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How Should We Distribute Rewards in Social Sustainable Organizations? Investigating Individual Preferences for Justice Allocation Norms

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Abstract: The fair allocation of scarce resources is an important ethical and practical problem for sustainable organizations. Research has typically focused on the perceived equity of distributions to the neglect of alternative justice norms governing allocation, such as equality or need. In the present paper, we address this gap by considering people to differ in their preferences for allocation norms. In four studies, we developed and validated an instrument that captures individual preferences for equity of input, equity of output, equality, need, and status. Our data suggest that people differentiate between these five allocation norms and that they are consistent in their preferences over time. We present recommendations for research and organizational practice, which can benefit from a deeper understanding of employees' and other stakeholders' preferences for specific allocation norms. Finally, considering different norm choices also links organizational-psychological research on organizational justice and social sustainability with philosophical debates about value choices in organizations.

Keywords: equity; equality; allocation norms; justice; sustainable organizations; distribution principles



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1. Introduction

Debates over the principles of resource allocation are ancient, and classical philosophers, including Plato [1] and Aristotle [2], as well as contemporary philosophers, such as Rawls [3,4], Sen [5], and Sandel [6], have extensively treated the issue. The philosophical debate indicates that different norms and values underlie diverging resource distribution preferences: for example, caring for those in need, incentivizing those who contribute the most, or stressing equal rights for all. The topic is taking on new relevance today, as rising inequalities can be observed both on a national level [5,7] and within organizations [8], and recent and current economic crises have exacerbated the scarcity of resources. One can also observe an increasing variety of compensation and benefit policies in organizations, ranging from classical models of pay by hierarchy level and tenure, via performance-related pay, to models that focus on employee needs, such as childcare and healthcare. People differ in which of these approaches they find most just.

The present studies therefore aim to advance our understanding of individual allocation norm preferences at work. Understanding the justice norms governing allocation that are embraced by managers, employees, and other stakeholders is of crucial interest to organizations. When views on allocations conflict, injustice perceptions are bound to arise. The human and financial costs of such injustice perceptions are tremendous, as hundreds of studies and several meta-analyses in the field of organizational justice demonstrate [9–14]. While these studies illustrate the important power of justice perceptions, they have not considered that conflicting allocation norms can be a root cause of perceived injustice in

organizations and have tended to focalize on a specific set of justice norms to the exclusion of others [15,16].

The allocation of resources and benefits in organizations has been investigated under the umbrella of “distributive justice.” This subfield of organizational justice has tended to measure perceived equity and equate this with the perceived fairness of distributions. For example, the most cited scales of distributive justice is the one developed by Colquitt [17], which includes the following four items: 1. Does your (outcome) reflect the effort you have put into your work? 2. Is your (outcome) appropriate for the work you have completed? 3. Does your (outcome) reflect what you have contributed to the organization? 4. Is your (outcome) justified, given your performance? As several reviews have pointed out [18]), people’s justice perceptions in organizations may, however, be the functions of different—and conflicting—allocation norms, and equity is only one of these. Indeed, early research in organizational justice [19,20] differentiated several justice allocation norms. These are equity (whether distributions are made in relation to contributions), equality (whether everyone gets the same), and need (whether distributions correspond to what individuals or groups need). These early contributions suggested that people tend to choose among and make trade-offs between these norms, an insight that seems to have been neglected in later empirical research that concentrated exclusively on equity. Organizational justice has been considered crucial to generating sustainable organizations [21]; therefore, having appropriate justice norms can create an environment of knowledge sharing that lead to long term social sustainability. In this research, some interesting findings support the need for further research of enlarging justice norms from equity to a more inclusive set of norms (with equality, need and status). When examining how organizational justice impacts knowledge sharing that impacts sustainability, one of the organizational justice perceptions that was more important was the relational aspect of justice, that includes different norms that the simple equity-just distribution duality. Therefore, some aspect regarding justice norms and sustainability is lacking, which requires incorporating additional justice allocation norms. That is precisely what are we doing in the present research. One of the conclusions of that research was that we need research which more comprehensively assesses the choices of allocation norms in an organizational context. That is the focus of the present paper.

The goals of the present paper are threefold. First, we review and integrate work on justice allocation norms from the literature on organizational justice, behavioral economics, sociology, political science, and justice philosophy. We provide an overview of how allocation norms relate to values and identify the most pertinent allocation norms and whether and why individuals may differ in embracing these beyond contextual influences. Second, we aim to empirically establish (1) whether people differentiate between the allocation norms identified and (2) whether their preferences remain stable over time. Third, we develop an instrument that researchers and organizational practitioners may use to assess individual preferences for justice allocation norms that help to increase social sustainability over time.

2. Allocation of Norms

Allocation decisions and preferences have been considered in a range of disciplines, including social and organizational psychology (especially organizational justice), political philosophy, behavioral economics, and sociology. The terminology employed differs between and even within fields. For the present paper, three terms are of particular relevance: allocation norms, values, and principles. We discuss these in turn.

The organizational justice literature tends to use the term “norms”, defined as “self-based standards, or expectations, derived from individuals’ socialized or internalized values, referring to the moral obligations held by individuals in a specific context.” [22] (p. 281). This literature also tends to consider multiple issues related to everyday interpersonal treatment and the provision of information (for a review of justice norms, see the work of Cropanzano, Fortin & Kirk, 2015). When extending the range of justice criteria this far, the term “norms” may not be appropriate. Therefore, justice researchers have often referred to

“justice rules” [23] or “normative criteria” [24] when considering the justice criteria across all possible facets of fairness, including interactions and procedures. In this paper, we consider distributions only. We therefore use the classical term “norms”. Justice as a virtue has been considered crucial as an element to create sustainability in organizations, as it has been shown in a seminal research paper in depth [25], along with practical wisdom, or the applied knowledge of the specific decision-making processes [26].

In the economics literature, which tends to focus on allocations of material wealth, authors have also used the more general term “principles”—for example, the “need principle, which calls for the equal satisfaction of basic needs” [27] (p. 1189), or the “equity principle, which is based on proportionality and individual responsibility”.

An allocation norm or principle can be the direct expression of a deeper underlying value held by an individual. In comparison with concrete norms, values are trans-situational, focus on ideals, and are usually measured as individual-level constructs [28] (p. 361). People can simultaneously hold many values, and these various values may indicate conflicting solutions to any given situation. For example, a manager may value productivity and the well-being of his/her employees, but in specific situations these two values may conflict.

Values are known to affect general modes of behavior across situations and time [29], but they are only one among many influences on behavior [28], and the strength of the influence of values on behavior will (among others) depend on how well established the value structure is, whether it is activated from long-term memory, and whether the person has identified the value as relevant for the situation [30]. Values should have their greatest impact in the absence of strong situational variables (e.g., incentives and punishments) [31] (p. 356). For example, a manager’s own values may be strongly reflected in allocation decisions where they have more freedom and less situational pressure. Values tend to be acquired through a socialization process and then remain relatively stable within individuals [31] (p. 355). The relative stability of values makes it relevant for researchers and organizations to measure and understand the values of organizational members. While allocation norms reflect values, they are more specific and narrower than values.

Below, we review the set of allocation norms that have been most clearly defined and established in the literature: equality, need, equity of input, equity of output and status. (Reference [27] also provides a concise summary of how different philosophical theories of justice tend to be linked to these principles). We review these in turn.

