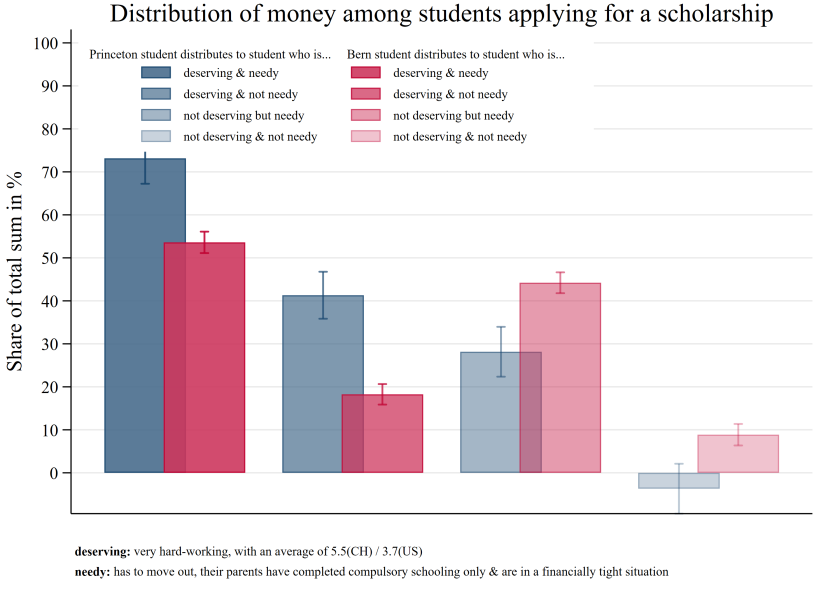


Figure 4.19: Scholarships – Predicted shares for different merit & need combinations by university

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

pared to the results for the Swiss general population in figure 4.8, we see that the general pattern is very similar for the student populations. However, and this is very much driven by the results for the students from Bern, with a much wider range of 8% to 53% (average over the university populations) compared to 17% to 49% for the Swiss general population, students are less egalitarian. Accordingly, the students attach more importance to the merit or need factors, and depending on the context they are from, more to one than the other.

In this public goods situation, the differences between the two student populations are most striking as they even show a different pattern. While Princeton students distribute similarly as in the work situation and clearly attach more importance to the principle of merit over need and equality, students from Bern show a pattern similar to the one in the friends situation. Additionally, students from Bern show a much higher preference for the need principle in this situation, giving 44% of the total to scholarship applicants with the combination *high need - low merit* compared to 18% for the combination *low need - high merit*. For Princeton students, the priorities are the other way around, with 28% (*high need - low merit*) and 41% (*low need - high merit*) respectively. These results are in line with hypothesis 4.a stating that merit is more important in the US context.

On the whole, once again we see very different patterns of distributions across the four situations. Differences between student populations are also more or less pronounced depending on the situation. Contextual differences in regard to what constitutes a just distribution are most apparent in the scholarship situation, where students from Bern apply a more needs-based approach, while Princeton students attach more importance to merit. It seems that there was most agreement, across both student and general population samples, on how to distribute bonus money in the work situation.

2. Egalitarianism among students in Switzerland and the United States

Differences in egalitarianism were also expected among the two student populations. We hypothesised that in the context of the US equality is less important than in Switzerland (hypothesis 4.b). Accordingly, we expect students at Princeton University to be less likely to divide money equally among the three hypothetical people described in the distributional survey experiments throughout the situations. Figures 4.20 to 4.23 display the shares of equal splits for the two student populations differentiated by gender of

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

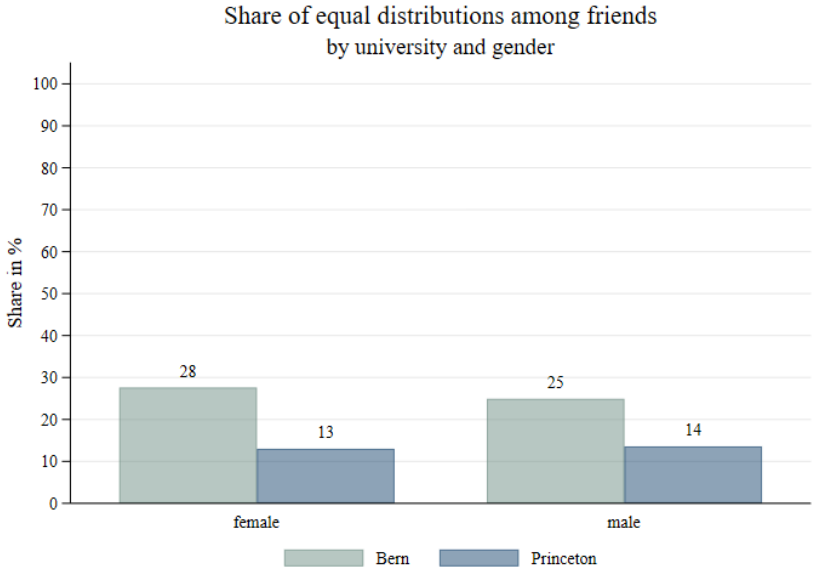


Figure 4.20: Percentage of equal splits in the friends situation by university & gender

