Two scenario studies examined justice perceptions in Indian samples. Study 1 investigated the effect of allocator-recipient relationship and internallexternal locus of merit and need on both reward and punishment allocation in a distributive context, involving a meritorious and a needy recipient. Between merit, need and equality, subjects showed a clear equality orientation, in both allocation rule preference and perceived fairness of a given allocation. This finding was inconsistent with the strong need orientation reported in several Indian studies. In order to obtain more information on punishment alone, Study 2 was conducted in order to investigate a non-distributive context, involving internal/external locus of merit and need, and choice of punishment and perceived fairness of a given set of punishments, seriousness of the offence, guilt of the offender and the importance of need and merit. In both studies, the effect of situational variables did not emerge as expected. The apparent absence of effects of the situational variables was interpreted as the expression of a cognitive strategy to combine all the contextual information. The equality orientation found in Study 1 was interpreted as the resultant of such a combination. One part of this combination was in terms of the merit and need rules. It was suggested that subjects thought in terms of merit and need, instead of merit or need. Some evidence for this suggestion was obtained in Study 2. Need and merit were rated as being similar in importance when deciding a fair punishment. Attention was drawn to several aspects of justice perception, especially those related to punishment that requires further detailed investigation with modified methods.

### Reward and Punishment Allocation in the Indian Culture

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For over four decades now, distributive justice in reward allocation settings has been examined in the social-psychological perspective, mostly in the form of fairness perception in reward allocation settings. Although several determinants of fairness perception have been investigated, some questions still remain unanswered, especially in the context of non-Western cultures such as India. The majority of investigations have compared the relative fairness of merit, equality and need as alternative allocation rules, in the context of hypothetical allocation scenarios. Much information has been gathered on how justice is perceived under varying situational and resource variables. Moreover, different cultures have been compared, in terms of individualism-collectivism as a cultural dimension, and also with respect to other factors, as illustrated in the project entitled Cross-cultural Variations in Distributive Justice Perception (Powell, 2005). The findings of this project clearly bring out the multidimensional nature of justice judgements, especially in the cross-cultural context. Yet some issues related to fairness perception in distributive justice remain unexplored or ambiguous.

The present investigation inquired into the following issues that remain unexplored in the context of the Indian culture. First, between merit, equality and need as allocation rules, assuming relative collectivism among Indians, is need preference (reported in several Indian studies) the only, or the best indicator of cultural collectivism, or can one expect equality preference to be as dominant as need preference? Does collectivism itself satisfactorily explain fairness perception among Indians?

Second, what would be the role of specific situational information in the preference for merit, equality and need, and in the fairness perception of allocations based on these allocation rules? The present investigation included allocator—recipient relationship (relevant to collectivism), internal/external locus of merit and need (relevant in the attributional perspective), the nature of the allocation and allocator/recipient role, the latter two variables being directly related to the allocation made in the particular context.

Third, would there be a correspondence between the sense of fairness expressed in allocation rule preference, and that expressed in the perceived fairness of a given allocation, both being indicators of justice perceptions?

Fourth, would allocation rule preference and perceived fairness be similar between reward allocation and punishment allocation, considering the allocator–recipient relationship, the locus of merit and need, the nature of allocation and allocator–recipient role?

With regard to the first issue, namely, that of collectivism as the best explanation of need preference among Indians, cross-cultural variations in allocation rule preference have been frequently explained in terms of individualism-collectivism (Hofstede, 1980, 2001) as a cultural dimension. Individualistic cultures are said to be merit-oriented because they emphasise independence, competition and personal achievement, whereas collectivistic cultures are said to be need- or equality-oriented because they emphasise interdependence, cooperativeness and concern for the welfare of others. However, a meta-analysis has shown that collectivism may not be the only or even the major dimension that accounts for allocation rule preferences in different cultures (Fischer & Smith, 2003; Hui et al., 1991). Several factors, such as the form of allocation (whether or not the allocator is one of the recipients), other cultural dimensions such as power distance, the sample used in the study, the operationalisation of allocation preference and the like, may be stronger determinants of allocation rule preferences. In addition, several questions may be raised about the very conceptualisation and measurement of collectivism (Oyserman et al., 2002; Triandis & Gelfand, 1998), and the defining features of individualism-collectivism may vary, depending on the specific cultural context. Some empirical investigations involving samples in India, said to be a relatively collectivistic culture, partly support the collectivist interpretation of allocation rule preferences, but other Indian studies have yielded divergent findings. Need preference has been reported in some reward allocation studies (Aruna et al., 1994; Berman et al., 1985; Murphy-Berman et al., 1984; Pandey & Singh, 1989). Other investigations report equality preference, or both need and merit preference (Krishnan, 1998, 2000, 2001; Pandey & Singh, 1997; Singh, 1994).

A deviation from need preference (as shown in merit or equality preference) can be explained in more than one way. First, even if an individualistic–collectivistic explanation is favoured, collectivistic values would also include equality preference. Collectivism is said to foster sensitivity towards collective rather than personal interests, a concern for interpersonal harmony and welfare rather than individual achievement, cooperation rather than competition and interdependence rather than independence. All these values may be reflected in both equality and need preference in reward allocation, and therefore, collectivism must allow for both. Some other Indian studies (cited above) do show equality preference over need preference. Yet, in the light of the more commonly reported need preference among Indian subjects, very little has been said about equality preference

under collectivism. Second, there could be other departures from need preference, such as a greater merit preference or an equal likelihood of need and merit preference (Krishnan, 2000). It is suggested that such deviations from need preference can be explained in terms of the effect of situational and resource variables—an effect that may override or act along with cultural influences. This suggestion is based on the observation that the earlier Indian investigations reporting a strong need preference did not include information about situational variables. They dealt with money as the resource (which itself may subtly highlight the importance of need over merit and equality). In some other investigations on Indian subjects that included different nonmonetary resources (such as admission to an academic institute, skill training, recruitment for a job, recommendation for participation in a contest, etc.) and situational variables (such as the allocator–recipient relationship, the allocator's/recipient's caste or the allocation rule alternatives available), there were deviations from need preference.

The possible influence of specific situational factors was the second major question addressed in the present set of investigations. In particular, four situational variables were included, namely, allocator-recipient relationship, a variable relevant to collectivism, internal/external locus of need and merit, a variable that has implications for attributional aspects of justice perception, the nature of allocation and the allocator-recipient role. The last two variables are relevant to perception of fairness of a given allocation. The rationale for the inclusion of these variables was as follows. With regard to allocator-recipient relationship, some of the existing findings from Indian studies are ambiguous (Krishnan, 2000, 2001), and further investigation of this variable would throw more light on its role in justice perception. With regard to the locus of need and merit, this is a variable that requires attention even outside the cultural context. Some experts have pointed attention to the significance of incorporating an attributional approach into justice research (Cohen, 1982). It would be easy to see that the internal/external locus of both need and merit might influence the perceived deservingness of recipients, and thereby affect both allocation rule preference and perceived fairness of a given allocation. Evidence contrary to such an expectation has been reported in some investigations. For example, focusing on need, Lamm and Schwinger (1980) reported that the source of need did not have a significant effect on reward allocation. However, evidence from a cross-cultural investigation conducted with a society-level perspective demonstrated the significant role

of the attribution of need on specific aspects of distributive justice. In a 14-culture comparison, Shirazi and Biel (2005) found that attributed causes of poverty (need) had a significant effect on attitudes towards the role of the government in allocating resources to provide for basic needs. It is argued here that while locus may be especially important in the case of need, both in society at large and at the interpersonal level, it is quite possible that when need has to be compared with merit and equality, the locus of both merit and need of the recipient would affect justice perception. Including this variable along with allocator-recipient relationship would indicate the interactive effects of these two variables on justice perception. With reference to the nature of allocation and the allocator-recipient perspective, these variables become meaningful if it is noticed that the existing studies related to distributive justice examine allocation rule preferences or perceived fairness of a given allocation mainly from the allocator's perspective. Very little is known about the recipient's perspective. A comprehensive understanding of justice perception in a context consisting of an allocator and two recipients, one needy and the other meritorious, would necessitate taking into account the perspectives (roles) of both the allocator and the recipients, with regard to the nature of allocation (need-based, merit-based, or equal allocation). If self-interest dictates perceived fairness of a given allocation, then the two recipients would be expected to perceive greater fairness when the given allocation in their favour. On the other hand, the allocator as a disinterested third party would perceive greater fairness in the allocation that reflects the cultural norm. A few investigations have shown the significant role of one or both of these variables (Krishnan, 1998; Krishnan & Carment, 2006; van Yperen et al., 2005). In view of the paucity of evidence on these two variables, they were included in the present research.

The third question in the present set of investigations was that of correspondence between two indicators of justice perception, namely, allocation rule preference from the allocator's perspective and perceived fairness of a given allocation, which would take into account both the allocator's and recipients' perspectives. Earlier studies of reward allocation tended to focus either on allocation rule preference or on perceived fairness of a given allocation, but not on both. The present investigation considered both measures of justice perception.

Finally, the present investigation inquired into punishment allocation, in addition to reward allocation. In contrast to the latter, there is very little

information on allocation rule preferences or perceived fairness in the case of punishment allocation. A few studies have included "punishments" such as a monetary cutback (Murphy-Berman et al., 1984) or a fine (Aruna et al., 1994) for a misdeed, and have found essentially the same allocation preference patterns as in the case of the allocation of rewards. Much more information on punishment allocation is required, especially in the light of the determinants suggested above. The question of fairness of punishment has been approached from varying points of view. In the social-psychological perspective, some investigators have examined the question of punishment in terms of compensation for harm-doing and other motivations from the point of view of the punisher (Darley, 2002; Darley & Pittman, 2003). Others have made a distinction between the retributive and utilitarian (deterrent) purpose of punishment (Carlsmith, 2006; Carlsmith et al., 2002). If two persons are party to an offence, and one of them is said to be meritorious (e.g., more capable) while the other is said to be needy, it may be surmised that the allocator or decision maker may allocate equal punishment to the two offenders. Alternatively, under collectivism, the allocator may show greater leniency towards the needy offender, and therefore allocate more punishment to the meritorious one.

If situational variables are now brought into the picture by way of the allocator–recipient relationship, and internal/external locus of merit, again, greater leniency may be shown towards (a) an offender who is related to the allocator than one who is unrelated and (b) an offender who is meritorious because of internal causes, and one who is needy because of external causes. Such leniency may be exhibited in the form of less punishment being allocated to the recipient (offender) in question.