2.1. Equality

Aristotle stresses the importance of the norm of equality: He considers that it is typically because of violations of the principle of equality that conflict occurs and injustice is created; therefore, to re-establish justice, equality needs to be restored. He not only considers material equality but also rights that should be equally considered for everyone, regardless of individual differences.

Equality has been described as the fairness principle underlying all other fairness norms [5], depending on “with regard to what” equality is established. People might, for example, expect equality of allocations for equal amounts of work, for equal needs, or simply equality of allocations without further conditions. In Table 1, we provide a summary of the allocation norms reviewed here, whereby we also summarize the underlying equality for each norm. In the present paper, when we discuss equality, we focus on egalitarianism, which is probably the “simplest and strongest notion of equality” [27] (p. 1194), whereby equal outcomes are just. Indeed, it has been well illustrated that people may choose equality in making allocation decisions, especially in cooperative and close work relationships. For example, Mikula and Schwinger [32] found that soldiers decided to allocate earnings equally even when the application of equity principles would have given them an advantage. Indeed, in the workplace, we can think of many situations where equality is—explicitly or implicitly—an important standard. More often than equality, the theme of research is inequality. For example, research shows that pay inequalities can be seen as unfair (undeserved) when the pay gap becomes very large [8].

Table 1. Central justice norms governing allocation—five types of “equality”.

Allocation Norm	Definition	Equality of	Philosophical/Normative References (Examples)	Organizational Behavior and Psychology of Justice References
Equality	Allocation should be equal to all	Objective equality	Sen (2009) Eckhoff (1974)	Konow (2003) Mikula and Schwinger (1973) Siegel and Hambrick & Hambrick (2005) Fehr, Bernhard and Rockenbach (2008) Eek and Gärling (2008)
Need	Allocation should be proportional to need	Subjective equality of need (Equal needs, equal allocation)	Rehm (2016) Skoe (2014)	Cunningham & Hadley (2004) Devereux (2002) Prasch & Sheth (1999)
Equity of input	Allocation should be proportional to effort	Relative equality of effort (Equal effort, equal allocation)	Aristotle (2009)	Leventhal (1980) Adams (1963, 1965)
Equity of output	Allocation should be proportional to results	Relative equality of results (Equal results, equal allocation)	Aristotle (2009)	Adams (1963, 1965) Perry, Engbers & Jun (2017) Shields et al. (2015) Davey et al. (1999)
Status	Allocation should be proportional to seniority	Rank order equality of seniority (Equal seniority, equal allocation)	Eckhoff (1974)	Leventhal (1980) Hofstede (2001) Kirkman, Chen, Chen & Lowe (2009)

The norms of equality and equity are also often considered together; as they are interdependent, social arrangements tend to prescribe what should be equally guaranteed as a tangible or intangible good, and as a consequence, what should be distributed according to equity [5,33]. Typically, a large percentage of salary is based on equality considerations, whereby the same jobs are expected to be remunerated equally. Annual pay, except for bonuses and pay raises, does not tend to be based entirely on performance and contribution. Some companies also explicitly embrace egalitarian values for other benefits, e.g., equally sized offices and desks.

However, while much of the research on equality has focused on the organizational or relational circumstances that may strengthen preferences for equality, there is also ground to believe that people will differ in the degree to which they subscribe to the equality principle. For example, children aged 7–8 years differ markedly in the degree to which they exhibit preferences for egalitarianism [34]. Furthermore, experimental research suggests that participants high on prosociality (a personality difference) tend to prefer equal distributions [35]. We are not aware, however, of any scale that directly measures individual preferences for egalitarianism and the equality allocation norm.

2.2. Need

The needs of individuals are an alternative basis of allocations. Here, the idea is that equal needs deserve equal resources, and different needs justify differences in resource allocation. In the social sciences and particularly in the political sciences and sociology, the need norm is discussed in relation to covering basic needs, for example, through health care for all, a minimum income and the social safety net see, for example [36–38]. While the role of the need norm in business contexts has been neglected in the organizational justice literature, it becomes evident when we consider the allocation of, for example, parental or care leave, and personal development and mentoring programs (where personal and business needs often meet). However, concerns about the minimum salary in an organization relate to the basic needs of employees. As such, the need norm is often aligned with concerns for more equality: by providing more equal allocations among employees of different levels, the needs of those who are worst off are more likely to be fulfilled.

Evidence that individuals differ in their preferences for need comes, for example, from research on the ethics of care: The “ethics of care interview” see [39,40] assesses differences in the degree to which people balance self and other concerns when considering

moral dilemmas. Similarly, political scientists have investigated individual differences in support for redistribution and welfare state policies [39]). We are, however, not aware of any instrument that directly assesses preference for the allocation norm of need in organizational contexts.

2.3. Equity

Equity is often said to have been originated by Aristotle, who described that in a society, distributions require a proportionality based on some form of equity to be just [2]. For organizational contexts, this was formalized in Adams [19,41,42] equity theory, which proposes a formula to “calculate” equity: People compare their own reward/contribution ratio with the reward/contribution ratio of a referent other. A problem is that people may define contributions (and rewards) very differently, leading to entirely different conceptions of what is an equitable distribution. In other words, there are “sub-rules”, particularly in regard to defining what is the most important contribution in the equity calculation. We consider here the two prominent subrules of equity of input and equity of output.

Equity of input prescribes that rewards or allocations be proportional to relevant inputs under one’s control, such as ability or effort. This is often difficult to measure in organizational contexts. To complicate things further, people may also differ in their understanding of how different types of inputs should be weighted. For example, contributing new business contacts, working late hours, and sharing rare expert skills may all be perceived as important inputs.

Equity of output, on the other hand, considers actual achievement or performance as the most important contribution to the equity ratio. The difference between equity of input and output is well illustrated in the context of student evaluations, whereas students often expect to be rewarded based on the effort they exerted (input), while traditional exams consider only performance or how much of the material was actually mastered (learning output). In organizational contexts, there are some roles that lend themselves rather easily to the measurement of output; for example, sales representatives can be rewarded based on the number of sales they make. This may be seen as unfair, however, if the performance is strongly impacted by external factors and thus becomes disproportional of input. For other roles, performance is difficult to assess. How should the performance of a manager or an auditor be assessed? Despite these inherent problems, companies tend to see using the performance criterion for individual rewards as a way to align individual motivation with the organization’s goal of profitability. The research evidence shows, however, that the relationship between performance-related pay and motivation is not straightforward, and in some cases, pay for performance can even lead to negative performance effects for a review see [43]. Nevertheless, the principle of pay for performance is still widely embraced and taught in management programs see for example [44], making equity of output one of the more salient allocation values in organizational contexts.

In our review of the literature, we have found one scale that attempts to measure individual preferences for equity: The “merit principle scale” by Davey, et al. [45]. This measure combines both equity of input and equity of output and opposes them to a choice of all other norms combined (notably equality and need), which makes the results somewhat difficult to interpret. Nevertheless, this work provides the first evidence that individuals are indeed likely to differ in the degree to which they subscribe to equity type norms versus other types of allocation norms.

2.4. Status

Status is another allocation norm that is rarely discussed in research or managerial discourse yet remains prevalent in organizational contexts. The status norm was described by Leventhal [23] as higher status persons deserving better outcomes. This could be considered another sub-rule of equity if status is seen as the important input that should determine the proportionality of outcomes or allocations. However, status may be in conflict with the abovementioned equity norms of input and output if those who have

higher status in an organization do not exert more effort or contribute more. Indeed, tradition, culture and seniority may be reasons specific posts or even demographic profiles are seen as linked to higher status and therefore as deserving larger allocation shares. For instance, in some public institutions, such as many universities in Europe, people tend to progress mostly according to their tenure (the time spent in the institution).

