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Distributive justice research from an interactionist per-
spective II: The effects of reducing social control and
reducing subject's responsibility

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ABSTRACT

A review of interactionist studies in the domain of distributive justice is given. The general assumption of this research is that attitudes towards distribution principles and functionally equivalent situation factors interact, i.e., affect distribution behavior and justice judgments synergetically. This means that the variation of situational characteristics such as relative achievement has a stronger impact on distribution behavior for individuals with a favorable attitude towards the corresponding distribution principle (equity) than for subjects with an unfavorable attitude. Research results are inconsistent regarding this general hypothesis. The present research was designed to test the conjecture that person-situation-interactions can only be expected in situations which do not impose normative constraints on individuals, i.e., which do not suggest strongly a particular distribution or judgment. Continuing previous research, two studies were conducted in which normative constraints were reduced (1) by leaving the corecipient anonymous to the subject and (2) by having subjects distribute chances to win money instead of money. The first strategy had no effects. The latter procedure, which reduces the subject's responsibility for the final result, was successful in removing behavioral constraints present in earlier studies. Some, but not all, of the expected person-situation-interactions were found. Subjects with a positive attitude towards equality tended more than subjects with a negative attitude to disregard achievement differences when distributing rewards. A similar interaction effect was not found, however, for attitude towards equity.

ZUSAMMENFASSUNG

Es wird ein Überblick über bisherige interaktionistische Untersuchungen zur Verteilungsgerechtigkeit gegeben, in denen die These untersucht wurde, daß Einstellungen zu Verteilungsprinzipien mit funktional äquivalenten Situationsfaktoren interagieren, d.h. Verteilungsverhalten und entsprechende Gerechtigkeitsurteile synergetisch bedingen. Eine solche Interaktion bedeutet, daß die Variation des situativen Kontextes, z.B. des Leistungsverhältnisses der Betroffenen, bei Personen mit einer positiven Einstellung gegenüber dem entsprechenden Verteilungsprinzip (Leistungsprinzip) einen größeren Effekt hat als bei Personen mit einer negativen Einstellung. Die Ergebnisse der Forschung stützen diese These nur teilweise. In zwei neuen Experimenten wird die Überlegung untersucht, daß Person-Situation-Interaktionen nur unter Bedingungen erwartet werden können, die Verhalten nicht normativ restringieren und keine bestimmte Verteilung nahelegen. Aufbauend auf früheren Untersuchungen werden normative Restriktionen durch zwei Strategien zu reduzieren versucht, (1) durch Anonymisierung des Korezipienten und (2) durch die Verteilung von Gewinnwahrscheinlichkeiten statt von Geld. Die erste Strategie erwies sich als wirkungslos, die zweite führte zu der intendierten Varianzerweiterung des Verhaltens. Übereinstimmend mit den Erwartungen konnten zumindest einige Interaktionen nachgewiesen werden. Personen mit einer positiven Einstellung zum Gleichheitsprinzip sahen bei der Gewinnaufteilung von Leistungsunterschieden eher ab als Personen mit einer negativen Einstellung. Mit der Einstellung zum Leistungsprinzip konnte der entsprechende Interaktionseffekt nicht nachgewiesen werden.

METATHEORETICAL PREFACE

The studies described in this paper are part of a research program aimed at investigating the role of person-situation-interactions in the domain of justice judgments and distribution behavior (Schmitt, 1980). The basic premise of this program has been described in earlier papers (Schmitt, 1980; Schmitt et al., 1994) and will be recapitulated only briefly here. *Aims and Scope of Personality and Individual Differences (PAID)*, the official journal of the *International Society for the Study of Individual Differences (ISSID)*, gives a clear description of the interactionist agenda. *ISSID* and the editors of *PAID* (Eysenck & Eysenck) share the opinion of the present authors that theorizing and research in psychology may profit substantially from integrating general and differential psychology and from combining experimental and correlational research strategies. The following quote from *Aims and Scope of Personality and Individual Differences* helps to clarify this view:

"The two disciplines of scientific psychology, as Cronbach called them in his celebrated presidential address to the American Psychological Association, are the experimental, concerned with general laws, and the correlational, concerned with individual differences. As he pointed out then, they are both indispensable to a proper understanding of man and his behaviour. More than that, one cannot properly exist without the other. Individual differences interact in almost every case with experimental and situational paradigms to produce results differing profoundly for individuals of different personalities, different capacities, different motivations. Consequently, studies in experimental, social, educational, clinical or industrial psychology which do not take into account personality factors (using that term in its widest sense as referring to individual differences in temperament, intelligence, character, attitudes, aptitudes etc.) inevitably throw away a great deal of potential information, and enlarge the error term in their analysis to an unacceptable degree. Main effects are frequently swamped by interaction effects, and these are lost when we do not include personality in the research design. Conversely, the concepts and laws of experimental psychology are vital to any scientific understanding or interpretation of the results of work in personality; if we are to explain the major factors of personality in scientific terms, we must make appeal to the concepts used in experimental and physiological psychology. Only in this way, i.e. by the integration of the two disciplines of scientific psychology, can we hope to build up a unitary science, as opposed to that "collection of chapter headings" of which William James spoke so disparagingly."