In connection with punishment, Smilansky (1996), a philosopher, has posited a link between responsibility and desert. Placing the responsibility—desert link in the context of reward and punishment allocation, it may be stated that an individual who is personally "responsible" for a positive outcome deserves credit and reward. By the same reasoning, a person who is personally responsible for a negative outcome deserves blame and punishment. Information about the internal or external locus of need and merit provides a ground for assigning or not assigning personal responsibility to a recipient for a positive/negative outcome. As such, locus information might influence decisions about reward and punishment allocation, and also the perceived fairness of a given allocation. All these possibilities are based on conjecture

and require empirical verification. In the light of the absence of evidence regarding the role of the locus of need and merit, the present investigations included this variable.

On the rationale described above, two studies were conducted as follows.

Study 1 examined the effects of allocator–recipient relationship, and internal/external locus of need and merit on both reward and punishment allocation. Two major dependent variables were included, namely allocation rule preference (between merit, need and equality) and the perceived fairness of a given allocation (merit-based, need-based and equal allocation). In the case of perceived fairness, allocator/recipient role as well as the nature of allocation were also included as independent variables.

Study 2 examined only punishment allocation, considering one offender who was described as meritorious but committed the offence because of need. Specifically, the study investigated the effect of internal/external locus of need and merit on the perceived seriousness of offence, perceived guilt of the offender and perceived fairness of various possible punishments. In addition, the effect of internal/external locus, on the importance of need and the importance of merit, in deciding the punishment was also examined.

The two investigations are described below in detail.

#### Study 1

The Effect of Allocator–Recipient Relationship, Internal/External Locus of Merit and Need, Allocator/Recipient Role and Nature of Allocation on Justice Perception

Method

**Subjects** In total, 110 college students (71 males and 39 females) enrolled in a college in the north Indian state of Uttar Pradesh participated in the study. They ranged in age from 18 to 24 years (mean age = 20.19 years). As indicated by the family income, the subjects belonged to the middle and lower-middle economic class.

**Design** The two main dependent variables were allocation rule preference and perceived fairness of given allocation, both examined as indicators of justice perception.

Allocation rule preference was assessed by presenting allocation scenarios (one depicting reward allocation and another depicting punishment allocation), and asking subjects to indicate which alternative way of distributing the resource they would adopt if they were in the allocator's place, out of five given alternatives, namely the following:

- Giving the whole reward/punishment to the needy recipient
- Giving more of the reward/punishment to the needy recipient
- Giving equal reward/punishment to the needy and meritorious recipient
- Giving more of the reward/punishment to the meritorious recipient
- Giving the whole reward/punishment to the meritorious recipient

A sixth open alternative was provided allowing subjects to indicate any other form of allocation that they might choose.

The frequencies of allocation preference indicating merit, equality and need preference were compared between the different conditions.

Perceived fairness of given allocation was assessed by asking subjects to rate on a seven-point scale, the degree to which they perceived a given allocation to be fair/unfair. The mean perceived fairness ratings were compared between the different conditions.

In the case of allocation rule preference, the two independent variables were allocator–recipient relationship (related/non-related recipient jointly with merit and need) and internal/external locus of merit/need. The first variable had two "levels" (relative meritorious + non-relative needy/relative needy + non-relative meritorious). Internal/external locus of merit and need had five "levels", as follows:

- 1. Merit internal
- 2. Merit external
- 3. Need internal
- 4. Need external
- 5. No information about locus of merit/need

The fifth condition mentioned above would serve as a control condition (merit internal/merit external/need internal/need external/no information regarding locus).

Thus, the design consisted of 10 conditions, and 11 subjects were randomly assigned to each condition.

Perceived fairness of given allocation was investigated in a mixed  $2 \times 5 \times 3 \times 3$  factorial design that combined relationship, locus, nature of allocation (merit allocation/need allocation/equal allocation), and allocator/recipient role (allocator role/meritorious recipient role/needy recipient role). The first two variables were between-subjects variables, and the latter two, within-subject variables.

**Procedure** All subjects were administered the Social Behaviour Inventory 1 in Hindi, the native language of the respondents. The inventory consisted of (*a*) a section regarding general information about the subject (age, gender, family income and the like) (*b*) an allocation scenario involving reward and (*c*) another allocation scenario involving punishment.

Each allocation scenario was followed by specific questions, the responses to which provided information regarding the dependent variables.

**The Social Behaviour Inventory 1** The Social Behaviour Inventory commenced with an introduction to the purpose of the study, followed by a General Information section soliciting information regarding age, family income and similar demographic information. Two allocation scenarios followed, one related to punishment allocation and the other related to reward allocation in that sequence.

**Punishment Scenario** A professor appoints two research assistants for his research. One of them is a relative of the professor, but the other is not related. After completion of the research work, the professor gets the information that an expensive machine had been damaged, and that the two assistants are responsible for this. The professor thinks of imposing a fine on the assistants.

Within the scenario, the relative recipient was described as meritorious, and the corresponding non-relative recipient, as needy. In the other condition, the relative recipient was described as needy, and the corresponding non-relative recipient, as meritorious. In order to "manipulate" internal/external merit, the meritorious recipient was said to be meritorious either because of his own effort (merit internal) or because of his good luck (merit external).

Similarly, in order to manipulate need, the needy recipient was said to be financially needy, either because of his own carelessness (need internal) or because of his bad luck (need external). In the fifth condition, no information was given regarding internal or external locus, and only merit and need of the recipients were mentioned.

Following the scenario were five items that asked for (1) allocation rule preference (the amount of fine to be imposed on the recipients), requiring a choice between five given alternatives, that have been described above; (2) reason for the alternative chosen in first item; (3) perceived fairness of given punishment allocation (need, merit and equal allocation) if the subject were in the place of the allocator; (4) perceived fairness of given punishment allocation (need, merit and equal allocation) if the subject were in the place of the meritorious recipient and (5) perceived fairness of given punishment allocation (need, merit and equal allocation) if the subject were in the place of the needy recipient. Items (3)–(5) required the subject to rate perceived fairness on a seven-point scale, ranging from 1 (very unfair), through 4 (neither fair nor unfair), to 7 (very fair).

**Reward Scenario** A government official organises a conference in his department, in which two employees are actively involved. One of them is a relative of the official, whereas the other one is unrelated to him. After the conference, the official comes to know that the work of the two employees has been appreciated. So he thinks of giving them a sum of money as a reward.

As in the case of the punishment scenario, in the reward scenario also, when the relative recipient was described as being meritorious, the corresponding non-relative recipient was described as needy; when the former was described as being needy, the latter was described as meritorious.

Internal/external merit and need were "manipulated" as in the punishment scenario. The items for assessing the dependent variables were also on the same lines.

There was a difference in the way in which the responses were to be interpreted. In the case of the punishment scenario, the recipient who got less punishment was the one more favoured. On the contrary, in the case of the reward scenario, the recipient who got more reward was the one more favoured.

*Hypotheses* With regard to allocation rule preference and perceived fairness, the following effects were expected.

1. Considering needy/meritorious relative and non-relative recipients, reward allocation rule preference between merit, need and equality

would vary between the two combinations. There would be a general tendency to favour the relative over the non-relative recipient, especially when the relative is needy, and is compared with a non-relative who is meritorious. This expectation was consistent with the idea and some empirical findings that in a collectivistic culture, in-group members are favoured more than out-group members, and a needy recipient is shown preference over a meritorious recipient (Berman et al., 1985; Murphy-Berman et al., 1984). However, in the light of some reported findings that deviated from predictions based on collectivism (Krishnan, 2000, 2001), other possibilities were allowed for. In the relative meritorious condition, merit might be preferred with greater likelihood over need and equality. In the relative needy/non-relative needy condition, both need and equality might be preferred over merit, with the same likelihood.

In the context of punishment allocation rule preference, similar effects of meritorious/needy relative and non-relative were expected. Assuming the influence of collectivistic characteristics, the relative would be favoured over the non-relative, especially when the former is needy, expressed in the form of greater leniency towards a needy relative (i.e., a preference for giving less punishment to the needy relative recipient). The possibility that equal punishment to the two recipients would be preferred was also allowed for.

- 2. With regard to allocator—recipient relationship combined with merit/ need, perceived fairness of given reward and punishment allocation would vary along the same lines as in the case of allocation rule preference. Following the rationale mentioned above regarding the role of collectivism, it was expected that, in the case of reward allocation, perceived fairness would be the highest when the reward is allocated to a needy relative, or when it is allocated equally to both the recipients, and lowest when it is allocated to a meritorious non-relative. In the case of punishment allocation, perceived fairness would be highest when a meritorious non-relative is punished, or when both recipients are given equal punishment, and lowest when a needy relative is punished.
- 3. Considering internal/external locus of need and merit, allocation rule preference would vary in likelihood between the locus conditions. In the case of reward allocation, under internal merit and internal need conditions, merit would be preferred with greater likelihood than need

and equality. Under external merit and external need conditions, need would be preferred with greater likelihood than merit and equality. When no locus information is given about merit or need, either needbased or equal reward allocation would be preferred with the greatest likelihood, and merit-based allocation, with the lowest likelihood.

In the case of punishment allocation, under internal merit and internal need conditions, under external merit and external need conditions, preference for meritorious punishment would have the greatest likelihood, followed by preference for equal punishment. Needy punishment preference would have the lowest likelihood. Under internal merit and internal need, needy and meritorious punishment would have a greater likelihood of preference than equal punishment. The basis of this expectation is that the needy recipient would be blamed less than the meritorious recipient, and even less when the need has an external locus. When no locus information is provided about merit or need, punishment would be allocated either equally to the two recipients or with the greater likelihood to the meritorious recipient, thus favouring the needy recipient by giving him no punishment.

4. Perceived fairness of given reward and punishment allocation, with reference to internal/external locus of merit and need, was expected to show the same pattern as that described in the case of allocation rule preference. In general, perceived fairness of reward allocation would be highest under need allocation/need external (i.e., greater or whole reward to the needy recipient, when the recipient was needy because of internal causes). Perceived fairness of reward allocation would be lowest under merit allocation/merit external (i.e., greater or whole reward to the meritorious recipient, when the recipient was meritorious because of external causes).

In the case of punishment allocation, perceived fairness would be highest under merit allocation/merit external (i.e., greater or whole punishment to the meritorious recipient, when the recipient was meritorious because of external causes). Perceived fairness would be lowest under need allocation/external need (i.e., greater or whole punishment to the needy recipient, when the recipient was needy because of external causes).