There is also evidence that suggests people differ in the degree to which they embrace the status principle and that this difference is not merely caused by organizational or national culture and circumstances. For example, Hofstede's power distance refers to the extent to which people expect power to be distributed unequally [46], and empirical evidence suggests that there is not only a large variation in this variable across cultures but also within cultures see for example [47]).

2.5. Justice Allocation Norms as Subrules of Equality

To summarize our discussion of the five allocation norms and to highlight the differences and similarities between them, we draw on Sen's work, which argues that any arrangement in societies and organizations will be based on some type of equality over important resources, which would then inevitably generate other inequalities [5]. Therefore, Sen argues, parties should try to agree about the norm of equality that would by implication also determine the inequality norms. For example, the equity of input norm prescribes that equal input (e.g., effort) leads to equal allocation, and therefore this inevitably would generate different allocations for those who expend different degrees of effort.

This classification is similar to the one by Eckhoff [48], who also distinguishes allocation principles according to the type of equality considered (in his words, relative, absolute and subjective equality). The five allocation principles reviewed, then, differ with regards to how the equality and inequality balance appears (see Table 1).

Inside organizations, we find that as illustrated above, when making an allocation decision, various rules are often in conflict and can yield different decisions. Therefore, distributive justice judgments often imply a trade-off between rules: an allocator has to choose one rule or a compromise among several rules [27]. (In contrast, justice researchers have typically operationalized the criteria for procedural, interpersonal and informational justice as additive [17], such that each criterion has the same weight, and the overall justice judgment is the sum of all criteria). It is important for organizations to understand the various preferences for justice norms governing allocation precisely, because such choices and trade-offs need to be made in everyday organizational life.

2.6. The Five Allocation Norms in Organizational Justice Research

Previous scales in the organizational justice literature indirectly relate to, but do not directly measure, preferences for the five allocation norms reviewed. For example, as noted above, there are measures of perceived fairness of distributions, but these tend to rely on a specific norm typically equity, see [17]) and therefore may falsely equate the perceived fulfillment of this norm with perceptions of distributive justice. Imagine, for example, an employee who agrees that resources are distributed according to the equity allocation norm but embraces equality as the most important allocation norm. While this employee agrees that equity is respected, he or she may still find allocation decisions based on equity unfair. Thus, we need to measure the employee's preferences for allocation norms to understand which norms need to be fulfilled to establish fairness in the eyes of this employee.

A further limitation of extant measures of distributive justice is that equity is considered a single norm, while in fact and as reviewed above, there are at least two possible equities, depending on whether deserving more depends on effort expended (equity of input) or the results obtained (equity of output). For instance, an employee who embraces the allocation norm of equity of input will expect to be rewarded based on effort, even if their actual performance or result does not reflect the effort.

Other measures of distributive justice concern the perceived fairness of distributions in general [49] and thus neither allow any insights into which distribution norms under-

lie allocation judgments nor which norm is better aligned with an individual's values. Such knowledge is, however, crucial for organizations that wish to manage the fairness perceptions of individuals and groups. Finally, another related instrument is the seminal measure of equity sensitivity [50], which assesses the degree to which people are sensitive to inequity towards themselves or others but does not provide any comparison with other justice allocation norms (for example, sensitivity to equality, need).

To conclude, the recent literature on organizational justice has mostly avoided dealing with allocation norm choice by focusing almost exclusively on equity. However, the limitations of equity norms in business contexts are increasingly becoming apparent. For example, recent research on inequality in organizations suggests that it may be important to ponder equity principles with principles of equality and that high disparities within top management groups may have harmful effects on people's attitudes towards collaboration (see also [8]). Some argue that the norms people choose for allocations depends on context. We will consider this context sensitivity before focusing on allocation principles as individual value differences.

2.7. Choice of Justice Allocation Norms as a Function of Context

Typically, the choice of a specific allocation norm is sensitive to context. Macro-context, specifically societal values and culture, is relevant to allocation decisions. For example, Reeskens and van Oorschot [51] investigated preferences for welfare distribution principles across 24 European countries and found that while most European populations apply the equality norm to unemployment benefits, they are divided over applying equity and equality norms to pension schemes. These differences seem to be largely shaped by institutional design and social expenditure. Such national-level differences have even been found for distribution preferences inside teams. Corgnet, et al. [52] found that using the equality norm in the allocation of team profits is strongly preferred in France and Japan, two countries that are high in egalitarianism, even when this implies less efficient team formation.

The organizational and institutional structure are also relevant contextual factors. For example, highly unionized work environments are more likely to embrace the equality norm [53], and in many European public sector organizations, status continues to play an important role. Such organizational value systems are likely to influence specific allocations both through the reward systems formally created by these organizations and informally through organizational culture (e.g., anecdotes, tradition).

Finally, the relationship between the parties involved in an allocation or decision is also an important contextual factor [54]. Two important dimensions of workplace relationships are the relative hierarchical position of the perpetrator in relation to the perceiver of injustice [55] and the degree of friendship or distance between perpetrator and perceiver [56]. Specifically, people have been found to prefer more equal distributions among friends [57], and they often employ the need norm in family contexts [58], which can be relevant in family owned firms and may create problems that should also be solved inside and outside the organization to compensate family members for perceived injustices. It seems likely that allocation norm choices can differ based on firm ownership.

To conclude, there is a multitude of contextual factors likely to influence any specific allocation norm choice. Nevertheless, in the following section, we argue that individual differences also play an important role.

3. Methods and Results

3.1. Methods

In the present paper, we consider preferences for allocation norms as individual differences. As described above, the allocation norms of equity, equality, and need are expressions of different underlying values. Generally, researchers agree that values are formed early in life and that in adulthood, values tend to change only slightly [59]. Even though new social environments can sometimes lead to changes in value structure [60], for

example, during organizational entry and socialization processes [31], overall values are more lasting and general than attitudes [61,62] (p. 676).

Indeed, there is tentative evidence for individual differences in the choice of these norms. A study by Winter, et al. [63] found that among participants in economic games, there are typically some players who consistently follow the equity norm, some who consistently follow the equality norm (in the role of either allocator or recipient), and a small minority who behave in mostly egoistic ways or “cherry pick” the norms that benefit themselves most in the situation. Research to date, however, has not looked at whether people differ in how much they embrace these norms outside of a specific decision-making situation and without “forcing” a choice between two norms.

One contribution of our research is thus investigating whether people can indeed differentiate between allocation norm preferences. Building on this, another contribution will be to show whether people have a stable individual predisposition to prefer specific norms. Finally, and building on the previous contributions, we proceed to develop an instrument of individual differences in preferences of allocation norms (equality, need, equity of input, equity of output, and status).

With these goals in mind, we present four studies. First, a large set of items was developed by consulting the literature and by working with a group of experts in justice research. The initial item set was narrowed down by asking a panel of experts for their assessment of each item’s content validity. In a second study, the item set was administered to a group of working people ($n = 338$) and narrowed down further following exploratory factor analyses. In a third longitudinal study ($n = 112$), we tested the stability of the measure. In a fourth study ($n = 458$), we tested our scale in confirmatory factor analyses and tested the discriminant validity of our measure.