This statement reads like a reconciliation of one of the most profound debates in modern psychology, the person-situation debate (Epstein & O'Brien, 1985; Kenrick & Funder, 1988; Schmitt, 1990). Although it may sound like a creed, it is a conclusion from empirical evidence. Most studies conducted during the sixties and seventies to solve the person-situation-issue found that the largest proportions of variance in behavior was neither due to individual differences nor to situational differences but to person-situation-interactions (Bowers, 1973; Endler & Hunt, 1966; Sarason, Smith, & Diener, 1975).

Given these findings, it is surprising how rarely interactionist designs have been realized in past and current research. Even in *PAID*, 1 in 25 studies at most is based on an interactionist design. According to our estimate, the ratio is not much better in other personality journals (e.g., the *Journal of Personality*), it is certainly worse in experimental journals, it is not better in social psychology journals, and it is not better in journals which cover personality and social psychology such as the *Journal of Personality and Social Psychology (JPSP)*.

It seems that Cronbach's plea to move beyond general and differential psychology and to integrate both disciplines into a united science has not convinced the scientific community. Rather, the experimental and the correlational research paradigms continue to coexist fairly independently. This is true for most substantive areas in psychology. And it is especially true for social justice research. Most research in social justice is either experimental or correlational. There are, however, some noteworthy exceptions. A few studies on the justice motive examined situation and person factors simultaneously, such as the draft lottery study by Rubin & Peplau (1973), the study by Zuckerman, Gerbasi, Kravitz, & Wheeler (1975), which used the Lerner & Simmons (1966) paradigm to test the construct validity of the Rubin & Peplau (1973) Just World Scale, the study by Dion & Dion (1987) on "deserving" physical attractiveness, and the research by Hafer & Olson (1989) on effects of the belief in a just world on the self-concept.

The present research is concerned with person-situation-interactions in distributive justice. Before we describe past studies, we have to clarify what type of interactions are meant. The term "interaction" does not refer to social interactions among individuals. It also does not refer to dynamic systems and reciprocal causation. Rather, the most simple case of a person-situation-interaction according to Magnusson & Endler (1977) is considered, i.e., the statistical interaction between a situation factor and a person factor which are assumed or known to be functionally equivalent for a particular behavioral outcome.

Regarding distributive justice, this means considering at least two situations which differ in the degree to which they suggest a certain distribution, for example a distribution according to needs or according to achievements. Thanks to theoretical work by Deutsch (1975, 1985), Lerner (1980), and others, and thanks to empirical research which has been reviewed, for example, by Mikula (1981), Deutsch (1985), and Törnblom (1992), we have considerable knowledge regarding which distributions are preferred in which situations. Less is known about which individuals prefer which distributions. The available evidence has been reviewed by Major & Deaux (1982) and others. Some authors have suggested that the most straightforward way to predict individual preferences for certain distributions may be to measure individuals' attitudes towards different distribution principles directly. Available measurement instruments have been developed by Jasso (e.g., 1983), Bossong (1983a), Montada, Schmitt, & Dalbert (1983), Schwinger & Winterhoff-Spurk (1984), Sabbagh, Dar, & Resh (1994), and Winterhoff & Herrmann (1979a).

An interactionist research design requires the combination of such attitudes as person factors with situation factors in the same study. Interactionism would not only predict that both explain unique proportions of variance in distribution behavior. The crucial prediction from an interactionist perspective has been described by Schmitt et al. (1994, p. 7) as follows:

"... situational differences and individual differences do not guide behavior independently from each other but in a synergetic combination. This combination can ... stem from various psychological mechanisms For example, individuals may react differentially to the same situational difference because they construe the situations or modify it actively depending on their personality. In a statistical sense, individual differences act as moderators of situational differences and vice versa. To give a specific example for the substantive domain of justice, subjects with a positive attitude towards the need principle should be more sensitive than subjects with a negative attitude to the variation of needs. That is, the variation of needs is not expected to have (only) a general effect on the distribution of outcomes or on justice judgments regarding a particular distribution. Rather, the effect of situational need variations should be conditional

upon the person factor, i.e., the subject's attitude towards the need principle. The situational variation of needs should make a larger difference for subjects with a favorable attitude than for subjects with an unfavorable attitude. In other words, a positive attitude towards the need principle amplifies the effect of a situational need variation. Since factors which interact statistically are formally equivalent, the same interaction can also be phrased in terms of differential effects of the person factor. More specifically, the effect of attitude towards the need principle should increase with the magnitude or salience of needs in a particular situation. In cases where needs are irrelevant, unknown, and not imputable, individual differences towards the need principle should make no difference at all. Note that if such an interaction is fully ordinal, it implies the additional presence of main effects of both, the situation and the person factors."

EMPIRICAL EVIDENCE ON PERSON-SITUATION-INTERACTIONS IN DISTRIBUTIVE JUSTICE

Empirical evidence on the synergetic effect of functionally equivalent person and situation factors in distributive justice is limited to a few studies. Schmitt et al. (1994) have described these studies in detail and will be recapitulated here only briefly.

Vignette Studies with Suggested Distributions as Dependent Variables

Bossong's Research

Bossong's first study was on fair income (Bossong, 1983a; Experiment 3). Fifty six female subjects were given the curriculum vitae of individuals who had just graduated from a university. Subjects were asked to suggest a fair net monthly income for the applicant's first job (dependent variable). Two factors were varied between subjects: gender of applicant and difficulty of training (difficult, easy). Subjects' preference for equity vs. equality was measured using a ten-item questionnaire. Each item contains a brief description of a distribution conflict. Subject have to decide which distribution out of five, ranging from exactly equal to exactly equitable, they would consider most fair.