The expected distinction between internal and external merit was based on the "just world" concept (Lerner & Miller, 1978), an

attributional perspective (Shaver, 1985), and Smilansky's (1996) linking of responsibility with desert. In the case of reward allocation, a meritorious recipient would be given more credit for a positive outcome than a needy recipient, when the merit has an internal rather than external locus. Similarly, a needy recipient would be favoured more than a meritorious recipient when the locus of the need is external rather than internal. In the case of punishment allocation, by the same rationale, a meritorious recipient would be blamed more for a negative outcome than a needy recipient, especially when the locus of the merit is external rather than internal. Accordingly, punishment for a meritorious recipient in such a condition would be considered justified. Similarly, a needy recipient would be blamed more than a meritorious recipient when the locus of the need is internal rather than external; punishment for the needy recipient in this condition would be considered justified. When no locus information is given about need or merit, the attribution component would be weak or absent, leading to a preference for equal punishment allocation, or a preference for showing leniency to the needy recipient, and favouring merit punishment allocation.

5. Considering nature of allocation, a significant main effect of nature of allocation on perceived fairness was expected in the case of both reward and punishment allocation. Assuming the effect of collectivism, reward allocation to a needy recipient would be perceived to be most fair, followed by equal reward allocation; reward allocation to a meritorious recipient would be perceived to be least fair. Alternatively, both need and equal reward allocation might be perceived to be significantly more fair than merit reward allocation. Punishment allocation would be perceived to be most fair under merit allocation, less fair under equal allocation and least fair under need allocation. Alternatively, both merit and equal allocation might be perceived to be significantly more fair than need allocation.

The rationale for this expectation was on the same lines as those of the preceding hypotheses.

6. A significant interaction between nature of allocation and allocator/ recipient role was expected in the case of perceived fairness of both reward and punishment allocation. Based on the assumption that self-interest would affect perceived fairness in the two recipient roles, but not in the allocator role, it was expected that, in the meritorious recipient role, perceived fairness of reward allocation would be highest under meritorious reward allocation and lowest under needy reward allocation. In the needy recipient role, perceived fairness of reward allocation would be highest under needy reward allocation and lowest under meritorious reward allocation. Perceived fairness of punishment allocation in the meritorious recipient role would be highest under need punishment allocation, and lowest under merit punishment allocation. In the needy recipient role, perceived fairness of punishment allocation would be highest under merit punishment allocation, and lowest under need punishment allocation. That is, from the perspective of the two recipient roles, in the case of reward allocation, role-congruent and role-incongruent reward allocation would be perceived to be most and least fair, respectively. In the case of punishment allocation, role-incongruent and role-congruent punishment allocation would be perceived to be most and least fair, respectively. Here, "role-congruent" allocation refers to the allocation being made to the recipient whose role or perspective is being considered. "Role-incongruent" allocation refers to the allocation being made to the recipient whose perspective is not being considered. A meritorious recipient judging merit allocation and a needy recipient judging need allocation are said to be in role-congruent situations. A meritorious recipient judging need allocation and a needy recipient judging merit allocation are said to be in role-incongruent situations. Assuming collectivistic norms that are need oriented, or equality oriented, in the allocator role, perceived fairness of reward and punishment allocation would favour need reward allocation, merit punishment allocation or equal reward/punishment allocation.

The expectations regarding the main effect of nature of allocation and the interaction between nature of allocation and allocator/recipient role were based also on some findings reported in the existing literature (Krishnan & Carment, 2006; van Yperen et al., 2005).

7. Significant interactive effects on perceived fairness were also expected between relative/non-relative recipient, internal/external locus of merit and need, nature of allocation and allocator/recipient role. In the absence of definite empirical evidence, no specific prediction was made about the direction of differences within the two-way, three-way or four-way interactions. Overall, the interactions were expected to be consistent with the pattern of variations in perceived fairness of

reward and punishment allocation mentioned above in the context of needy/meritorious relative and non-relative recipient and internal/ external merit and need.

Results and Discussion Allocation rule preferences were examined in terms of their frequencies in 10 conditions (Relative Meritorious recipient/Relative Needy recipient combined with five locus conditions), whereas Perceived fairness ratings were analysed with the help of a mixed-design analysis of variance (ANOVA) (Relative Meritorious/Relative Needy recipient, five levels of Internal/External Merit and Need, three levels of Allocator/Recipient Role and three levels of Nature of Allocation, the last two variables being repeated measures). It may be recalled that among the two recipients described in the scenarios, one recipient was said to be a relative of the allocator and the other was a non-relative. In addition, when the relative recipient was said to be meritorious, the other recipient (non-relative) was said to be needy. Likewise, when the relative recipient was said to be needy, the other recipient (non-relative) was said to be meritorious. In short, considering the relative meritorious/relative needy variable, the two levels were (a) relative meritorious recipient + non-relative needy recipient and (b) relative needy recipient + non-relative meritorious recipient. The main results pertaining to reward allocation and punishment allocation are described separately for each dependent variable. Tables 1-5 and Figures 1-5 display the relevant statistical information and graphically present the salient findings of the present study. For a direct comparison between reward allocation and punishment allocation, the statistical details have been shown in the same tables and figures, respectively.

Allocation Rule Preference: Reward Allocation When indicating allocation rule preference between merit, need and equality, subjects chose one out of five alternatives. Two alternatives indicated merit preference, two need preference and only one alternative indicated equality preference. Accordingly, the frequencies of preferences for the three kinds of alternatives were analysed with the help of a proportional probability rather than equal probability chisquared test. Comparing the merit, equality and need preference frequencies, the results revealed that equality preference was the strongest (52.7%), followed by merit preference (33.6%). Need preference was the weakest (13.6%) in the present study (proportional probability  $\chi^2_{(2)} = 73.82$ , p < 0.001). This finding contradicted the expected dominance of need preference, a finding that has also been reported in many Indian studies.

With respect to allocator–recipient relationship, equal allocation to the two recipients was the most likely preference (52.7%), and no significant difference was found between the likelihood of allocation to a relative (21.8%) and that to a non-relative recipient (25.5%) (proportional probability  $\chi_{(2)}^2 = 73.82$ , p < 0.001). Whether the relative or non-relative recipient was meritorious or needy, there was no significant difference between the two in the likelihood of reward allocation.

When the effect of internal/external locus of merit and need was examined across the five conditions (including the no locus information condition), the low cell frequencies in most of the conditions ruled out chi-squared tests. An inspection of the observed frequencies in the light of the expected frequencies indicated that, in all the conditions equality preference likelihood was numerically higher than expected, while merit and need preference likelihood was lower than or similar to the expected likelihood. Only in the case of internal merit did the likelihood of merit preference tend to be higher than expected. As already mentioned, the overall merit preference likelihood was higher than that of need preference.

In short, allocation rule preference in the case of reward allocation exhibited an overall equality preference over both merit and need preference, and a leaning towards merit rather than need preference. This feature diverged from earlier findings that demonstrated need preference among Indian subjects. The absence of an overall distinction between relative and non-relative recipient disconfirmed expectations based on collectivism, that an in-group recipient would be favoured more than an out-group recipient. Nor was there a confirmation of the expected effects of an attributional component underlying reward allocation rule preference, as exhibited by the complete absence of any difference between internal/external merit and need of the recipient.

**Allocation Rule Preference: Punishment Allocation** With regard to allocation rule preference in the case of punishment allocation, again, the overall likelihood of punishment allocation rule preference was unambiguously in favour of equal punishment allocation (72.9%), followed by need punishment allocation (15.9%), and then by merit punishment allocation (11.2%), the latter two likelihoods being non-significantly different (proportional probability  $\chi^2_{(2)} = 187.40$ , p < 0.001). No significant difference was found between relative/non-relative recipient, in the likelihood of merit, need or equality preference. In the case of both a relative and a non-relative recipient,

irrespective of whether he was meritorious or needy, equal punishment was significantly more likely to be preferred (73.5%) than either more punishment for the relative recipient (13.2%) or for the non-relative recipient (13.2%) (proportional probability  $\chi^2_{(2)} = 190.22$ , p < 0.001). The leaning towards merit preference found in the case of reward allocation did not emerge in the case of punishment allocation. This finding was discrepant from the expectation that greater leniency might be shown to a relative than to a non-relative and to a needy recipient than to a meritorious recipient.

Considering allocation rule preference in the light of internal/external locus of merit/need, again, no significant differences in likelihood of preferences could be discerned. As in the case of reward allocation rule preference, in the case of punishment allocation rule preference also, the very low frequencies in some of the cells made it impossible to carry out a chi-squared test. An inspection of the frequencies indicated a prominently stronger equality preference, regardless of whether merit or need was internal or external, or whether any locus information was provided. The extent of equality preference across the five locus conditions varied in range from 68% to 80%.

In short, punishment allocation rule preferences also went against the expectations based on collectivism, and those based on the attributional component. Between reward and punishment allocation rule preferences, the picture was similar in that there was an unmistakable overall equality preference over both need and merit preference. This feature was found with regard to both allocator—recipient relationship and internal/external locus of merit and need.

Tables 1 and 2, Figures 1 and 2 display the relevant details on allocation rule preference frequencies in the case of reward allocation and punishment allocation.

**Perceived Fairness of Given Reward Allocation** A mixed-design ANOVA was carried out on perceived fairness of reward allocation, with meritorious/needy relative and non-relative recipient and internal/external merit and need as between-subjects variables, and nature of allocation and allocator/recipient role as repeated measures. The analysis revealed (1) a significant main effect of nature of reward allocation ( $F_{2,200} = 100.69$ , p < 0.001;  $\eta^2 = 0.344$ ), (2) a significant nature of allocation × internal/external locus interaction ( $F_{8,200} = 2.35$ , p < 0.02;  $\eta^2 = 0.032$ ), and (3) a significant role × nature of allocation interaction ( $F_{4,400} = 4.07$ , p < 0.003;  $\eta^2 = 0.007$ ).