In summary, the method followed was a step wise procedure, formed of four studies, which each of them is used to complete the objectives as follows:

- Study 1: the item development phase, that means finding through the literature and experts in the field the items that have more relevance to express the justice norms we are willing to cover.
- Study 2: exploratory factor analysis to narrow down the list to a final one that is to be finally confirmed.
- Study 3: adding the longitudinal dimension to test the scale in terms of stability.
- Study 4: confirmatory factor analysis and also adding all the checks for the discriminant validity of our measure.

We show in detail each study method, sample, and procedure.

3.1.1. Study 1—Item Development and Item Validation through Expert Ratings

As a first step, we developed a pool of general statements to assess preferences for the allocation norms reviewed above: equality, need, equity of input, equity of output, and status. We developed the items based on a literature review. To make the items as comparable as possible, and in line with Sen’s framework reviewed above [5], we formulated them all according to the type of “equality” that they would imply. Therefore, we initially classify and define the norms next.

Equality is defined as “equal amounts allocated always to each person”. It is an absolutely equal allocation of a given resource, just for the sake of being a worker, a person, and so on. An example item is “equal preference should be given to everyone”.

Need is defined as “equal allocation for equal need”. It is therefore an allocation that depends on specific needs that are considered legitimate in that context. An example item is “more should be given to those with more need”.

Equity of input is defined as “equal amounts for equal contribution in terms of input”. Thus, allocation depends on input (e.g., effort), which implies that for greater input, a greater allocation is made. An example item is “it should be the norm to give preference to those who put in more work and effort”.

Equity of output is defined as “equal amounts for equal contribution in terms of output”. Thus, allocation depends on contribution to some desired result or output (e.g., level of production), which implies that for a greater output or result, a greater allocation is made. An example item is “preference should be given to those who are more productive”.

Status is defined as “equal amount for equal status/position in the hierarchy”. An example item is “preference should be given to those with a higher position in the hierarchy”.

Initially, the pool also included several items related to additional justice and non-justice norms: for example, interpersonal treatment/care (give preference to those who create a better social climate, to those who cooperate more), discrimination (give equal treatment within groups of the same race, the same sex, etc.), and self-serving (give preference to those who have a better relationship with the manager, give preference to those who keep silent about managerial mistakes, give preference to those who are more likely to complain about an outcome they do not like). After discussion, we decided to drop these items. The care item was too complex and could mean different things to different people, and this justice norm was not present in much of the literature. The discrimination item and the self-serving items did not seem to pertain to the realm of justice, which is the core interest of our study, even though they may come into play in real-world allocation decisions. However, they do not qualify as “norms” because these items do not prescribe socially desirable behavior (and we also believed that participants would not report honestly or even be fully aware about eventual use of such biases).

Thus, we entered the remaining norms into an excel sheet and sent it to a group of six experts in the field of justice, five of whom held a PhD in a domain related to justice. For each item, the experts were asked to choose which of the five allocation principles it represents (if any). They were also encouraged to comment on each item if they wished, for example, if they found the wording unclear. Only items with high interrater agreement were included in the final measure.

3.1.2. Study 2—Exploratory Principal Component Analysis

As a next step, we conducted a quantitative study to allow us to use exploratory principal component analysis to test whether our pool of 22 items grouped into the five principles as expected. This step seemed particularly important with respect to the different types of equity, as much of the literature has grouped equity of input and equity of output together in the same measures [45]. It remained to be tested whether people differentiate between them.

Sample Characteristics

As we wished to investigate the allocation norms that people value at work, we recruited working people via executive education programs and partnerships with organizations. The requirements for participation were a minimum of three years of work experience and to be currently employed. Participation in the survey was anonymous, fully voluntary, and not remunerated. A total of 338 employed people participated (of whom 41% were women and 59% were men). The average age of the participants was 35 years, and the average work experience was four years. Thirty percent had managerial experience.

Methods and Procedures

The survey was administered online and contained the 22 items resulting from Study 1. We performed an exploratory principal component analysis with a varimax rotation and then tried two other types of rotation (oblimin and promax), which is justified when factors are not completely independent. The emerging factor structure consists of five factors that explain 60% of the total variance. As expected, the five factors correspond to the five allocation principles that we intended to include in our measure: equality, need, equity of input, equity of output, and status. We look into the details in the Results section.

3.1.3. Study 3—Stability of Justice Allocation Norm Preference over Time

As discussed above, much of the literature on allocations and distributive justice deals with individual decisions and has discussed the situational dependency of allocation choices. We have, however, argued that allocation preferences are also linked to a relatively stable individual value system. If this is true, then not only should people be able to differentiate between the five principles in any one moment, but more importantly, their personal preferences should show some stability over time.

Sample Characteristics

For our third study, we again recruited working people with a minimum of three years of work experience via executive education programs. Participation was fully voluntary and anonymous, and no compensation was provided. We received 112 replies to our first survey (T1). The second survey was sent one month later (T2) to the initial 112 respondents and 103 of them responded a second time; 58% were women, and 42% were men. The average age of the participants was 36 years, the average work experience was 6 years, and 64% had managerial experience.

Methods and Procedures

The shortened scale was administered twice, with a time lag of one month. This time lag was chosen because it is unlikely that respondents will remember their precise responses after one month, yet the time lag is not so long as to dramatically change the respondents' work experience in most cases.

Before proceeding, we investigated whether people who responded to both the T1 and T2 surveys had different response patterns from those who answered only the T1 survey. Therefore, we created a dummy variable labeled "stay", which took the value of 1 if the respondent completed both surveys and the value of 0 if the respondent answered only the first survey. We then regressed the dummy as a dependent variable on the demographics and the average score of the five factors with the full sample through logistic regression. We then look into the coefficients of the regression. If these are not significant ($p > 0.1$), this implies that responses to our scale do not predict whether respondents would participate at T2 or not. We show the results in depth in the next section devoted to results.

3.1.4. Study 4—Confirmatory Factor Analysis (CFA), Convergent and Discriminant Validity

In our fourth study, we had two main goals: First, to reconfirm our factor structure, and second, to test whether our scale differs from related measures (such as distributive justice).

Sample Characteristics

For this study, we recruited participants from the alumni of a university in the United Kingdom. The only requirement for participating was that respondents be currently employed. Two thousand email invitations to participate were sent out, and 458 responses were received (62% women and 38% men). The average age of the participants was 34 years, and the average work experience was 6.5 years. Twenty percent of the participants had managerial experience (an average of 3 years).

Methods and Procedures

First, we again tested the dimensionality of our measure and performed a confirmatory factor analysis with the 19-item scale with five factors. We used confirmatory factor analyses and tested convergent and discriminant validity. All the results are shown in the next section of results.

3.2. Results

3.2.1. Study 1—Item Development and Item Validation through Expert Ratings

After the process explained in the methods section for Study 1, the results were achieving a final set of 22 norms was agreed upon and used in Study 2. These 22 norms consisted of 5 items for equity of input, 5 items for equity of output, 4 for need, 4 for equality, and 4 for status. The 22 items were used to test the dimensionality of the final item selection for the measure, which will be the aim of Study 2.

3.2.2. Study 2—Exploratory Principal Component Analysis

For the study 2, we followed, as we mentioned in the procedures, a process to refine the scale. The process of refining was done by dropping the items that had a uniqueness greater than 0.5 and a cross-loading greater than 0.4 on more than one factor. The number of retained items was four for equity of input, three for equity of output, four for need, four for equality, and four for status, so the complete remaining scale has 19 items. The retained items and their loadings and uniqueness are shown in Table 2, the analyses of the factors and results for this analysis are shown in Table 3, and the correlations are shown in Table 4.