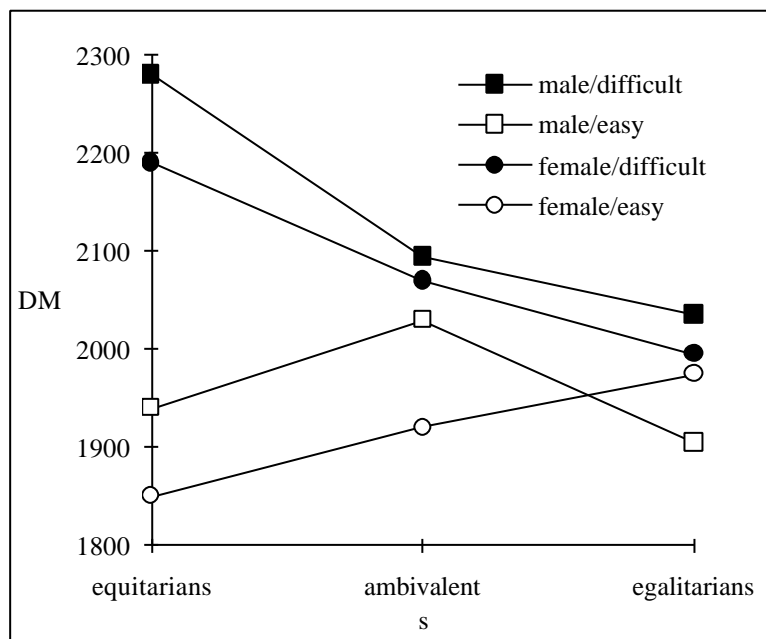


Figure 1

Fair Income for Men and Women with an Easy vs. Difficult Education as Suggested by Subjects with Different Preferences for Equity vs. Equality (Adopted from Bossong, 1983a, p. 42)

Subjects were split into three groups of approximately equal size based on their scale scores (equitarians, egalitarians, ambivalents). A 2 (gender) x 2 (difficulty of training) x 3 (justice preference) analysis of variance revealed a significant main effect for gender of applicant, a significant main effect for difficulty of education, and a significant first order interaction for difficulty x justice preference. The corresponding means are given in Figure 1. Regarding the crucial interaction effect, it can be seen that subjects with a strong preference for equity put more weight on differential contributions (difficulty of training) than subjects with an ambivalent attitude or with a strong preference for equality. This finding is in line with interactionist expectations and supports the construct validity of Bossong's questionnaire.

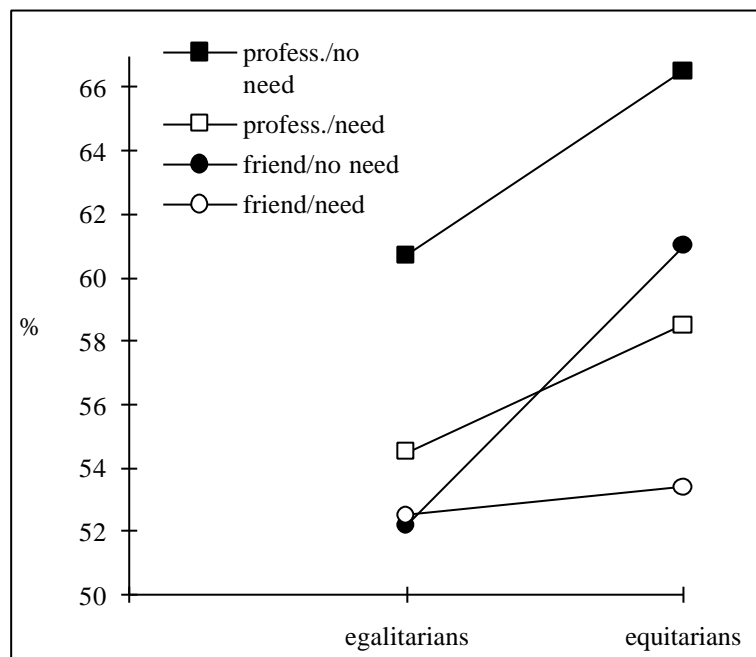


Figure 2

Percentage of Fair Pay (for Recipients with Superior Achievement) in Friendly vs. Economic Relationships and for Presence vs. Absence of Needs (of Recipients with Inferior Achievement) as Suggested by Subjects with Different Preferences for Equity vs. Equality (Adopted from Bossong, 1983b, p. 569)

Twenty-six female high school students served as subjects in Bossong's (1983b) second vignette study. Situational factors were (1) the social relation between two recipients (friendly vs. economic) and (2) the presence vs. absence of needs of the one recipient who contributed less to a common achievement. Both situation factors were varied within subjects. Subjects had to decide how much money they would pay each person for the job. The values for both recipients were transformed into percentages. The percentage for the person with superior achievement served as the dependent variable. From an interactionist perspective, equitarian subjects should put more weight on differential contributions in professional relations than in friendly relations.

A 2 x 2 x 2 analysis of variance with repeated measurement on the situation factors revealed sig-

nificant main effects for all three factors. The corresponding means are given in Figure 2. Contrary to the general interactionist hypothesis, no interaction between situational factors and dispositional factors was found. Subjects with a preference for equity did not put more weight on unequal contributions than subjects with a general preference for equality.