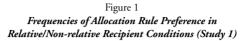
Table 1

			(N = II0)	6				(N=110)			
Reward Allocation	Rel	Eql	N-Rel	$\mathcal{X}^{2}_{\scriptscriptstyle{(2)}}$	Ъ		Merit	Eql	Need		
Rel/Mer, NRel/Nd	19	26	10	27.41	<.01	Mer-Int	11	10	- `		
						Mer-Ext Nd-Int	c 9	11 51	4 1		
Rel/Nd, NRel/Mer	5	32	18	53.96	<.001	Nd-Ext	9	13	3		
						No Loc Inf	_	6	9		
	Rel	Eql	N-Rel	$\chi^2_{\scriptscriptstyle (2)}$	þ		Mer	Eql	Need	$\mathcal{X}^{rac{2}{(2)}}$	þ
Overall Rew Alloc Preference	24	58	28	73.82	<.001		37	58	15	79.13	<.001
			(N = 106)					(N = 106)			
			201					(221 17)			
Punishment Allocation**	Rel	Eql	N-Rel	$\chi^{\frac{2}{2}}$	Ъ		Merit	Eql	Need		
Rel/Mer, NRel/Nd	~	40	7	105.41	<.001	Mer-Int	4	15	8		
(N=52)						Mer-Ext	3	16	3		
						Nd-Int	2	15	5		
Rel/Nd, NRel/Mer	6	38	_	85.72	<.001	Nd-Ext	2	15	3		
(N=54)						No Loc Inf	_	16			

	Rel	Eql	Eql N-Rel $\chi^{z}_{\scriptscriptstyle (2)}$	${\cal X}^2_{\scriptscriptstyle (2)}$	d	Mer	Eql	Eql Need $\chi^{^2}_{\scriptscriptstyle (2)}$	$\mathcal{X}^{\frac{2}{(2)}}_{(2)}$	þ
Overall Rew Alloc Preference	14	78	14	190.22	<.001	12	77	77 17 187.40	187.40	<.001
	Rew	Reward Allocation	tion			Punish	Punishment Allocation	ation		
	Relative Alloc	Equal Alloc	Non- Relative Alloc			Relative Alloc	Equal Alloc	Non- Relative Alloc		
Rel Mer/	17.27% 23.63%	23.63%	9.1%			4.72% 3	37.74% 6.60%	%09.9		
NRel Nd	(19)	(26)	(10)			(5)	(40)			
Rel Nd/	4.54% 29.1%		16.36%			8.49%	35.85%	%09.9 %		
NRel Mer	(5)		(18)			(6)	(38)	$\bigcirc$		
<b>Notes:</b> *All $\mathcal{X}^2$ values are based on proportional probability. **The $N$ differed because some Ss (4) chose 'Other'	sed on prop	ortional p Ss (4) chc	robability. se 'Other'	as their pr	*All $\mathcal{X}^2$ values are based on proportional probability. **The N differed because some Ss (4) chose 'Other' as their preference. These were omitted from analysis.	d from analy	sis.			

Table 2

		Reward Allocation			Pu	Punishment Allocation	~
	Merit Pref	Equality Pref	Need Pref		Merit Pref	Equality Pref	Need Pref
Merit Internal	20%	45.5%	0.5%	Merit Internal	18.2%	68.2%	13.6%
(n = 22)	(11)	(10)	(1)	(n = 22)	(4)	(15)	(3)
Merit External	31.8%	20%	18.2%	Merit External	13.6%	72.7%	13.6%
(n = 22)	()	(11)	(4)	(n = 22)	(3)	(16)	(3)
Need Internal	27.3%	68.2%	0.5%	Need Internal	9.1%	68.2%	22.7%
(n = 22)	(9)	(15)	(1)	(n = 22)	(2)	(15)	(5)
Need External	27.3%	59.1%	13.6%	Need External	10%	75%	15%
(n = 22)	(9)	(13)	(3)	(n = 20)	(2)	(15)	(3)
No Locus Info	31.8%	40.9%	27.3%	No Locus Info	2%	80%	15%
(n = 22)	(2)	(6)	(9)	(n = 20)	(1)	(16)	(3)



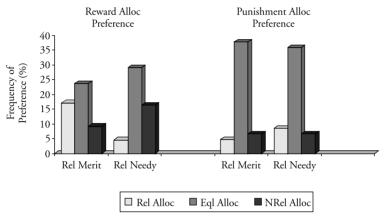
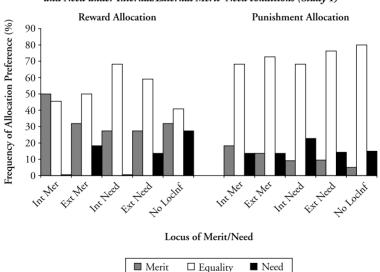


Figure 2

Reward and Punishment Allocation: Preference for Merit, Equality
and Need under Internal/External Merit-Need conditions (Study 1)



With regard to the nature of reward allocation main effect, equal reward allocation was perceived to be most fair (mean = 5.47, SD = 1.63), followed by need reward allocation (mean = 3.297, SD = 1.86); merit reward allocation was perceived to be the least fair (mean = 2.96, SD = 1.87). It may be recalled that need reward allocation was expected to be perceived as the most fair, although high perceived fairness of equal reward allocation was not ruled out. The higher perceived fairness of need reward allocation compared to that of merit reward allocation, while closer to the expected effect, was inconsistent with the stronger leaning towards merit preference in the case of reward allocation rule preference (described above).

Attention was then turned to the interaction between nature of allocation and the other variables. The significant nature of allocation × internal/external locus interaction revealed that once again, in all locus conditions, equal reward allocation was perceived to be the most fair, followed by need reward allocation. Between merit and need reward allocation, under external merit, external need and no locus information, merit reward allocation was perceived to be less fair than need reward allocation. Under internal merit and internal need, there was no significant difference in perceived fairness between merit and need reward allocation. The difference in perceived fairness between merit, need and equal reward allocation was the greatest in the external need condition, and least in the no locus information condition. In general, this finding suggested that even though the main effect of locus was non-significant, subjects did show sensitivity to information regarding the internal/external merit need. Some features of the nature of allocation by Locus interaction were partially consistent with expectations.

Also partially supporting the hypothesis, the nature of allocation  $\times$  role interaction reflected the expected self-interest effect under need and merit reward allocation. Merit reward allocation was seen to be more fair by a meritorious recipient (mean = 3.21, SD = 2.09) than by a needy recipient (mean = 2.94, SD = 1.75), and correspondingly, need reward allocation was seen to be more fair by a needy recipient (mean = 3.46, SD = 2.07) than by a meritorious recipient (mean = 3.13, SD = 1.75). However, the finding that equal reward allocation was seen to be more fair than either merit or need allocation in all three roles—allocator, meritorious and needy recipient—deviated from the prediction based on the recipient's self-interest.

The absence of main effects of both relationship and internal/external merit and need, although contrary to expectations, were consistent with the

findings pertaining to reward allocation rule preference. Overall, although several effects related to perceived fairness of given reward allocation turned out to be significant, only some of them were in the hypothesised direction.

**Perceived Fairness of Given Allocation: Punishment Allocation** Contrary to expectations, a mixed-design ANOVA of perceived fairness ratings of given punishment allocation revealed non-significant main effects of both allocator—recipient relationship and internal/external locus of merit or need, but these findings were consistent with the corresponding non-significant findings in the case of punishment allocation rule preference, and also similar to the findings related to perceived fairness of given reward allocation.

The significant findings consisted of (1) a main effect of nature of allocation ( $F_{2,200} = 144.44$ , p < 0.001,  $\eta^2 = 0.574$ ), (2) a main effect of allocator/recipient role ( $F_{2,220} = 3.14$ , p < 0.05,  $\eta^2 = 0.028$ ), (3) an interaction between allocator/recipient role and nature of allocation ( $F_{4,400} = 5.23$ , p < 0.001,  $\eta^2 = .045$ ), (4) an interaction between relative meritorious/relative needy and internal/external merit need ( $F_{4,100} = 3.874$ , p < 0.006;  $\eta^2 = 0.127$ ) and (5) an interaction between relative meritorious/relative needy and allocator/recipient role ( $F_{2,200} = 3.09$ , p < 0.05,  $\eta^2 = .027$ ).

The main effect of nature of punishment allocation revealed that equal punishment allocation was perceived to be significantly more fair (mean = 5.52, SD = 1.62) than either needy punishment allocation (mean = 2.88, SD = 1.72) or meritorious punishment allocation (mean = 2.85, SD = 1.71). The latter two means were non-significantly different from each other. The higher perceived fairness of equal punishment allocation was consistent with the finding of strong equality preference in the case of punishment allocation rule preference. In the case of the role main effect, a pairwise comparison of means showed that perceived fairness of given punishment allocation was higher in the meritorious recipient role (mean = 3.81, SD = 2.09) and needy recipient role (mean = 3.79, SD = 2.09) than in the allocator role (mean = 3.63, SD = 2.10). The difference between the meritorious recipient role and needy recipient role means was found to be non-significant. In other words, the overall perceived fairness of punishment allocation was significantly lower from the allocator's perspective than from the needy recipient's or meritorious recipient's perspective. This finding contradicted the expectation that perceived fairness would be higher in the allocator role than in the recipient role. However, it was similar to the corresponding finding in the case of perceived fairness of given reward allocation.

The significant interaction between allocator/recipient role and nature of punishment allocation indicated that with regard to equal punishment allocation, there was no significant difference between the three roles, apart from a tendency for perceived fairness to be higher in the meritorious recipient role than in the allocator and needy recipient roles. However, there were small differences in the case of merit and need punishment, between allocator and recipient roles. In accordance with expectations based on a self-interest motive in the two recipients, perceived fairness of merit punishment allocation was higher in the needy recipient role than in the meritorious recipient role. Likewise, need punishment allocation was perceived to be more fair in the meritorious recipient role than in the needy recipient role. In the allocator recipient role, need punishment tended to be perceived as more fair than merit punishment. Assuming that the allocator role perspective represents a more objective and non-partisan view that is closer to the norm, this aspect of the interaction does not fit in with the collectivist tendency to show greater leniency towards a needy recipient in the context of punishment allocation. In general, the pattern of the role × allocation interaction was parallel to the corresponding interaction in the case of perceived fairness of reward allocation.

Considering the significant interaction between relationship and internal/external merit need, both expected and unexpected features were observed. A pairwise comparison of means in this interaction showed that perceived fairness of punishment allocation was highest in the relative meritorious/external merit condition (mean = 4.49, SD = 0.79) closely followed by the relative needy/external need condition (mean = 4.12, SD = 0.72) and relative meritorious/no locus information condition (mean = 3.95, SD = 1.15); these three means were non-significantly different from each other. Perceived fairness of punishment allocation was lowest in the relative meritorious/internal merit condition (mean = 3.05, SD = 0.92). The last-mentioned mean hinted at leniency towards an internally meritorious recipient who was also the allocator's relative.

A glance at Figure 5, which shows the interaction described above, indicates that in general, there were more variations in perceived fairness of punishment allocation across the locus conditions, in the case of a meritorious relative than in the case of a needy relative. However, this interaction by itself is not meaningful unless the nature of allocation is taken into consideration. The three-way interaction between relationship, locus and nature of allocation turned out to be non-significant.