Table 2 allows us to select the items that finally would be used for the final model, which are marked in bold, so, this scale would be compounded with four items for equity of input, three items for equity of output, four items for need, four items for status and four items for equality. The five loadings show that these five aspects of the scale are really perceived as different from the respondents and have sufficient entity to be considered relevant when asked for a preference over distributions. It seems then that the usual equity norm that has been traditionally considered linked mainly to merit, in organizations, seems that should be complemented with the other four norms that are included in this study.

Table 3 develops the idea that each latent factor is also internally consistent, and each separate factor model has adequate fit indices to be considered a good measurement model of the latent specific allocation norm. We have considered equity as a unique model consisting of two latent factors and a covariance between both. Need, equality, and status have indices of fit that also are, respectively, RMSEA = 0.000, 0.0031, and 0.000, which are very good and show internal consistency as well. Table 4 shows values of reliabilities that are greater than 0.75, so showing also internal consistency of latent measures. Correlations between latents are low, so the latent factors measure really different norms, in terms of perceptions of individuals responding to the scale items test.

The results of this study are promising because they suggest that people can and do differentiate between different groups of distribution norms. That is, unlike in some other areas of human preferences and values (e.g., cultural blindness phenomenon), people can make meaningful judgments regarding their norm preferences, even when judging these norms outside of a specific situation.

Specifically, the results suggest that there are five meaningful groups of distribution norms in our set of items. Particularly noteworthy in this context is that equity of input and equity of output loaded onto two factors. This suggests that even if correlations between the two latent factors are high, as expected, they also represent different constructs. This is an important finding for researchers and practitioners alike; people may actually be more sophisticated in their differentiation between allocation norms than previous justice scales have implied, and organizational practitioners may need to be more precise if they speak about equity. Of course, such differences will be meaningful to managers and organizations only if they are somewhat stable over time.

Table 2. Factor loadings for the five factors and uniqueness ($N = 338$).

Items/Factors	Equity of Input	Equity of Output	Equality	Status	Need	Uniqueness
Equity of input						
1. Preference should be given to those with better work relationships and networks.	0.7357					0.3203
2. Preference should be given to those with higher loyalty and commitment to the firm.	0.7734					0.4001
3. Preference should be given to those who work longer hours and are less often absent.	0.8151					0.3804
4. It should be the norm to give preference to those who put in more work and effort.	0.6951					0.3865
Equity of output						
1. More should be given to those who contribute more.		0.8797				0.2761
2. Preference should be given to those who produce higher quality work.		0.8740				0.2580
3. Preference should be given to those who are more productive.		0.8222				0.4069
Need						
1. More should be given to those with more need.					0.7766	0.4088
2. Preference should be given to those who are least privileged.					0.7800	0.3898
3. Preference should be given to those who have more difficulties.					0.8260	0.3958
4. It should be the norm to give preference to those who need more.					0.7046	0.3900
Equality						
1. Equal preference should be given to everyone.			0.7921			0.3255
2. Exactly the same preference should be given to all members of the organization.			0.6937			0.3649
3. All employees should be treated equally, regardless of who they are and what they do.			0.7997			0.3537
4. It should be the norm to treat all employees equally.			0.8267			0.3680
Status						
1. More should be given to those who have a higher status.				0.7981		0.2962
2. Preference should be given to those with a higher position in the hierarchy.				0.8089		0.4067
3. Preference should be given to those who have spent more years with the organization.				0.6410		0.3763
4. It should be the norm to give preference to those with higher status.				0.8181		0.4011

Note. All items use a 7-point scale with anchors of 1 = “strongly disagree” to 7 = “strongly agree”.

Table 3. Factor structure and goodness of fit indicators for the final scale ($N = 338$).

Factors	χ^2	df	χ^2/df	TLI	CFI	RMSEA
Equity of input	40.04	13	3.082	0.946	0.967	0.078
Equity of output						
Need	0.497	2	0.248	1.014	1.000	0.000
Equality	2.59	2	1.294	0.995	0.998	0.031
Status	0.737	2	0.368	1.012	1.000	0.000

Note. χ^2 values are all significant at $p < 0.001$. TLI = Tucker–Lewis index. CFI = comparative fit index. RMSEA = root mean square error of approximation. We tested both equities together, allowing for correlation between equity of input and equity of output.

Table 4. Correlation matrix.

Measure	Mean	S.D.	1	2	3	4	5
1. Equity of input	4.71	1.3	0.77				
2. Equity of output	5.46	1.3	0.52 ***	0.81			
3. Need	3.98	1.3	0.55 ***	0.26 ***	0.77		
4. Equality	4.89	1.4	0.33 ***	0.33 ***	0.44 ***	0.78	
5. Status	3.77	1.3	0.26 ***	0.26 ***	0.60 ***	0.29 ***	0.77

Note. Alpha reliabilities are along the diagonal. *** indicates $p < 0.001$.

Through this second study, we were able to refine our scale to consist of a final set of 19 items that represent the five justice norms governing allocation: four for equity of input, three for equity of output, four for need, four for equality and four for status. This is the set of items (listed in the Appendix A) we use in Studies 3 and 4.

The final factor model and the relationship between the latent factors and the items is presented in Figure 1.

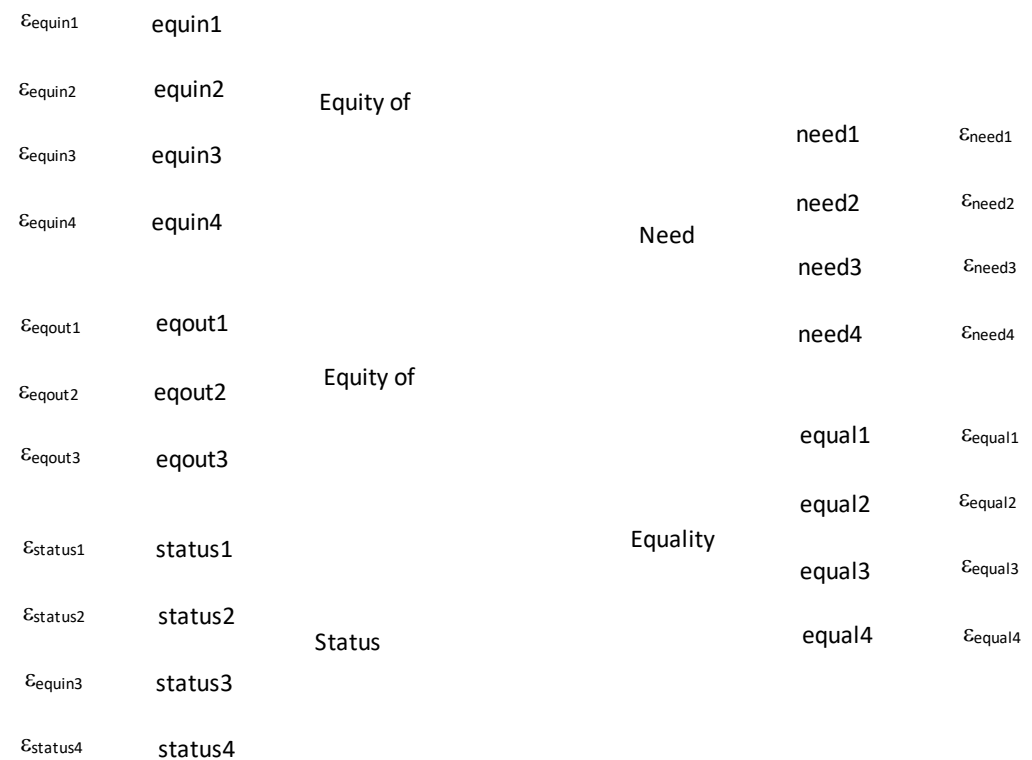
**Figure 1.** Factor structure of the model of justice allocation norms (JAN) with latent factors and items.