Research by Schmitt et al. (1994)

The first of two vignette studies conducted by Schmitt et al. (1994) dealt with own contributions of insurance clients. Six different insurance cases were described to 80 students. Subjects had to indicate for each case, on natural scales (ranging from 0% to 100%), the percentage of the total costs that they would consider a fair contribution of the client. Two situation factors were varied between subjects: (1) the client's responsibility for the damage (low, high) and (2) the client's economic situation (poor, wealthy). Subjects' attitudes towards different distribution principles were measured with a justice inventory which will be described in more detail later (cf. Appendix 1). Four interactions between person and situation factors were expected:

1. A positive attitude towards equity should amplify the effect of the client's responsibility.
2. A positive attitude towards need should amplify the effect of the client's economic situation.
3. A positive attitude towards equality should lessen the effect of the client's responsibility.
4. A positive attitude towards equality should lessen the effect of the client's economic situation.

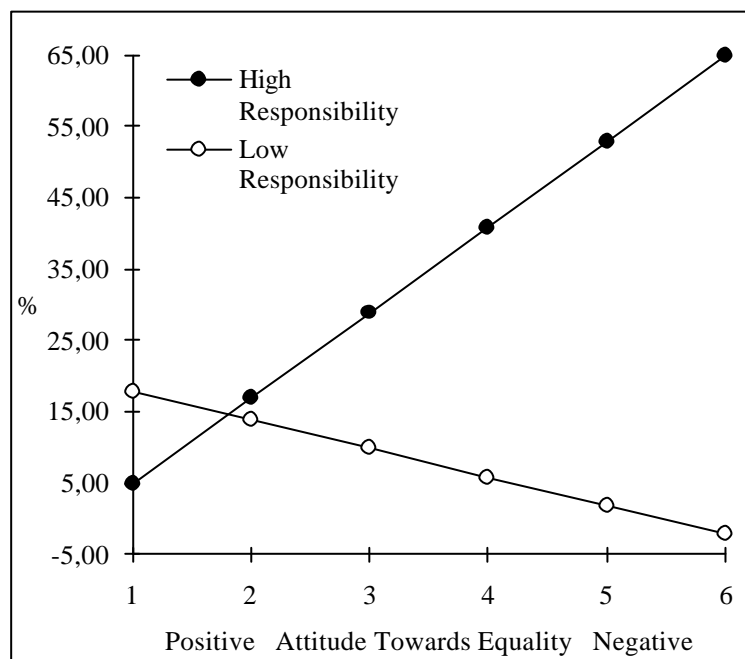


Figure 3

Mean Percentage of Own Contribution Assigned for Poor vs. Wealthy Insurance Clients with High vs. Low Responsibility for their Damage (Adopted from Schmitt et al., 1994, p. 27)

These hypotheses were tested via multiple regression analyses with dummy-coded situation factors and product terms for testing person-situation-interaction effects (cf., Aiken & West, 1991; Cohen, 1978; Dalbert & Schmitt, 1986). Only the third hypothesis was supported by the data. The

remaining interaction effects were not significant. The direction of the significant interaction effect can be seen from Figure 3. In line with expectations, responsibility has a lower effect on the dependent variable for subjects with a positive attitude towards equality than for subjects with a negative attitude.

The second vignette study by Schmitt et al. (1994) dealt with a contribution conflict regarding university resources (teaching capacity). More specifically, a situation was described in which a fellow student who, for various reasons, was unable to accomplish his degree in time and who asked the department exam committee to defer the date of the final exam. Subjects (120 students) were asked to indicate their opinion, how fair or unfair it would be if the committee would accept or reject the request. Six different explanations for the student's delay with exams were construed by varying two factors between subjects. Factor *Reason* had three levels: (1) the student works for a "Peace Committee Yugoslavia", (2) the student has to work to support himself, (3) the student works to make money for an expensive hobby and for expensive vacations. Factor *Urgency* had two levels: (1) the student requested postponement to avoid being expelled from the university, (2) the student requested postponement to avoid stressful preparations for his final exam and the risk of poor grades. Subjects' attitudes towards different distribution principles were measured with the same justice inventory that was used in the previous study. Four interactions between person and situation factors were expected:

1. A positive attitude towards equity should amplify the effect of the students' reason for requesting a postponement. More precisely, the difference between forced (Reason 2) and voluntary delays (Reason 1 and 3) should be larger for subjects with a positive attitude towards equity than for subjects with a negative attitude.
2. A positive attitude towards need should amplify the effect of the urgency of the request.
3. A positive attitude towards equality should lessen the effect of the reason factor.
4. A positive attitude towards equality should lessen the effect of the urgency factor.

Contrary to expectations, none of these interaction effects were significant in appropriate multiple regression analyses with dummy-coded situation factors and product terms for testing person-situation-interaction effects (cf., Aiken & West, 1991; Cohen, 1978; Dalbert & Schmitt, 1986).

Additional exploratory analyses revealed an unexpected interaction between attitude towards equity and urgency. In the high urgency condition, preference for equity had a weak positive correlation with refusing the request, while in the low urgency condition, this association was stronger.

Studies with Distribution Behavior as the Dependent Variable

Herrmann and Winterhoff-Spurk's (1980) Research

These authors measured high school students' attitudes towards equity and parity with two Rasch scales. They defined equity-typed individuals (E-type) as having scores above the median in the equity scale and parity scores below the median. Parity-typed individuals (P-type) had the opposite pattern of attitudes (high parity and low equity scores).