A comparison of the interaction between relative meritorious/needy, allocator/recipient role and nature of allocation in the case of perceived fairness of given reward and punishment allocation revealed the following features: (a) the overall pattern of perceived fairness was similar between reward and punishment allocation; (b) the perceived fairness of equal allocation (of both reward and punishment allocation) was distinctly higher than that of merit and need allocation, the latter two being non-significantly different from each other; (c) there was no overall significant difference between relative meritorious and relative needy conditions; (d) allocator/recipient role had a weak but significant main effect on perceived fairness, and interacted significantly with nature of allocation, but this interaction was dominated by the main effect of nature of allocation.

In order to facilitate comparisons between corresponding effects in perceived fairness of given reward allocation and perceived fairness of given punishment allocation, the means and standard deviations pertinent to the significant main effects and interactions have been presented in Tables 3–6, and graphically depicted in Figures 3–6.

The following were the highlights of the findings of Study 1. First, there was an overall similarity between allocation rule preference and perceived fairness of given allocation, in the case of both reward and punishment allocation. At first glance, it can be said that the subjects in the present study showed consistency in their justice perceptions as reflected in the two measures. This was as would be expected, but is often not actually found. Second, the core findings were similar between reward allocation and punishment allocation, including the main effects of the situational variables, and some of the interactions between them. These two aspects were, in fact, issues that were to be addressed in the present investigation. Although the apparent resemblance between reward and punishment allocation may not necessarily imply similar underlying dynamics, the immediate answers to two of the questions raised at the beginning of the present studies—namely, whether there would be consistency between two measures of justice perception and resemblance between reward and punishment allocation—were in the affirmative.

Third, equality preference was noticeably stronger than need and merit preference in the case of both reward and punishment allocation. The possibility of equality preference being stronger than need or merit preference was allowed for in the hypothesis, although many of the earlier Indian studies had reported a strong need preference. In the present study, with reference to reward allocation, subjects exhibited the greatest preference for allocating the

Perceived Fairness of Given Reward and Punishment Allocation: Interaction Table 3

between Internall External Locus of Merit/Need and Nature of Allocation (Study 1)

	Need Alloc	5 35
unishment Allocation*	Equality Alloc	2 14
P	Merit Alloc	2.86
	Need Alloc	5 50
Reward Allocation*	Equality Alloc	256
	$Merit\ Alloc$	2.86
		Mean
		- Internal

		Merit Alloc	Equality Alloc	Need Alloc	Merit Alloc	Equality Alloc	Need Al.
Merit Internal	Mean	2.86	2.56	5.59	2.86	2.14	5.35
	SD	2.01	1.93	1.79	1.32	1.07	1.49
Merit External	Mean	2.88	3.77	5.59	2.85	3.50	5.97
	SD	1.78	1.75	1.77	1.14	1.40	1.39
Need Internal	Mean	2.86	2.82	5.58	2.91	2.89	5.39
	SD	1.91	1.71	1.47	1.495	1.51	1.497
Need External	Mean	2.87	3.68	5.91	2.92	2.83	5.61
	SD	1.57	1.60	1.22	1.12	1.33	1.28
No Locus Info	Mean	3.30	3.65	4.69	2.68	3.03	5.26
	SD	1.96	1.88	1.67	1.73	1.61	1.46

## Notes: \*Interaction significant p < 0.02. \*\*Interaction non-significant.

4 o H.T.

		Perceived Fairr between Nature	uess of Given Rewar of Reward Allocati	Table 4 Perceived Fairness of Given Reward and Punishment Allocation: Interaction between Nature of Reward Allocation and Allocator-Recipient Role (Study 1)	lllocation: Interac ccipient Role (Stu	tion ty I)	
			Reward Allocation*			Punishment Allocation*	*"
		Allocator Role	Allocator Role Merit: Recip. Role Needy Recip. Role	Needy Recip. Role	Allocator Role	Allocator Role Merit: Recip. Role Needy Recip. Role	Needy Recip. Role
Merit Alloc	Mean	2.73	3.21	2.94	2.56	2.76	3.23
	SD	1.72	2.09	1.75	1.52	1.63	1.89
Need Alloc	Mean	3.30	3.13	3.46	2.86	3.05	2.74
	SD	1.74	1.75	2.07	1.72	1.78	1.66
Equal Alloc	Mean	5.60	5.26	5.56	5.48	5.64	5.43

1.65

1.52

1.68

1.61

Note: \*Interaction significant.

Table 5
Perceived Fairness of Given Allocation: Interaction between Relative

Meritorious/Relative Needy and Internal/External Merit Need (Study 1)

No Locus Information

External Need

Internal Need

External Merit

Internal Merit

Reward Allocation*						
Relative Meritorious	Mean	3.37	4.33	3.65	3.83	4.06
	SD	1.18	1.06	0.87	0.62	1.08
Relative Needy	Mean	3.97	3.83	3.86	4.49	3.71
	SD	0.54	0.83	98.0	0.61	1.04
Punishment Allocation**						
Relative Meritorious	Mean	3.05	4.49	3.77	3.46	3.95
	SD	0.92	0.79	0.93	0.58	1.15
Relative Needy	Mean	3.85	3.72	3.69	4.12	3.36
	SD	0.58	1.11	0.79	0.72	99.0

# \*\*Interaction significant at p < 0.006.

Notes: \*Interaction statistically non-significant.

 Table 6

 Perceived Fairness of Given Allocation: Interaction between Relative

Meritorious/Relative Needy, Allocator-Recipient Role and Nature of Allocation (Study 1)

			Reward Al	location*				Ь	unishment A	llocation*		
	Mer: All	Mer: Alloc Role	Needy Recip Role	ip Role	Recip .	Recip Role	Mer: Alloc Role	c Role	Needy Recip Rol	p Role	Recip Role	sole
	Mean	SD	Mean	QS	Mean	SD	Mean	QS	Mean	QS	Mean	QS
Relative Mer												

Netative ivier									
Meritorious Alloc	2.89	1.93	3.42	2.22	3.06	1.81	2.67	1.59	2.69
Need Alloc	3.16	1.80	2.86	1.81	3.33	2.11	3.13	1.85	3.09
Eql Alloc	5.36	1.73	5.13	1.70	5.44	1.68	5.35	1.68	5.71
Relative Mer									
Needy Alloc	2.56	1.49	3.00	1.96	2.82	1.70	2.44	1.45	2.82
Need Alloc	3.44	1.69	3.40	1.65	3.60	2.03	2.58	1.55	3.00
Eql Alloc	5.84	1.46	5.38	1.78	69.5	1.35	5.62	1.68	5.56
Note: *Interaction non-significant	non-significa	nt.							
	٥								

1.76 1.47 1.61

3.51 2.76 5.46

1.52 1.59 1.54

1.99 1.85 1.71

2.95 2.71 5.40

1.98

Figure 3

Perceived Fairness of Given Reward and Punishment Allocation: Interaction
between Internal/External Locus of Merit/Need and Nature of Allocation (Study 1)

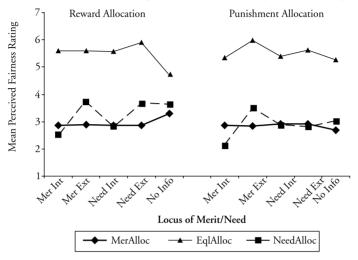


Figure 4

Perceived Fairness of Given Reward and Punishment Allocation: Interaction
between Nature of Allocation and Allocator/Recipient Role (Study 1)

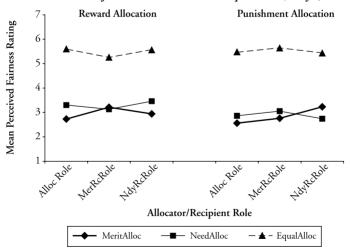


Figure 5

Perceived Fairness of Given Allocation: Interaction between Relative
Meritorious/Relative Needy and Internal/External Merit Need (Study 1)

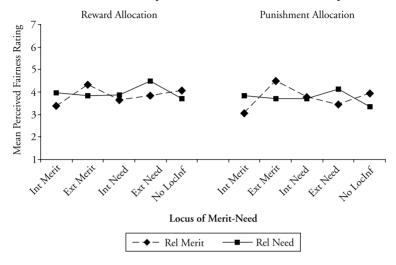
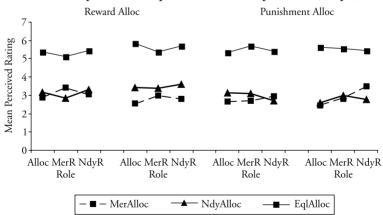


Figure 6

Perceived Fairness of Given Allocation: Interaction between Relative Meritorious/
Relative Needy, Allocator–Recipient Role and Nature of Allocation (Study 1)



reward equally between a meritorious and a needy recipient, and also showed the greatest perceived fairness of equal allocation of the reward. With reference to punishment allocation, again, subjects indicated the greatest preference for equal allocation of punishment to a meritorious and needy recipient, and indicated the greatest perceived fairness under equal punishment allocation. Considering the other two preferences, in the case of reward allocation, there was either a leaning (non-significant) in favour of the meritorious recipient or no significant difference between the meritorious and needy recipients, in allocation rule preference. In the case of perceived fairness of given reward allocation, need allocation was seen as more fair than merit allocation. With reference to punishment allocation also, there was clear supremacy of equality preference: in both allocation rule preference and perceived fairness of given punishment allocation, there was no significant difference between the meritorious and the needy recipients.

Since the unmistakable equality preference is related to the main question raised in the present investigation, this finding deserves more detailed discussion. On one hand, the greater equality preference found in the present study could be seen as a departure from the need preference so frequently reported in many of the Indian studies. On the other hand, this finding need not be interpreted as a fundamental deviation from the earlier findings; instead, it may be explained and interpreted in a different way. Equality preference or orientation may reflect more than one mechanism or value. First, equality preference may indicate an egalitarian philosophy, the thinking that rewards and punishment must be distributed equally among individuals, without discrimination in terms of merit or need. Second, equality preference may reflect a *cultural norm*, by way of collectivistic concerns in much the same way as need preference: equality may be associated with interdependence, concern for interpersonal harmony and welfare and cooperativeness rather than competitiveness. Despite the debates regarding the conceptualisation of individualism-collectivism, the values just mentioned would be accepted as characterising collectivism rather than individualism. Since both need and equality preference are associated with these values, one must allow for both equality and need preference under collectivism, as was suggested in the introductory section. A third connotation of equality preference could be a combination of merit and need: that is, by preferring equality, subjects are conveying that they cannot choose merit or need, and therefore, they choose merit and need. A fourth implied meaning of equality preference is

that of a *cognitive strategy*, that also serves social or interpersonal purposes. Since the choice between merit, need and equality has to be made in the context of specific situational information, individuals may try to integrate all the available information, and equality preference ends up being the resultant of this attempted integration. In other words, equality preference may be a response to the information provided in the context, and not only, or dominantly, a demonstration of a cultural norm or value. The last-mentioned argument receives some support when it is observed that earlier studies that reported a strong need preference did not incorporate situational or resource variables, although they did allow for equality as an alternative allocation rule. When equality is not an alternative (as in fact is the case in some investigations cited above), individuals may favour one allocation rule, or they may choose both allocation rules with the same likelihood. If the latter happens, this would be closer to the third connotation of equality (merit plus need) mentioned above. Some evidence of the "same likelihood" possibility has already been cited (Krishnan, 2000), and this particular meaning of equality may be examined further. For the present, the cognitive strategy explanation seems to be a plausible one for the consistent equality preference found in Study 1.