Figure 1 shows a measurement factor model of the justice allocation norms (JAN) scale, that finally is arrived after the Study 2. There are four latent factors, equity of input, equity of output, need, status, and equality. Each of them is measured with the items shown in the figure, four items for equity of input (equin1, equin2, equin3, and equin4), three items of equity of output (eqout1, eqout2, and eqout3), four items for need (need1, need2, need3, and need4), four items for status (status1, status2, status3, and status4), and four items for equality (equal1, equal2, equal3, and equal4). In all the estimations we are using a model in which we allow for covariance between the latent factors, as also it is represented in the Figure 1.

3.2.3. Study 3—Stability of Justice Allocation Norm Preference over Time

As we have mentioned, we performed two analyses, a test–retest and a confirmatory factor analysis for both moments, T1 and T2. We report the results for all of these analyses in the following sections.

Test–Retest

Next, to test the stability of individual responses to our scale, we performed a test–retest analysis. In Table 5, we report the correlations between the factors and scale composites for T1 and T2. The first measure for our stability is the set of correlations between the items measured at T1 and T2; these correlations are high and significant, which means that our factors are rather stable over time.

Table 5. Correlations among latent norm constructs between T1 and T2 ($N = 103$).

Factors of Justice Allocation Norms (JAN) Scale	Correlations between Latent Constructs	Correlations between SCALE Composites
Equity of input (T1) and Equity of input (T2)	0.804 ***	0.60 ***
Equity of output (T1) and Equity of output (T2)	0.724 ***	0.610 ***
Need (T1) and Need (T2)	0.634 ***	0.601 ***
Equality (T1) and Equality (T2)	0.712 ***	0.621 ***
Status (T1) and Status (T2)	0.610 ***	0.515 ***

Note: Correlations are measured among latent constructs and among scales created from averaging the items. *** indicates $p < 0.001$.

We also report the reliabilities of the factors corresponding to the factor structure at both times, T1 and T2 (see Table 6).

Table 6. Reliabilities for the factors of the 5-factor justice allocation norms (JAN) scale ($N = 103$).

Factors	N° of Items	α on T1	α on T2
Equity of input	4	0.65	0.77
Equity of output	3	0.80	0.87
Need	4	0.89	0.90
Equality	4	0.89	0.89
Status	4	0.87	0.81

Confirmatory Factor Analysis for Time 1 and Time 2

We also tested the JAN scale on T1 and T2, and we report the fit indices for this JAN scale for both times (see Table 7).

Table 7. Factor structure and goodness of fit indicators for the final scale ($N = 103$) on T1 and T2.

Factors	χ^2	df	χ^2/df	TLI	CFI	RMSEA
Five-factor scale T1	309.04	142	2.17	0.82	0.85	0.09
Five-factor scale T2	295.41	142	2.07	0.842	0.869	0.086

Note. χ^2 values are all significant at $p < 0.001$. TLI = Tucker–Lewis index. CFI = comparative fit index. RMSEA = root mean square error of approximation. We test both equities together, allowing for correlation between equity of input and equity of output.

The results obtained are shown on Table 7. The fit indices of our CFA at T1 for the 5-factor model are $\chi^2_{(142)} = 309.04$, with RMSEA = 0.09, TLI = 0.82, and CFI = 0.85; at T2, $\chi^2_{(142)} = 295.41$, with RMSEA = 0.086, TLI = 0.842, and CFI = 0.869. The indices show that the fit of the model is close to the thresholds established in the literature, as the RMSEA is less than 0.1, and CFI and TLI are close to 1.

Overall, Study 3 supports our scale in two important ways. First, the five factors found in Study 2 received further support. Second, we find that individual preferences for specific allocation principles are rather stable over time. This suggests that it is unlikely that allocation choices are entirely situationally determined. Instead, these results provide support for our argument that there is an individual component based on what individuals value when embracing and choosing allocation principles. This is important both for research and practice. For research, it means that when we wish to understand people's allocation decisions and their reactions to allocation decisions made by others, individual norm preferences should be considered as important factors. Indeed, two groups of people may have different assessments of the same situation. On the other hand, the same person is likely to have relatively stable preferences over time; that is, if an acceptable agreement is found for one type of situation, then in similar situations, the preferences of the same group are likely to be similar over time. This is also reassuring, as it makes value debates about just allocations useful.

3.2.4. Study 4—Confirmatory Factor Analysis (CFA), Convergent and Discriminant Validity

Results of the Confirmatory Factor Analysis

We report the results in the following tables, which we explain in turn. In Table 7, we report the reliabilities of the five factors, and in Table 8, we report the correlations between the factors and the scale composites with the items in Table 9. Correlations are significant but low, both for the latent constructs and the scale composites, suggesting that the scale measures something that is common through all latent factors (correlations are significant), but each dimension has an aspect that differs. Naturally, however, two types of equity are more closely related than equity and the rest of the norms. We decided to keep both equity-related norms (equity of input and equity of output) separate even if we allow correlation between the two, maintaining a second-order factor. The results of our CFA for the 5-factor model proposed are $\chi^2_{(142)} = 385.85$, with RMSEA = 0.050, TLI = 0.934, and CFI = 0.934. The fit is great, as RMSEA is less than 0.08, and CFI and TLI are greater than 0.9. In the following, we present additional tests to compare our model with existing scales. We also followed the recommendation of Parks–Leduc, Feldman, and Bardi, and therefore, removed the mean to compare the relative importance of the norms included in our measure, which allows our scale to compare norms and their relative importance [64].

Convergent and Discriminant Validity

First, we performed several tests to investigate the convergent and discriminant validity of our scale. The comparison of several alternative models to our final model led us to conclude that our model has the best possible fit while also being the most parsimonious. The results of these comparisons are reported in Table 10.

Table 8. Reliabilities for the factors of the 5-factor JAN scale ($N = 458$).

Factors	N° of Items	α
Equity of input	4	0.75
Equity of output	3	0.86
Need	4	0.84
Equality	4	0.86
Status	4	0.87

Table 9. Correlations among latent variables and scale composites, 5-factor justice allocation norms (JAN) scale ($N = 458$).

JAN Factors	1	2	3	4	5	α
1. Equity of input	-	0.60 ***	0.17 ***	−0.12 **	0.38 ***	0.75
2. Equity of output	0.75 ***	-	−0.06	−0.33 ***	0.15 ***	0.86
3. Need	0.16 **	−0.06	-	0.16 ***	0.23 ***	0.84
4. Equality	−0.18 ***	−0.39 ***	0.16 ***	-	−0.09 **	0.86
5. Status	0.37 ***	0.15 ***	0.19 ***	−0.13 **	-	0.87

Note: Correlations below the diagonal are among latent variables. Correlations above the diagonal are among scales created from averaging the items. The reliability of those scales is shown in the last column. *** indicates $p < 0.001$. ** indicates $p < 0.05$.

Table 10. Correlations between 5-factor justice allocation norms scale (JAN) and 4-factor Colquitt scale, latent variables ($N = 458$).