In a first experiment (Winterhoff & Herrmann, 1979b), 44 E-typed and 44 P-typed subjects were selected from a larger sample of 256 high school students. Subjects were invited to compete with an anonymous partner in a computer game. Subjects were given bogus feedback on their relative achievement. In one experimental condition, they were told that they had performed about twice as

good as their partner. In the second condition of this factor, they were told that their partner was about twice as good as them. Besides *Relative Achievement*, *Commitment* was varied as a second factor. In one condition, subjects were told their values on the attitude measures, while in the second condition, they were not informed about their typicality. Subjects were asked to distribute 30 tokens, which could be turned into pens, toys, books, etc., among themselves and their partner. The dependent variable was the number of tokens a subject kept for himself or herself.

A 2 (type) x 2 (relative achievement) x 2 (commitment) analysis of variance revealed a significant main effect for relative achievement, explaining 49% of the variance of the dependent variable, and a significant interaction between type and relative achievement, explaining 4% of the variance. The mean numbers of tokens kept by E-type and P-type subjects under the low and high relative achievement conditions are given in Figure 4.

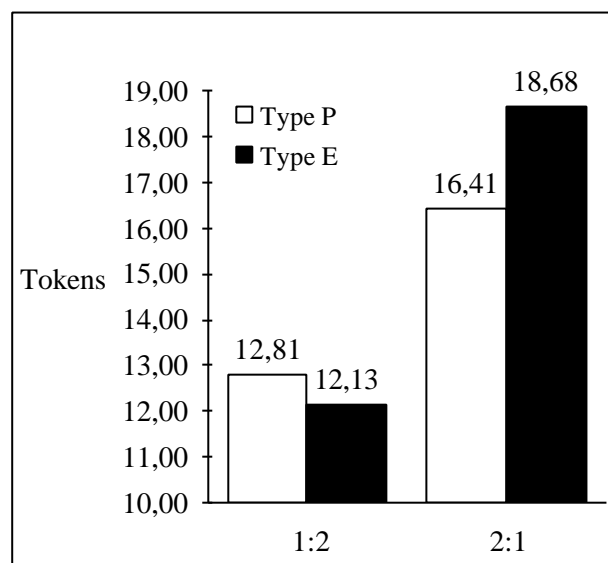


Figure 4

Mean Amount of Tokens Kept by E-Type and P-Type Subjects under Conditions of Low (1:2) vs. High (2:1) Relative Achievement (adopted from Winterhoff & Herrmann, 1979b, p. 17)

The pattern of results given in Figure 4 could be replicated almost exactly in a second experiment by Winterhoff & Herrmann (1979b), which differed from the first one only with regard to the commitment factor. In one condition of the commitment factor of the second experiment, subjects were told their correct attitude typicality, while in the second condition, they were given bogus feedback on their attitude and told that they belonged to the opposite type. However, this manipulation had again almost no effect on the subjects' distribution behavior.

Thus, both experiments support the general interactionist hypothesis that functionally equivalent person and situation factors affect the outcome behavior to be explained in a nonadditive, i.e., synergistic fashion.

Research by Schmitt et al. (1994)

In a study by Schmitt et al. (1994), Herrmann & Winterhoff-Spurk's (1980) research was replicated

and extended in three regards. *First*, need was considered in addition to equity and equality as a distribution principle. *Second*, individual attitudes towards these principles were measured with several questionnaires. *Third*, situational counterparts of personal attitudes were included for all three principles and varied experimentally.

As in Winterhoff & Herrmann's (1979b) studies, relative achievement was varied as a situation factor which can be assumed to be functionally equivalent to a preference for equity. In one condition, subjects were told to have been twice as good as their partner. In the second condition, they told that they had only been half as good.

Deutsch (1975) and Lerner (1977) have suggested that the equality principle is generally preferred in cooperative social relations. Results from several studies support this assumption (e.g., Bierhoff, 1981; Bossong, 1983a; Deutsch, 1985; Schmitt & Montada, 1982; Schwinger, 1980). While cooperative social relations are usually characterized by common goals, mutually exclusive goals are typical for competitive contexts of which the best example may be sports. Consequently, Deutsch (1975), Lerner (1977), and others have predicted that equity would be considered most appropriate in competitive social contexts. Although the empirical evidence is not entirely consistent (Schmitt, 1994), some studies have confirmed this prediction (e.g., Bossong, 1983b; see above). Following Deutsch's and Lerner's lines of reasoning, social context was varied as a second factor. Under one condition, subjects performed together with a partner (cooperative context), while under the other condition, they were instructed to compete against an opponent (competitive context).

Past research has shown that needs are taken into account when they are obvious (e.g., Bossong, 1983a,b; Lamm & Schwinger, 1980). To test whether attitudes towards need amplify situational differences in need, need of partner/opponent was varied as a third factor in Schmitt et al.'s (1994) experiment. Using the waiting room method, the subjects's partner/ opponent mentioned strong financial needs in one condition, while in the second condition, no financial needs were mentioned.