A fourth finding worth mentioning is the significant interaction between nature of allocation, and allocator/recipient role. This finding is a corroboration of the few earlier findings on these two variables (Krishnan & Carment, 2006; van Yperen et al., 2005). It may be noted that these two variables had significant effects and accounted for most of the total variance in perceived fairness, whereas the situational variables had much weaker effects. An explanation of this finding is that nature of allocation and the allocator/recipient perspective were more closely linked to the allocation itself than the situational variables (relationship and internal/external locus).

With reference to this significant interaction, although Equal Allocation was clearly perceived to be more fair than Merit or Need Allocation, between the latter two allocations, the Role made a difference. As hypothesised, role-congruent Perceived fairness was higher than role-incongruent Perceived fairness. That is, in the case of Reward allocation, Perceived fairness of Merit allocation was higher in the Meritorious recipient Role than in the Needy Recipient Role. Perceived fairness of Need Allocation was higher in the Needy Recipient Role than in the Meritorious Recipient Role. Similarly, in the case of Punishment allocation, Perceived fairness of Merit Punishment allocation

was higher in the Needy Recipient Role than in the Meritorious Recipient Role. The opposite was true with regard to Perceived fairness of Need Punishment allocation. This finding indicates that along with the cognitive strategy mentioned as an explanation of the strong Equality preference, self-interest as a motivational element was also operative.

A fifth finding in Study 1 was the absence of significant main effects of and interactions between the two situational variables that were expected to influence the dependent measures in a significant way. The question then is: why did allocator—recipient relationship, and internal/external locus of merit and need not have significant main effects or interactive effects on allocation rule preference, or perceived fairness of given allocation? The answer to this question seems to lie in methodological or procedural aspects of the investigation.

Regarding allocator—recipient relationship, real-life observations show the undeniable importance of this variable in Indian society. However, when presented with a hypothetical scenario containing this variable, subjects might have expressed their responses as a disapproval of nepotism, or they might have responded in accordance with social desirability. The lack of significant differences between relative and non-relative recipients was found in at least one Indian study (although that study showed interactive effects of this variable with other situational variables) (Krishnan, 2000). In short, the absence of a main effect of relationship on justice perception in the context of a scenario study should not be surprising. Moreover, the present study did show a significant interaction (although a weak one) between relationship and internal/external merit need in the case of punishment allocation.

With reference to internal/external locus of merit and need, the present finding is similar to that reported by Lamm and Schwinger (1980). These authors examined the role of internal or external need and found no significant effect of this variable. Possibly, in the present study, there was no obvious link between internal or external locus of merit and need of the recipients and the outcome (the successful conduct of the conference, in the case of reward allocation, and damage to the expensive machine, in the case of punishment allocation). Therefore, subjects might have seen no grounds for incorporating information regarding locus into their justice perception.

In other words, whether or not relationship and internal/external locus of merit and need actually play a significant role in justice perception can be verified by suitably modifying the allocation scenarios.

In summary, the main findings of Study 1 revealed certain unexpected aspects of justice perception, but also corroborated many expectations and earlier findings. One of the questions that these findings generate is related to punishment allocation. As already mentioned, in the findings of Study 1, there was a resemblance between allocation rule preference and perceived fairness of given allocation in the case of reward allocation, and also in the case of punishment allocation. However, this may not necessarily imply similarity in the underlying factors determining justice perceptions in reward and punishment allocation. It is quite possible that the present study (Study 1) did not adequately bring out the differences between the dynamics underlying reward allocation and those underlying punishment allocation. Methodological features, such as the same subjects responding to both the reward and the punishment scenarios, might have created a mental "set," and thereby influenced the responses. Moreover, the role of internal/ external locus of merit and need would be expected to be stronger in the case of punishment allocation, as implied by the literature on attribution of responsibility (Shaver, 1985). It is possible that the role of attributional aspects did not emerge more clearly in the first study because of the way in which the locus was manipulated: information was provided only about the locus of either merit or need, and not both. Further, the dynamics underlying justice perceptions related to punishment might be revealed more clearly if punishment is investigated in a context devoid of any comparison with reward allocation, or with another recipient. There could be other aspects as well that were not adequately highlighted in Study 1, as shown in investigations of punishment in the retributive justice perspective. Therefore, it was strongly felt that punishment allocation should be investigated separately in another study which focuses only on punishment. Study 2 was planned and conducted with this aim, and is described below.

#### Study 2

The Effect of Internal/External Locus of Merit and Need on Perceived Fairness of Punishments, and Importance of Need and Merit in Punishment Decision

The approach adopted in the second study varied from that of the first one in several respects. First, the focus in Study 2 was on punishment without the inclusion of reward.

Second, the issue was not that of distributive justice (in the sense of "allocation" between more than one person), but that of the role of locus of merit and need in deciding the fairness of various punishments with reference to one wrongdoer or offender. Accordingly, a scenario was presented to the respondents, depicting one person (the offender) who was described as being both meritorious and needy; the locus of his merit and need was simultaneously manipulated, by presenting different combinations of internal/external merit, with internal/external need. The rationale for adopting this view of internal/external locus was that providing information about both merit and need at the same time might lead to a finer manipulation of the internal/external locus variable, thus clarifying some of the ambiguous effects of this variable found in the first study.

The main questions of interest in the second study were as follows: considering the description of an offender who is said to be both meritorious and needy, and taking into account information regarding internal/external locus of merit and need.

- 1. how fair would a given set of punishments be perceived to be (perceived fairness of punishments)?
- 2. which punishment out of a given set of punishments would subjects consider most fair (a) from the allocator's (decision maker's) perspective and (b) from the recipient's (offender's) perspective?
- 3. how serious would the offence be perceived to be (seriousness of offence)?
- 4. how guilty would the offender be perceived to be (guilt of offender)?
- 5. what would be the rated importance of the offender's (*a*) need and (*b*) merit, as considerations in deciding the appropriate (fair) punishment (need importance and merit importance)?

The last-mentioned question was meant to provide information regarding a possible basis or component of equality orientation, in the light of the suggestion made in Study 1—namely, that equality preference among Indians might indicate, among other things, a preference for a combination of both merit and need. Whether this principle would apply to the case of punishment can thus be seen in the present study.

## Method

**Subjects** Ninety college students (65 males and 25 females), enrolled in a university in the central Indian state of Madhya Pradesh, participated in the study (mean age = 19.84 years, SD = 2.24). (This number was the sample retained after verifying the manipulation success of the main independent variable.) They belonged predominantly to the middle-upper socio-economic class.

**Design** Using the scenario method, the main independent variable examined in the present study was internal/external locus of merit and need. In addition, with respect to one dependent variable, namely, perceived fairness of punishment, nature of punishment was included as another independent variable (as a within-subjects variable).

Internal/external locus of merit and need was presented at the following nine "levels", and 10 Ss were randomly assigned to each condition:

- 1. Merit internal + Need internal
- 2. Merit external + Need internal
- 3. Merit internal + Need external
- 4. Merit external + Need external
- 5. Merit internal + Need no locus information
- 6. Merit external + Need no locus information
- 7. Merit no locus information + Need internal
- 8. Merit no locus information + Need external
- 9. Merit no locus information + Need no locus information

With regard to nature of punishment, six forms of punishment were described briefly, and subjects were asked to rate each punishment on perceived fairness.

The dependent variables were ratings of: (1) seriousness of the offence, (2) guilt of the offender, (3) perceived fairness of punishments, (4) preference for a given punishment (in the allocator's role and the recipient's role), (5) importance of need in deciding punishment and (6) importance of merit in deciding punishment.

Except for preference for a punishment, each of these dependent variables was assessed on a seven-point scale, with a rating of 1 indicating the lowest

end of the variable, a rating of 4 indicating the middle point and a rating of 7 indicating the highest end. Preference for punishments was to be examined in terms of the frequency of the choice of the punishments in the allocator's and recipient's role.

The Hindi version of the Social Behaviour Inventory 2, described below, was administered to subjects.

**Manipulation** Internal/external locus of merit and need was manipulated through information provided as part of the scenario. Manipulation check items were included in the inventory to verify the manipulation success of the independent variable.

**The Social Behaviour Inventory 2** Following an introduction to the purpose of the study, and some items related to general information about the respondent, a scenario was presented that depicted the following situation involving an offence. The protagonist in the scenario is a senior employee in an office of an organisation, who has contributed a great deal to the growth of the organisation (merit). The contribution he has made is described as being (a) due mainly to his own effort (internal merit) or (b) due to his good fortune (external merit).

The employee has taken office money without permission, which is the offence under consideration (equivalent to stealing or embezzling). His need for money is described either as arising out of his own careless expenditure (internal need) or because of his expenditure incurred on the medical treatment of his ailing mother (external need).

In some of the conditions (no locus information conditions), nothing was said regarding the internal or external locus of merit/need: that is, the sentence indicating the locus of merit or need was omitted from the scenario, retaining only the information that the employee was meritorious and needy.

**The Scenario** A senior employee in an office has contributed a great deal to the progress of his organisation. This has been due entirely to his own effort (due to his good fortune). One day a high-ranking official comes to know that an amount of Rs 50,000 is missing from the treasury of the office. The higher official calls the senior employee and asks for an explanation. After some time, the employee confesses that he was the one who had taken the money, to make purchases in connection with his daughter's wedding. But his intention was to return the money very soon. The employee states that he needed money, as he could not get it from any other source because

he had already borrowed large amounts from many sources. Later it is also learned that the employee's extreme need for money had arisen because he had spent most of his income on unnecessary expenditure (on the medical treatment of his mother).