Construct (Justice Norm)	Distributive Justice	Procedural Justice	Interpersonal Justice	Informational Justice
Equity of input	−0.011	0.028	0.065	0.059
Equity of output	0.001	0.05	0.181 ***	0.045
Need	0.081	0.068	0.022	0.081
Equality	−0.008	−0.027	−0.091	−0.030
Status	0.031	0.015	−0.026	0.047

*** indicates $p < 0.001$.

Second, we investigated the discriminant validity of the new scale compared to other scales related to justice judgments. To test this, we included Colquitt's [17] seminal measure of organizational justice in the questionnaire for this study. We first perform a correlation analysis of the factors of our measure together with Colquitt's factors that we report in Table 11. We compare both measures, specifically the factors that appear to be more closely related, which (as expected) are distributive justice from Colquitt's measure and the two equity factors in our measure. We first performed an exploratory factor analysis, forcing orthogonal principal components, and letting the items of equity of input (four items our measure), equity of output (three items our measure), and distributive justice (Colquitt scale) group freely into three different factors. This is a first approximation of the discriminant validity of our scale from the Colquitt scale.

To further investigate discriminant validity, we generated two alternative models with all the items combined differently and compared them with a model that included the three factors of equity of input, equity of output, and distributive justice. The first of these two alternative models combines all items into a single factor, and the second combines equity of input and the DJ measure (Colquitt) into a single factor. The comparisons of these models suggest that the model with three separate factors (equity of input norm preference and equity of output norm preference from our scale, and distributive justice perception measured via Colquitt's scale, see Table 12) has the best fit.

Table 11. Comparison of alternative models with several factor structures of our scale ($N = 458$).

Factors	χ^2	df	χ^2/df	TLI	CFI	RMSEA
1-Factor model with all items grouped ^a	2652.3	152	17.44	0.232	0.318	0.209
4-Factor model with both equities in a single factor ^b	518.11	146	3.54	0.880	0.890	0.082
3-Factor model with one equity and need and equality joined and status ^c	1233.96	149	8.27	0.66	0.704	0.139
5-Factor model proposed	385.85	142	2.71	0.934	0.923	0.05

Note. χ^2 values are all significant at $p < 0.001$. TLI = Tucker–Lewis index. CFI = comparative fit index. RMSEA = root mean square error of approximation. We test the alternative models compared to the 5-factor model: ^a $\chi^2_{(10)} = 2266.45$, better fit than the unnested one, supporting the 5-factor model. ^b $\chi^2_{(4)} = 132.26$, better fit than the unnested one, supporting the 5-factor model. ^c $\chi^2_{(7)} = 848.11$, better fit than the unnested one, supporting the 5-factor model.

Table 12. Comparison of alternative models of our equity justice allocation norms (JAN) factors and distributive justice (Colquitt, 2001) ($N = 458$).

Factors	χ^2	df	χ^2/df	TLI	CFI	RMSEA
1-Factor model with all items grouped ^a	1064.63	35	30.04	0.336	0.483	0.280
2-Factor model with equity of input and DJ grouped ^b	976.03	34	28.76	0.379	0.527	0.271
3-Factor model separating JAN equities and DJ (Colquitt)	113.55	32	3.54	0.942	0.959	0.082

Note. χ^2 values are all significant at $p < 0.001$. TLI = Tucker–Lewis index. CFI = comparative fit index. RMSEA = root mean square error of approximation. We test the alternative models compared to the 5-factor model: ^a $\chi^2_{(3)} = 951.09$, better fit than the unnested one, supporting the 3-factor model. ^b $\chi^2_{(2)} = 862.48$, better fit than the unnested one, supporting the 3-factor model.

We also tested convergent and discriminant validity through the AVE tests suggested by Fornell and Larcker [65], and we computed amount of variance and covariance of our five factors; the variance explained by each factor should be greater than 0.5 and the covariance between factors should be less than 0.5. We found that the only factors that did not perform well were equity of input and equity of output, as they had a covariance of 0.7, which was already accounted for in our model.

For discriminant validity, it is also important to show that our scale is different from other justice preference measures. One variable established in the literature is *justice orientation*, which measures the degree to which people care about justice in general [42]. For the purpose of jointly testing how the preference of norms affects justice orientation, we included a 7-item scale for justice orientation. We regressed our norms preferences into justice orientation, and we found that need, equality and status had significant effects on justice orientation (we report them in Table 13). The effect on need was positive (0.22) with a p -value < 0.001 , the effect on equality was positive (0.233) with a p -value < 0.001 , and the effect on status was negative (−0.136) with a p -value < 0.01 . These results suggest that those who find justice more important in life tend to express higher preferences for the equality and need rules but lower preference for the status rule. However, these results do not provide any grounds for believing that any of our norm preference dimensions represent the same construct as justice orientation

Table 13. Effect of justice orientation on the 5-factor JAN scale ($N = 458$).

Factor	Regression Coefficient	p -Value
Need	0.222 ***	0.000
Equality	0.233 ***	0.000
Status	−0.136 **	0.010

*** indicates $p < 0.001$. ** indicates $p < 0.05$.

4. Discussion

Taken together, the research presented in this paper makes three core contributions. The first contribution relates to integrating the literature on organizational justice, behavioral ethics, normative justice, and value choices, affording a more comprehensive picture of people's preferences for justice allocation norms in organizations to really generate social sustainability, as organizational justice has been shown as clearly one of the core values to social sustainability through knowledge sharing. It has long been argued that organizational justice could make important contributions to our understanding of behavioral ethics, were it not for assumptions that hinder such integration [66]. The focus of on equity almost to the exclusion of other distribution norms, such as equity and equality, is a case in point. We found that in reality, many policy debates and resource allocation arguments in work contexts can be understood only when considering a more comprehensive set of distributive justice concerns, including equity of input, equity of output, equality, need, and status considerations.

The empirical studies presented suggest that people distinguish between the five norms considered here: equity of input, equity of output, equality, need, and status. Moreover, our longitudinal study also suggests that this preference is relatively stable over time. Even though we expected this empirical result, it represents a second important contribution: When people meaningfully differentiate between the five norms, it will be helpful to measure their preference for each of the five norms to better understand their justice reasoning and justice expectations in organizational contexts. If such preferences are lasting, then it makes sense to take them into account in debating and deciding on organizational policies and practices.

Finally, a third contribution is that taken together, the four studies presented here develop and test an instrument that researchers and practitioners can use to take stock of employees' and other stakeholders' preferences for distribution norms. As the instrument does not force choices between pairs of norms, it is possible that some individuals simply score high on all five norms, while others might, for example, score high on one and low on the four others. We argue that this (descriptive) information provides important insights into the range of possible "justice solutions" that various stakeholders could hope to find. Indeed, overlaps in norm preferences indicate possible common ground that can serve as a starting point for negotiations. Apart for this instrument being an aspect of increasing knowledge to better set up solutions that personally adapt to individuals, it also helps to enlarge the actual focus on equity and distributions to incorporate other ethical standards that serve as underpinning values of many organizations that have been neglected so far, specifically need and equality. The recent job done by Sandel [6] about the tyranny of merit tries to shed light on how far we have gone using a simplistic ethical value of merit to decide whether people deserve something, which in turn implies under valuing other aspects like need or equality of real opportunities. This work precisely focussed on other norms, such as equality and need, which could serve as basis of wealth improvement for the whole, as Sandel suggests.

5. Conclusions

We would like to also mention some conclusions regarding the implications for managerial research and organizational decision makers, along with some limitations of this research and implications for future research.