Attitudes towards equity, equality, and need were measured with a justice inventory which consists of two parts (cf. Appendix 1). The second part of the justice inventory was adopted from Bossong (1983a). The original version of this instrument was changed slightly for style and for inflation during the last decade. The first part contains, in random order, items from the following questionnaires (for details, such as unifying the response formats, see Schmitt et al., 1994):

1. Schwinger & Winterhoff-Spurk (1984) adopted and refined Winterhoff & Herrmann's (1979a) Rasch scales for measuring adolescent attitudes towards equity and parity. Schwinger & Winterhoff-Spurk's equity scale has eleven items; the parity scale has twelve items.
2. Based on an experimental questionnaire (Schmitt & Montada, 1982), Montada, Schmitt, & Dalbert (1983) developed scales for measuring attitudes towards equity (9 items), need (6 items), factual equality (4 items), and equality of chances (6 items). Short versions of these scales (with four items per principle) were included in Schmitt et al.'s (1994) justice inventory.
3. Sabbagh, Dar, & Resh's (1994) questionnaire has 16 items for measuring attitudes towards equity (9 items), parity (4 items), and need (three items).
4. In order to analyze the discriminant validity of these measures vis à vis measures for other justice constructs, Dalbert, Montada, & Schmitt's (1987) Belief in a Just World Scale (6 items) and the Centrality of Justice Scale (5 items) were also included.

The experimental procedure was as follows (a detailed description is given by Schmitt et al., 1994): A total of 128 students were recruited individually. Each subject was led to a waiting room in

which his or her partner/opponent was already waiting. This person was a confederate who started an informal conversation. During the conversation, she either mentioned severe financial needs of her own, or she did not mention such needs. After a while, the experimenter came and explained the computer puzzle to be solved. She told the two persons either to be a team and maximize their common profit (cooperative context), or to be opponents and maximize their individual profit (competitive context). The time needed to solve the puzzle would determine the pay. Individual times would be added to determine the total amount of money. Bogus feedback was used to make subjects believe that they were either twice as good or half as good as their partner/opponent. Using faked lots, the subject was assigned responsibility for distributing the money. The amount to be distributed was always 30 Deutsche Mark (DM). The amount of money kept by the subject was the dependent variable.

The following 4 two-way interaction effects between situation factors and attitudes were expected:

1. Interaction effect of relative achievement and attitude towards equity: The effect of relative achievement was expected to be stronger for subjects with a favorable attitude towards equity than for subjects with a less favorable attitude towards equity.
2. Interaction effect of need and attitude towards need: The effect of need was expected to be stronger for subjects with a favorable attitude towards need than for subjects with a less favorable attitude towards need.
3. Interaction effect of relative achievement and attitude towards equality: The effect of relative achievement was expected to be weaker for subjects with a favorable attitude towards equality than for subjects with a less favorable attitude towards equality.
4. Interaction effect of need and attitude towards equality: The effect of need was expected to be weaker for subjects with a favorable attitude towards equality than for subjects with a less favorable attitude towards equality.

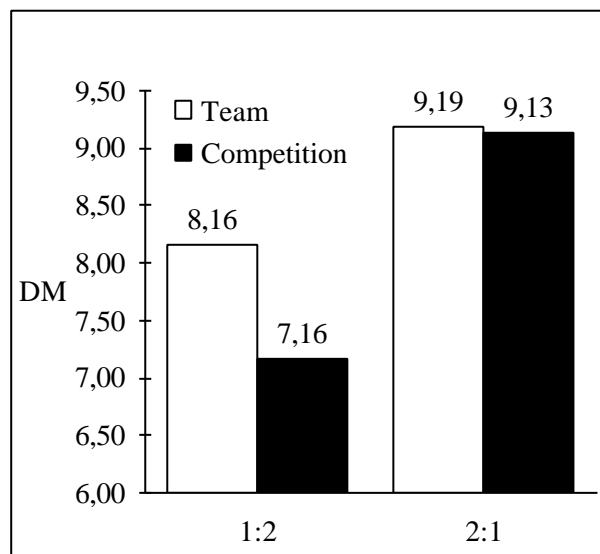


Figure 5

Mean Amount of Money (DM) Kept by Subjects in Schmitt et al.'s (1994) Study Depending on Relative Achievement and Social Context

Contrary to expectations, none of these interaction effects were significant. Only significant effects of the situation factors emerged. The main effect of relative achievement accounted for 27% of the variance of the dependent variable. The two-way interaction between relative achievement and social context accounted for 3% of the variance. Subjects with an inferior achievement kept more money in the team condition than in the competition condition. No such difference appeared for subjects with a superior achievement. As a consequence of this interaction, there was also a significant main effect of social context (3% variance). The means of the corresponding experimental conditions are given in Figure 5.

Trying to explain the difference between their results and the results from Herrmann & Winterhoff-Spurk's (1980) studies, Schmitt et al. (1994) reasoned that in their study, subjects perceived a strong social norm to distribute the money in a certain way, while Herrman & Winterhoff's subjects did not perceive such norms and therefore behaved more in congruence with their attitudes. This explanation seems meaningful given three important differences between the studies.

A first difference is subjects' age. Herrmann and Winterhoff-Spurk's subjects were adolescents (12- and 13-year-old high school students), while Schmitt et al.'s subjects were adults (university students in their twenties). Herrmann and Winterhoff-Spurk's subjects perhaps regarded the experiment more as a game than as a serious competition. If so, social norms regarding an appropriate distribution may not have been salient and this may have left room for individual differences in attitudes to come into play. By contrast, Schmitt et al.'s adult subjects may have taken the experimental situation more serious and may have been more concerned with the social adequacy of their behavior.