Following the scenario, the following items were included to which subjects had to respond:

- (1) Seriousness (severity) of the offence (to be rated on a seven-point scale); (2) reasons for the rating in item (1); (3) guilt of the offender (to be rated on a seven-point scale); (4) reasons for the rating in item (3); (5) and (6) manipulation check items for need and merit, respectively—each item provided two alternatives, one indicating an internal basis and the other indicating an external basis: respondents were required to choose one of these two alternatives; (7) perceived fairness (to be rated on a seven-point scale) of six punishments, that varied in severity: the following six possible punishments were listed, and each one was to be rated on fairness:
  - (a) Handing over the offender to the police.
  - (b) Dismissing the offender from the job.
  - (c) Suspending the offender for 6 months.
  - (d) Putting pressure on the offender to return the money immediately, along with a fine.
  - (e) Withholding the offender's salary for 6 months.
  - (f) Deducting a small amount of money from the offender's salary every month.

An additional "Other" alternative was provided so that respondents could suggest their own punishment.

- (8) and (9) Choice of punishment in the allocator role (that of the high-level official, the decision maker) and in the recipient (offender) role—in these two items, subjects were required to make a choice out of the six punishments mentioned in the previous item.
- 10. (*a*) Importance of the offender's need (to be rated on a seven-point scale) and (*b*) importance of the offender's merit (to be rated on a seven-point scale), in deciding the punishment to be given to the offender.

*Hypotheses* No empirical evidence seemed to be available that was relevant to the questions addressed in the present study. Therefore, the

expected effects of the independent variable, and the relationships between the dependent variables, were based on extrapolations from whatever is known about attributional aspects of wrongdoing, and other aspects related to punishment.

It was expected that

- Perceived Fairness of punishments would vary significantly depending on internal/external locus of merit and need: in general, a more severe punishment would be perceived to be fair under the merit external/need internal condition, and the least severe punishment would be perceived to be fair under the merit internal/need external condition.
- 2. The likelihood of choice of a fair punishment would also vary significantly between the locus conditions, as indicated in the first hypothesis.
- Internal/external locus of merit and need would significantly influence seriousness of the offence, guilt of the offender and importance of need and merit of the offender, in determining appropriate punishment.
  - (In the absence of earlier empirical evidence, the direction of differences with regard to the expectations mentioned above was not specified.)
- 4. Seriousness of offence would be positively and significantly correlated with guilt of offender. The rationale was that similar attributions would be made for seriousness and guilt.
- 5. With regard to importance of need and merit in deciding appropriate punishment, there might be at least two possibilities: the two measures might be similar (non-significantly different), implying a form of equality orientation, or importance of need may be significantly greater than that of merit, implying a need orientation. This expectation was based on the observation that need and/or equality preference has been commonly reported in Indian investigations of distributive justice, and this has been explained in terms of collectivism. In the present study also, the possible effect of collectivism was allowed for, in the form of an equality orientation (expressed as a combination of need and merit importance), or in the form of a need orientation (expressed as greater need importance).
- 6. Seriousness of offence and guilt of offender would be significant predictors of need and merit importance. The basis of this expectation

was that seriousness and guilt would be judged before considering the importance to be attached to need and/or merit of the offender in deciding fair punishment. The former judgement might thus guide the latter.

The expectations mentioned above were examined through statistical analysis of the responses obtained from the subjects. The main results are reported below.

Results and Discussion Based on an inspection of the manipulation check responses, only those subjects were retained who had perceived the manipulation as intended (the number of subjects mentioned under "Method" refers to the final sample). The following analyses were carried out in order to answer the questions raised at the beginning of the present study (Study 2):

- 1. A repeated measures ANOVA to examine the effect of internal/ external locus of merit need, and punishment, on perceived fairness of punishments.
- Inspection of the frequencies of choice of various punishments in order to see which ones had the highest likelihood of being chosen, and whether this choice coincided with the punishments rated highest on perceived fairness.
- A multivariate analysis of variance (MANOVA) to see the effect of locus on perceived seriousness of offence, and perceived guilt of offender, the latter two being the covariates.
- 4. A MANOVA to see the effect of locus on need importance and merit importance.
- Multiple regression analyses to examine whether seriousness of offence and guilt of the offender significantly predicted need importance and merit importance.

Responses to the open-ended items (specifically, reasons for the ratings on seriousness and guilt) are not included in the present discussion because these responses did not yield any information that would facilitate the explanation and interpretation of the main results.

**Perceived Fairness of Punishment** Ratings of perceived fairness of punishment were subjected to a mixed-design 9 × 6 ANOVA, with internal/external locus as a between-Ss independent variable (nine levels) and forms of punishment as a repeated measure (six levels). The results revealed only

a significant main effect of punishment ( $F_{5,405} = 73.073$ , p < 0.001; partial  $\eta^2 = 0.474$ ). The perceived fairness rating was highest for the deduction punishment (mean = 5.54, SD = 1.83), this mean rating being significantly higher than the ratings for the other five punishments. Perceived fairness was lowest for the dismissal punishment (mean = 2.19, SD = 1.49). This mean rating was non-significantly different from the mean ratings for the police punishment (mean = 2.23, SD = 1.41), and the withhold salary punishment (mean = 2.31, SD = 1.59). Contrary to expectations, both the main effect of locus and its interaction with punishments were found to be non-significant.

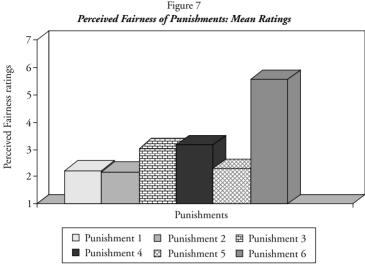
The means and standard deviations of perceived fairness of the six punishments have been presented in Table 7 and Figure 7.

Preference for Various Punishments

Preference for punishments was to be indicated in two items, one in the allocator (decision maker) role and, the other, in the recipient (offender) role. Four out of 90 subjects gave no response to these two items. Of the remaining 86 sets of responses, there were "Other" responses (choice of a punishment other than the given six) that had to be excluded because the exact punishment was not specified. There were 12 such responses (14%) in the allocator role and 10 (12%) in the recipient role. Inspecting the remaining responses, it was found that punishment 6 (deducting a small amount of money from the offender's salary every month) was chosen with the greatest likelihood, in both the allocator (decision maker) role (73.33%) and the recipient (offender) role (75.00%). This likelihood coincided, as expected, with perceived fairness of punishments: that is, punishment 6 was also rated significantly higher on perceived fairness than

Table 7
Perceived Fairness of Punishments: Mean Ratings

		Perceived Fairness	
Punishments	Mean	SD	
Handing over the offender to the police	2.23	1.41	
2. Dismissing the offender from the job	2.19	1.49	
3. Suspending the offender for 6 months	3.04	1.99	
4. Putting pressure on the offender to return the money immediately, along with a fine	3.17	1.99	
5. Withholding the offender's salary for 6 months	2.31	1.59	
6. Deducting small amount of money from the offender's salary every month	5.54	1.83	



other punishments. A few respondents mentioned punishment 1 (dismissing the offender from the job), or punishment 4 (pressurising the offender for immediate return of the money, along with a fine), but their number was too small to deserve further mention. None of the other punishments was chosen. It was neither necessary nor possible to carry out any formal statistical

analysis, such a chi-squared test.

Moreover, contrary to the expectations, there was no significant or systematic variation in the choice of punishment between the locus conditions. Possibly the deduction punishment was chosen mostly by the subjects, because it is only this punishment that appeared considerate to the offender and satisfied the retributive part of justice (the offender gets a punishment for his wrongdoing) as well as the restorative component (the offender is made to fulfil the responsibility of restoring the loss he had caused). All the same, the expectation that locus would influence the nature of punishment and also its fairness remains unconfirmed.

**Seriousness of Offence and Guilt of Offender** A MANOVA with internal/external locus as the independent variable and seriousness and guilt as dependent variables showed a non-significant main effect of locus on both seriousness and guilt. This finding also went against the hypothesis. It

appeared that subjects judged the seriousness of the offence, and the guilt of the offender on a basis unrelated to the locus information.

Need and Merit Importance The effect of locus on need and merit importance was examined with the help of a MANOVA including internal/external locus as the independent variable, and need importance and merit importance as the dependent variables. The results revealed a significant main effect of locus on both dependent variables (Wilks' lambda = 0.634, multivariate  $F_{16,160} = 2.564$ , p < 0.001, partial  $\eta^2 = 0.204$ ; need importance—univariate  $F_{8,81} = 2.574$ , p < 0.015, partial  $\eta^2 = 0.203$ ; merit importance—univariate  $F_{8,81} = 3.436$ , p < 0.002, partial  $\eta^2 = 0.203$ ). The overall rating of merit importance tended to be higher (mean = 5.728, SD = 1.209) than that of need importance (mean = 5.461, SD = 1.538), although this difference was non-significant.

With reference to locus conditions, need importance was highest under three conditions, namely, merit internal/need external condition (mean = 6.40, SD = 0.699), merit external/need external condition (mean = 6.20, SD = 0.919) and merit internal/need no locus information (mean = 6.00, SD = 0.943). It was lowest under merit no locus information/need internal (mean = 4.10, SD = 1.524). Merit importance was highest under four con-ditions, namely, merit internal/need external condition (mean = 6.50, SD = 0.707), merit external/need no locus information condition (mean = 6.20, SD = 0.632), merit external/need external condition (mean = 6.10, SD = 0.876), merit internal/need no locus information (mean = 6.00, SD = 0.667). It was lowest under the merit no locus information/need internal condition. An interesting feature could be noticed in the 'no locus information' condition, in which the locus was not mentioned for either merit or need. In this condition, there was clear divergence that could be discerned in importance ratings: need importance was significantly higher (mean = 5.80, SD = 1.48) than merit importance (mean 4.80, SD = 1.32). In other words, there was a tendency for both need importance and merit importance to be on the higher side when need had an external locus. When no internal/external locus information was provided for merit and need, need importance was higher than merit importance, corroborating some of the earlier Indian findings (it must be remembered that in the present study, equality was not an alternative). Overall, need and merit importance ratings were higher than the mid-point of the scale, being above 4 on a seven-point scale. The mean ratings of perceived importance have been displayed in Table 8 and Figure 8.