respondent and situation. From a first glance at the four figures, we see that there are pronounced differences in the prevalence of equal distributions across both populations and gender. A closer look reveals that the degree to which the student populations differ in regard to egalitarianism depends on the situation. Figure 4.20 shows the share of equal splits in the friends situation. There are large differences in the prevalence of equal distributions between the two student populations, with an average (not shown) of 27% for students from Bern University and 14% for students at Princeton (t-test of difference: $Pr(|T| > |t|) = 0.0000$). This result is clearly in line with our hypothesis 4.b stating that equality is less important in the US context. We also see that in this situation the gender differences are not pronounced and they are not significantly different at the 5% level ($Pr(T > t) = 0.0580$ — not shown). Although the direction of the effect is in line with hypothesis 2 claiming that women value equality as a principle of justice more than men, we cannot refute the null hypothesis of no differences for this situation.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

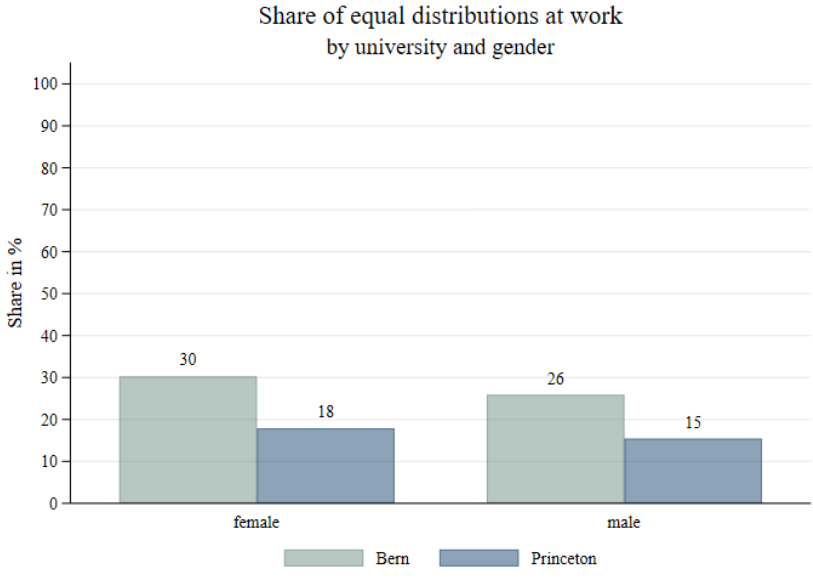


Figure 4.21: Percentage of equal splits in the work situation by university & gender

In the work situation (figure 4.21), we see both differences between the student populations as well as across gender. The pattern is the same as above, with students at the University of Bern showing, with 29% (average for both genders, not shown), a much higher prevalence for egalitarian distributions in the work setting than students at Princeton University (17% — average for both genders, not shown). Also, in both student populations, women were more likely than men — 30% as opposed to 26% in Bern and 18% as opposed to 15% at Princeton — to distribute equally. For the work situation, both hypothesis 2 and hypothesis 4.b, claiming stronger preferences for equality among women and among students from Bern, are confirmed.

In the family situation (figure 4.22), we see that — as is the case for the Swiss general population — the students in both the United States and Switzerland show a high prevalence for equal distributions compared to the other settings. Additionally, the same patterns of gender-based and contextual differences we found elsewhere emerge here too. Women and students from Bern have higher propensities for equal divisions compared to men and

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

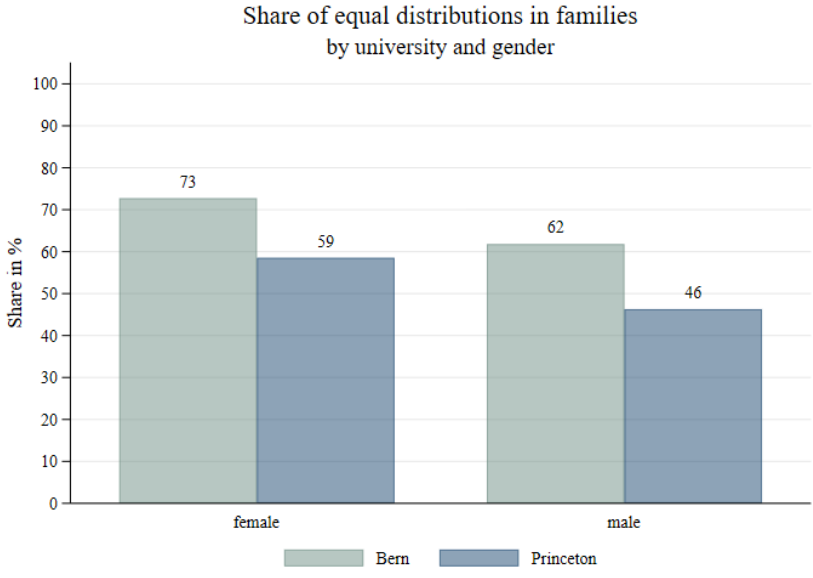


Figure 4.22: Percentage of equal splits in the family situation by university & gender

students from Princeton University. Students from Bern have a prevalence of 73% equal splits for women and 62% for men. In Princeton, the difference between genders is not quite as pronounced but still evident with 59% for women and 46% for men. Both the gender and population differences are highly significant.