A second difference is the kind of rewards. In Herrmann and Winterhoff-Spurk's experiments, these rewards were tokens. Although the subjects could convert them into items with material value (toys, books, pens, etc.), tokens may have less economic appeal than money -- which is the most obvious economic value in our society. Consequently, the distribution of tokens may have led Herrmann and Winterhoff-Spurk's subjects to conceive the experiment more as a game, while Schmitt et al.'s subjects, who had to distribute money, may have taken the experiment more as a serious economic transaction. The implication of this reasoning is similar to the implication of the age difference: The subjects who had to distribute money may have been more concerned with the social adequacy of their behavior.

A third difference is anonymity of vs. acquaintance with the partner/opponent. The subjects in Herrmann and Winterhoff-Spurk's experiments did not meet the person against whom they competed, whereas the subjects in Schmitt et al.'s study were introduced to and even had a brief conversation with their partner before the experiment. These circumstances may have raised the subjects' awareness of the social norms which are relevant for the specific situation, or it may have increased their compliance with these norms vis à vis the possibility of social disapproval.

Although these post hoc hypotheses could not be tested directly, they were consistent with some interesting aspects of the results. In both studies, the average amount of tokens or DM kept by the subjects with higher performance was less than what they deserved according to the equity principle. Instead of 20 tokens, Herrmann and Winterhoff-Spurk's subjects kept an average of 17.34 tokens. Interestingly, the corresponding value from the Schmitt et al. study was considerably lower. Instead of two-thirds (12 DM), these subjects kept almost exactly half of the money (9.16 DM). In addition, more than 80% of the subjects with superior achievement kept exactly 9 DM (cf. Figure 6). Apparently, the subjects would have considered it inappropriate to take more than half of the money al-

though their achievement was twice as high as their partner's achievement. Similar results have been interpreted as a politeness ritual (Deutsch, 1985; Mikula, 1980; Schwinger, 1980). Yet at the same time, subjects did not take less than half of the money for themselves (only two subjects kept 8 DM). The extent of consensus among the subjects regarding the appropriate amount of money is striking. This consensus is exactly what Mischel (1973) and others have called a strong situation.

Having performed less well than one's partner seems to be a somewhat weaker situation in this sense. Although most subjects kept 9 DM under this condition also, there was more variation. The lack of a significant interaction between relative achievement and the attitude measures indicates, however, that this variation cannot be explained by subjects' justice preferences.

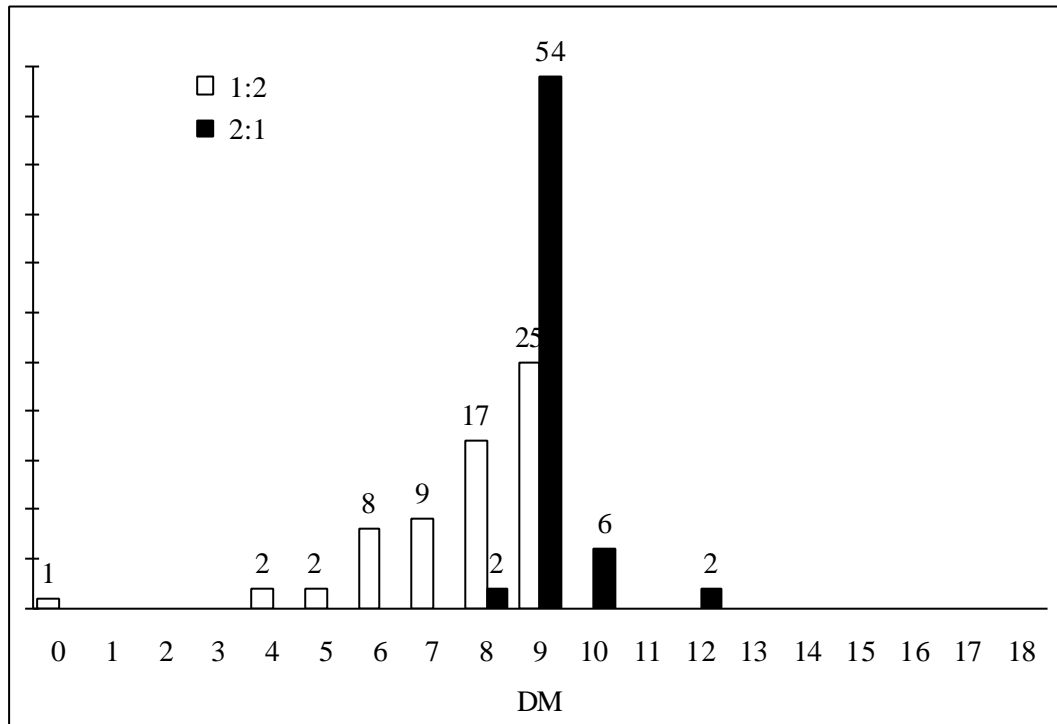


Figure 6

Number of Subjects who Kept Certain Amounts of DM, Depending on their Relative Achievement (Adopted from Schmitt et al., 1994, Figure 13)

The concept of strong vs. weak situations can be related to the psychometric terms of item difficulty. Easy and difficult items correspond to strong situations because they have little interindividual variance. Schmitt et al. (1994) argue that the concept of strong situations has important implications for interactionism because it suggests that curvilinear interaction or moderator functions may be more appropriate than linear functions, at least if the full range from very easy to very difficult situations is considered. As Figure 7 shows, strong effects of the person factor (in this case attitudes towards distribution principles) can be expected only for weak situations, i.e., for situations with moderate difficulty.