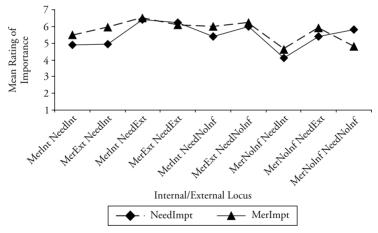
Table 8

Perceived Importance of Need and Merit: Mean Ratings
under Various Internal/External Locus Conditions (Study 2)

	Need Importance		Merit Importance	
	Mean	SD	Mean	SD
Merit Internal/Need Internal	4.90	2.01	5.50	1.05
Merit External/Need Internal	4.95	1.83	5.95	0.89
Merit Internal/Need External	6.40	0.69	6.50	0.71
Merit External/Need External	6.20	0.92	6.10	0.88
Merit Internal/Need No Locus Information	5.40	1.26	6.00	0.67
Merit External/Need No Locus Information	6.00	0.94	6.20	0.63
Merit No Locus Information/Need Internal	4.10	1.52	4.60	1.78
Merit No Locus Information/Need External	5.40	1.71	5.90	1.37
Merit No Locus Information/Need No Locus	5.80	1.48	4.80	1.32
Information				

Figure 8

Perceived Importance of Need and Merit: Mean Ratings
under Various Internal/External Locus Conditions (Study 2)



It can be seen that need and merit importance showed the same trend across different locus conditions.

**Multiple Regression** The importance that respondents attach to need and merit in deciding appropriate (fair) punishment was an issue of special interest in the present study. A further query in this regard was whether seriousness of

the offence and guilt of the offender would be significant predictors of need and merit importance. Multiple regression analyses, considering seriousness and guilt as the predictors and need importance and merit importance as the dependent variables revealed that seriousness and guilt predicted need importance significantly ( $F_{2,87} = 7.606$ , p < 0.001;  $R^2 = 0.389$ ), accounting for 39% of variance in need importance. However, seriousness and guilt did not emerge as significant predictors of merit importance.

**Bivariate Correlations** Bivariate correlations between seriousness, guilt, need importance and merit importance were as follows: there was a significant and positive correlation between seriousness and guilt (r = 0.582, df = 88, p < 0.001) and between need importance and merit importance (r = 0.396, df = 88, p < 0.001). The former correlation was in accordance with expectations. Seriousness showed a weak though significant and negative correlation with need importance (r = -0.185, df = 88, p < 0.04). Guilt showed a stronger significant and negative correlation with need importance (r = -0.383, df = 88, p < 0.001). Both seriousness and guilt were non-significantly correlated with merit importance.

Interpreting and explaining the findings of Study 2, it can be said that, as in the case of Study 1, many of the expectations were not borne out, but at the same time, the findings provide sufficient "food for thought" that would guide the way to the next set of research worthy questions related to punishment. Most of the questions raised in the present study were exploratory in nature, and the results called for an interpretation rather than explanation.

First, in the light of the offence described in the scenario, respondents chose one of the given punishments very consistently, and their choice was reflected in the ratings of perceived fairness of punishment. As suggested above, the deduction punishment was possibly chosen most frequently because it included different aspects of justice within punishment, namely, retributive as well as restorative justice, whereby the offender would be punished, and at the same time, the stolen amount could be given back to the organisation. This punishment also took human considerations into account. As commented by a few respondents, the deduction punishment would also minimise the hardship that might be caused to the offender's family.

Second, internal/external locus of merit need did not have significant effects on choice of punishment, its perceived fairness, seriousness of the offence or guilt of the offender. However, locus did significantly influence need and merit importance. As would be expected, need importance was

higher when need had an external locus, that is, the offender was needy because of causes beyond his control. Merit importance was also higher under external need conditions, but this was also true when merit had an internal locus—that is, the offender was meritorious owing to his own effort. Thus, the distinction in terms of locus seemed to be more apparent in the case of need than in the case of merit. Overall, there was no significant difference between need and merit importance. This suggests that subjects might have a general equality orientation when considering need and merit as the bases of justice. It may be recalled that this possibility was mentioned in the context of the findings of Study 1, as one implication of an equality orientation. In the present study, although the question was not directly related to equality preference, the near-equal importance given to need and merit may be taken as evidence in the direction of a "merit—need combination" interpretation of equality.

Third, seriousness and guilt were significant predictors of need and merit importance.

Seriousness and guilt were significantly and positively correlated, and so were need and merit importance. However, seriousness was significantly and negatively correlated with need importance (although the magnitude of the correlation was small), but its correlation with merit importance was non-significant. Guilt was also significantly and negatively correlated with need importance, but non-significantly correlated with merit importance. Together, seriousness and guilt predicted need importance significantly, but not merit importance. Overall, then, need importance was more sensitive to considerations of seriousness of the offence and guilt of the offender than merit importance. One interpretation of this finding is that respondents had an *a priori* view towards the importance of merit in judging wrongdoing, but their view of the importance of need would change in the light of the guilt that could be assigned to the offender.

In summary, investigating punishment independently, without including reward in any form, brought out certain preliminary aspects of perception of fairness of punishment. Notable among these aspects were the findings related to need and merit importance. A partial explanation of the equality orientation found in Study 1 with regard to punishment allocation could be in terms of a combination view—that is, respondents in the first study might have defined equality in terms of merit and need, instead of equality for its own sake.

## General Discussion

Taking together the findings of the two studies, the following points may be highlighted. When reward and punishment allocation were investigated in a distributive context, comparing a meritorious with a needy recipient, there was an unmistakable propensity among Indian subjects to exhibit a preference for equal reward as well as equal punishment allocation. This equality orientation not only was stronger than need and merit preference but also remained unaffected by situational variables, such as allocator—recipient relationship and internal or external locus of merit and need. Variables close to the allocation process, namely, the nature of allocation (whether it was merit allocation, need allocation or equal allocation) and allocator—recipient role proved to be significant, in terms of both main effects and interactions. Even with respect to the latter two variables, equality preference reigned supreme, although a motivational element by way of the recipients' self-interest was evident.

At first glance, the unanticipated absence of situational effects contradicted several findings from existing Indian studies and also went against the basic premise of the present set of investigations. On further analysis, it appears that the equality orientation found in the first study might actually represent a cognitive strategy of integrating all contextual information. Equality preference as a reflection of a collectivistic tendency is not ruled out, but is not the primary or only explanation. This view has been expressed by other authors as well in the context of cultures other than India (Fischer & Smith, 2003; Hui et al., 1991). This attempt at integrating all of the given contextual information might explain the apparent absence of significant effects of relationship and also internal/external locus of merit and need. At present, this cognitive explanation and interpretation is only a *possibility*, and this idea requires further empirical confirmation. As part of this cognitive interpretation of equality preference, it was suggested that subjects, instead of choosing between merit and need might tend to combine merit and need.

Among the questions raised at the beginning of Study 1 was one related to consistency between allocation rule preference and perceived fairness of given allocation as expressions of justice perception. The findings of the first study did indicate consistency between the two measures. Another major question was that related to similarity or, otherwise, between reward and punishment allocation. Study 1 exhibited a general similarity between

the two forms of allocation, although theoretically there would be grounds for expecting differences. Moreover, it was felt that attributional aspects would play a significant role particularly in justice perception in the context of punishment, as indicated in the existing literature (e.g., Shaver, 1985). However, the findings of the first study did not demonstrate such an effect (internal/external locus of merit and need were found to be non-significant also in the case of punishment allocation).

In order to examine attributional aspects of justice judgements in punishment, the second study was conducted, adopting a different approach. No comparison was entailed between two recipients, nor was there a question of comparing between merit, need and equality. Instead, the protagonist was said to be a meritorious person, who committed an offence because of need. The locus of his merit and need varied simultaneously. Internal/external merit and need was examined as an independent variable, with regard to its effect on the choice of punishment, perceived fairness of various punishments, and importance attached to need and merit in deciding the fairness of punishment. Seriousness of the offence and guilt of the offender were also kept in mind as two relevant aspects of punishment. The lastmentioned variables were expected to provide further information regarding the merit—need combination idea (as part of an equality orientation) suggested in the context of the first study.

The findings of the second study, again, contradicted most of the expectations related to the effect of internal/external locus on the choice of punishment, and on perceived fairness of various punishments. However, there were three notable findings.

First, internal/external locus had a significant effect on need importance and merit importance, although not a powerful one.

Second, need and merit importance were at the same level, providing some grounds for the "combination" idea suggested earlier. Some support could be found for a stronger leaning in favour of need rather than merit, in one of the control conditions, namely, the condition in which no locus information was provided, either for merit or for need. However, this feature was found only in one condition and did not change the general trend.

Third, seriousness of the offence and guilt of the offender together predicted a significant proportion of variance in need importance, but not merit importance. It is suggested that merit-related judgements in the context of punishment are made *a priori*, and independently of contextual information, whereas need-related judgements in the same context are more sensitive to

contextual information that enables individuals to judge the severity of the offence and guilt of the offender. This possibility, like the ones mentioned earlier, also requires further exploration. The questions addressed in the second study were exploratory in nature, and in the absence of existing empirical investigations related to the same questions, the present findings could not be directly compared with any earlier findings.

Additional aspects of punishment have to be addressed in depth. Specifically, between reward and punishment, the aversive nature of punishment (compared to the pleasant nature of reward) might make persons take a softer stand when it comes to punishment allocation. In a distributive–justice context, they might think it would be less humanitarian to assign more blame, and thus allocate more punishment to one person, than to distribute the blame and punishment equally between the potential recipients. On the other hand, because a reward is positive, assigning more credit, and thus allocating more of a reward to one of the recipients may not invoke a serious humanitarian question in the persons making such a judgement.

Fourth, outside of a distributive context, the elements of desert and assigning responsibility would be strong considerations in the case of decisions regarding punishment. As already cited, the connection between responsibility and desert has been discussed by some philosophers (Feather, 2002; Smilansky, 1996). Exactly how such a link is established in the light of socio-cultural considerations of humanitarianism (sensitivity to need considerations) must also be investigated. In the present set of studies, the link between merit/need of the recipient and the outcome was not clearly established in the case of punishment in the first study. An attempt was made in this direction in the second study. The link between need and wrongdoing might actually be perceived as a justification, a kind of saving grace for the needy offender. The link between merit and wrongdoing still remains ambiguous. A meritorious person might be seen as being more responsible for preventing a negative outcome than a person who is not as meritorious, and to that extent, as deserving more punishment than the other person. If this is so, the internal or external locus of merit in such a context might not make a difference. On the other hand, the internal or external locus of need of a person might have different effect.

Fifth, the decision about a "just desert" (Carlsmith et al., 2002) might involve greater complexity, going beyond locus of merit and need. Punishment may be recommended on the basis of sheer blameworthiness of the offender,

without taking cognizance of situational factors such as the merit or need of the offender, locus of merit and need or relationships. The absence of any significant effect of situational factors on punishment allocation in both studies suggests that a variable like internal or external locus may not matter, after all.

In short, the present set of investigations have provided findings which raise pertinent questions requiring further research, especially on the dynamics of deciding punishment for wrongdoing, taking into account cultural as well as contextual characteristics.

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