The fourth situation (figure 4.23), in which the respondents had to distribute money among pupils applying for a scholarship, has the lowest shares of equal splits by far (and it is markedly lower than in the general population sample). While it is still the case that students at the university of Bern were more likely to distribute equally (19% of the women and 17% of the men) than students at Princeton university (9% of the women and 10% of the men), the gender differences are not that large and not statistically significant (Pr(T > t) = 0.1651).

Summing up, students at the University of Princeton consistently display lower preferences for equality as a principle of distributive justice than students from the University of Bern. Therefore, hypothesis 4.b, stating that

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

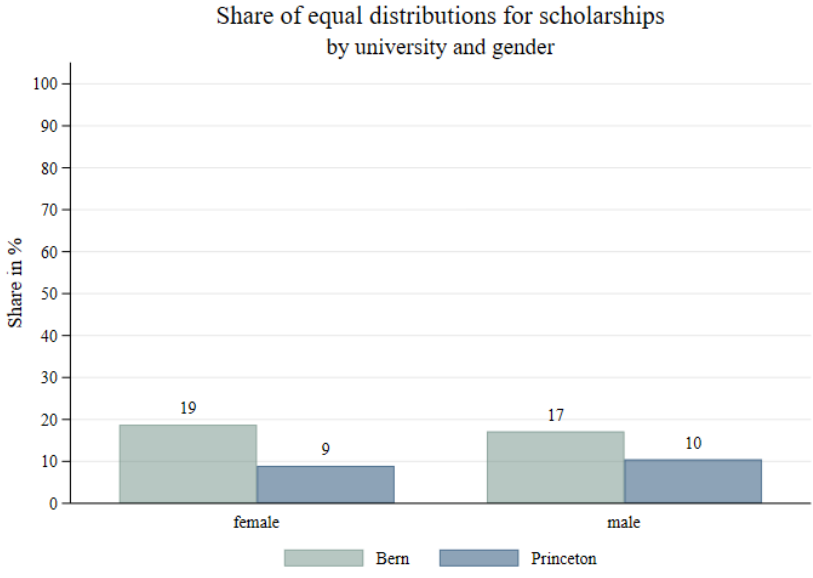


Figure 4.23: Percentage of equal splits in the public goods situation by university & gender

equality is a more relevant principle in the Swiss context compared to the US, receives strong support. On the individual level, the findings generally support hypothesis 2, claiming that women are more likely than men to favour the principle of equality, across both student populations. Where we find no such effects, we also find no evidence to the contrary; there are simply no significant gender differences in these cases.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

D. Context Effects in Short

Comparing the results from different contexts, we see that the students from both Bern and Princeton have similar views on what constitutes a just distribution as people from the Swiss general population survey. The most notable differences are found in the public goods situation in which scholarship money was distributed. This makes sense if we assume that students are more informed about the scholarship policies in their respective contexts. Alternatively, they might also have stronger opinions in favour of a certain principle of justice, be it a more needs-based or merit-based approach, depending on the prevailing policies at their respective institutions.

In regard to the expected differences for the US and the Swiss contexts, we find support for both hypothesis 4.a, according to which merit is more important in the US context, and hypothesis 4.b stating that equality is more important in the Swiss context. We can thus say that the results from the student populations speak strongly in favour of a cultural difference in the perceptions of justice.

E. Short Summary of Results

Summing up, we see that there are factors affecting the justice evaluations of the respondents (both the general population sample and the student samples) operating on three distinct levels: the individual, the contextual and the situational. In regard to individual-level effects, we find that women are generally more egalitarian. We also find tentative effects of social class on distribution choices, however not throughout all situations.

Generally speaking, we find very different patterns of distributions by situation. While both merit and need are central for distributions among friends, merit is the single most important factor in the workplace situation. Among family, equality dominates as an allocation norm. In the public goods setting the results are somewhat mixed, as they vary by context, however, both need and merit considerations matter. We also find further differences by context, with students from the US being less egalitarian and more meritocratic in their distributions than Swiss students.

While previous research has focused on individual level differences as well as context effects, the present study highlights the importance of the situation in which resources are distributed. As we have seen, far from being an inconvenience or *framing effect*, the setting within which resources are

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb

divided is an essential factor influencing our perceptions of distributive justice and, as such, guiding our allocation decisions. Dissecting the situation into the underlying relational structure – whereby allocation norms can be either functional or dysfunctional for achieving certain relationship-dependent goals – helps us understand when and why which principle of justice is applied. This functionalist approach is particularly useful in our quest for a deeper understanding of distributive justice, as it reveals the relevant mechanisms shaping our perceptions of what is fair, and thus which allocation norms should be applied when distributing limited goods.

https://doi.org/10.5771/9783748926955-101, am 12.10.2024, 05:17:46
Open Access – (cc) BY-NC-ND - https://www.nomos-elibrary.de/agb