5.1. Managerial Implications

Organizational practitioners regularly need to decide on resource allocations, and organizations also put general systems in place that guide and constrain resource allocations. It is interesting that the range of options embraced by organizations in any one cultural context seems larger today than in the past. For example, even within the same city and within the same industry, we find that organizations differ in how far they practice merit pay versus relatively equal pay or in whether they give specific advantages to parents of

young children or to older employees, etc. Thus, allocation systems represent value systems in organizations that can also be a source of competitive advantage in the search for talent. Considering the allocation preferences of employees and new hires more explicitly could also improve person-organization fit and employee commitment.

As organizations introduce and change such policies, they need to be aware that their employees may or may not embrace the values underlying such systems. For example, Davey, Bobocel, Hing and Zanna [45] found that people who are more in favor of the merit principle show less support for affirmative action programs that include preferential treatment for minorities. For organizations, it is therefore, important to determine the extent to which different justice norms are shared (or not) by organizational members. This will delineate the degree to which consensus on allocation policies is possible and indicate the range from which policies can be chosen without creating social disruption. Having said this, practitioners need to keep in mind that by measuring “what is” we cannot develop a comprehensive image of “what can be” and that people’s current allocation norm preferences may also partially be a product of successful organizational socialization (we return to this point below).

The fact that people’s norm preferences are relatively stable and that they can simultaneously embrace several norms means that it can also be useful to actively involve them in discussions about necessary trade-offs between norms. However, there may be limitations to this. As Fiske and Tetlock [67] note, “Taboo trade-offs violate deeply held normative intuitions about the integrity, even sanctity, of certain relationships and the moral-political values underlying those relationships.” ([67], p. 255). In other words, as the debate about norms is rooted in values, managers and organizations will need to tread carefully, which is yet another argument for trying to understand employees’ value systems first.

A particularly important role will be played by managers who are involved in making allocation decisions (e.g., distribution of bonus money among team members). The managers’ norm preferences will certainly have a greater impact when the organization establishes less clear policies and boundaries on decision-making freedom ([31], p. 356). On the one hand, this could allow managers to uphold their own moral identity and feel at ease with their decisions. On the other hand, this could also lead to less consistency within the organization, as managers may embrace different norms, and therefore, lead to feelings of injustice (consistency being a procedural justice norm, Cropanzano, Fortin and Kirk [18]).

5.2. Limitations and Implications for Future Research

In the present paper, we developed and tested an instrument that allows the simultaneous measurement of the preferences of five different allocation norms. Naturally, this approach comes with several limitations, and at the same time, opens the door for future studies. First, it seems that by asking people directly about their preferences for various norms, we obtained answers that are likely to be strongly shaped by the organizational realities and managerial discourses they have experienced throughout their careers. Research on the so-called system justification effects [68]) and on motivated justice reasoning [69] has illustrated that people are typically motivated to believe that the systems they are part of are fair, and in most cases, they will change this view only when the evidence to the contrary becomes overwhelming. Therefore, people’s estimate of what “ought to be” a good allocation rule will be strongly influenced by their (limited and subjective) range of experiences. Nevertheless, it is important for researchers, managers and even philosophers of justice to understand what norms and values people embrace, especially with a view to considering change.

Furthermore, our approach has advantages and disadvantages compared to the forced choice and trade-off approaches those behavioral economists have typically chosen to study allocation norm choices. In line with the literature on value measurement, we have here taken an ipsative scale approach [62,70]), whereas we use a normative scale and control for scale usage by partialling the mean value score out of the analyses. A weakness of this approach is that it does not fully account for some of the trade-offs that need to be made in

between norms in real-life allocation decisions. For example, to the extent that we reward the higher performance of one team member over another, the distribution between the two team members will be less egalitarian. On the other hand, in real-world situations, there is often a complex mix of norms that can be considered (explicitly and implicitly), and to find and define common ground between different stakeholders, it is important to determine not only which norm is chosen over another but also the extent to which several norms are considered important in absolute terms. Ideally, future studies could include both the forced choice and the absolute preference rating of norms to better investigate their joint effects.

For organizational justice research, our studies also inform the current debate as to whether we should measure direct fairness evaluations (e.g., how fair are outcomes in your organization) versus individual justice norm fulfillment (e.g., do the distributions of outcomes reflect effort). In the special case of distributive justice, the measurement was limited almost exclusively to equity [17]. Our studies suggest that people do care about norms other than equity and that they even meaningfully differentiate between equity of input and equity of output. For researchers, this also means they should consider the moderation effects of individual preferences for allocation principles. For example, positive effects of perceived equity will be moderated by whether equity is embraced by team members and by how strongly this norm preference is shared.

Current work on sustainability shows that organizational justice plays a specific and important role, to increase the willingness to share knowledge inside the organization, which in turn impacts economic and social sustainability. However, these studies have not incorporated other aspects of justice norms that the concept of organizational justice with the specific focus on the dyad equity-distributive justice, has somehow being overemphasized. This research turns the focus to enlarging the set of justice norms that can jointly with the perceptions of justice that organizational justice incorporates, be an additional step to study further individual's justice norms preference allocations and organizational justice perceptions impacts on sustainability. This research is a first step and should also need further work in incorporating this JAN model into the actual sustainability models.

Therefore, it may be necessary to measure insights into both the fulfillment of and the preference for individual distribution norms. Without this information, we do not know why distributions are considered fair or unfair, and the recommendations we can give to managers remain vague. The information regarding specific norm preferences and fulfillment is likely to be particularly predictive in relation to specific events: Justice norm preferences are likely to show their strongest effect in an event where a specific norm is violated or may be violated.

At the same time, paying more research attention to norms such as need and equality will also strengthen the link between social-psychological research on organizational justice and conceptions of normative justice, which have long stressed the importance of such criteria (see, for example, the work of Rawls or Sen). Thus, considering a wider range of norms in studies of organizational justice encourages debate about what values should underlie organizational and managerial choices.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Final Items Selected for the Measure

Norms as stand-alone items

In the workplace, resources need to be distributed between people. For example, it needs to be decided who gets paid how much, who should get a promotion, who sits in which office, who can attend which training opportunity, who should get how much personal attention from the manager, etc. Of course, your view on how to distribute these resources is likely to depend on the specific situation. However, most people have some general preferences regarding how to distribute resources in the workplace. The following items refer to your *general preferences*.

Please indicate for each item the extent to which you agree with it on a scale from 1 = very small extent to 7 = very large extent.

When distributing resources in the workplace . . .

(Equity of input)

Preference should be given to those with better work relationships and networks.

Preference should be given to those with higher loyalty and commitment to the firm.

Preference should be given to those who work longer hours and are less often absent.

It should be the norm to give preference to those who put in more work and effort.

(Equity of output)

More should be given to those who contribute more.

Preference should be given to those who produce higher quality work.

Preference should be given to those who are more productive.

(Need)

More should be given to those with more need.

Preference should be given to those who are least privileged.

Preference should be given to those who have more difficulties.

It should be the norm to give preference to those who need more.

(Equality)

Equal preference should be given to everyone.

Exactly the same preference should be given to all members of the organization.

All employees should be treated equally, regardless of who they are and what they do.

It should be the norm to treat all employees equally.

(Status)

More should be given to those who have a higher status.

Preference should be given to those with a higher position in the hierarchy.

Preference should be given to those who have spent more years with the organization.

It should be the norm to give preference to those with higher status.

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