Figure 7 also shows that such a curvilinear moderator function can only be detected and estimated empirically if several difficulty levels are realized in one experiment or in a series of similar experiments. Regarding the present context, this means to reduce the norm to distribute money

equally, at least under the condition of superior achievement. Schmitt et al. (1994) suggest the following experimental strategies for this purpose.

1. Adopting the general social setting of Herrmann and Winterhoff-Spurk's (1980) experiments, subjects could either be required to compete or cooperate with an anonymous partner.
2. A less direct distribution of money may also reduce the normative power of the situation. Instead of absolute amounts of money, chances to receive money might be used as a resource. This could be realized, for example, by having subjects distribute tokens which serve as lots in a lottery. Although the likelihood to win is a mathematical function of the number of tokens a person (subject/partner) has in the total pool of tokens (lots), the subject serves as an indirect causal agent in the distribution of money only because chance operates as an uncontrollable intervening variable.
3. Disentangling the roles of recipient and judge may also reduce normative restrictions. A judge who cannot serve own interests by the distribution may be less restricted in his behavior than a recipient. Indirect support for this strategy is provided by Bossong's (1983a) study (see above) and by the significant interaction between responsibility and attitude towards equality in Schmitt et al.'s (1994) study on the fairness of own contributions of insurance clients (see above).

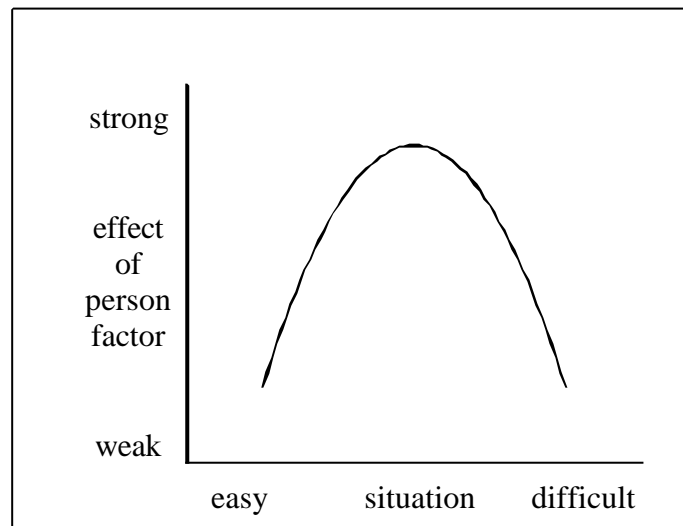


Figure 7

Difficulty of the Situation as a Moderator for the Effect of the Person Factor (Hypothetical Function; Adopted from Schmitt et al., 1994)

PRESENT RESEACH

The first two strategies were implemented in the present research. In the first study, the social control regarding distribution norms were reduced by leaving the partner or opponent anonymous to the subject. In the second study, the subjects' responsibility for the distribution was lowerd by having them distibute chances to win money in a lottery as opposed to having them distribute money directly as in the corresponding Schmitt et al. (1994) study.

Study I: Reducing Social Control

Method

Except for the following modifications, Study I was identical to the corresponding Schmitt et al. (1994) study described earlier:

1. Anonymity of partner/opponent: The subjects did not get to see their partner/opponent. In fact, no such partner/opponent existed. For this reason, no waiting room situation had to be arranged prior to the computer puzzle. In order to make the anonymity of the partner/opponent meaningful for the subjects, they were told that it was of interest to the researchers whether or not knowing the partner/opponent had an effect on achievement. All subjects were told that they were in the anonymous condition.
2. The need situation factor was dropped because it had no effect in the Schmitt et al. (1994) study, and because it would have been difficult to disguise the variation of the needs of an anonymous partner.
3. Number of subjects: 112 subjects (students from various majors at Trier University; no advanced psychology students) took part in the study.
4. Additional situation factor: In order to test whether the position of the justice inventory had an effect on the dependent variable, the justice inventory was administered prior to the puzzle in one condition and after the puzzle in another condition. In the Schmitt et al. (1994) study, all subjects filled in the justice inventory after the experiment. In line with the commitment factor in Herrmann & Winterhoff-Spurk's (1980) research, one might argue that filling in the justice inventory prior to the distribution situation raises the subjects' self-consciousness regarding their justice attitudes and motivates them to behave in accordance with their attitudes later on.¹ As in the Schmitt et al. (1994) study, filling in the justice inventory was presented to the subjects as part of a second, independent study. In the prior condition, the subjects were told that something was wrong with the computer and that they should wait for a moment. At this point, a second experimenter approached the first experimenter and the subject, saying that she was looking for subjects who would fill in a questionnaire. She asked both, the first experimenter and the subject, if they had time to help, pretending that she assumed both were available and that she did not know the first experimenter's role. The first experimenter disclosed her role and the present situation (problems with the computer) and thereby implicitly hinted at the subject's availability. The second experimenter then turned to the subject and asked whether he or she was willing to participate in her research. Almost all subjects complied. Subjects who refused to participate were dropped. The second experimenter promised the first experimenter that she would bring back the subject as soon as he or she had completed the questionnaire. After the subject returned, she was introduced by the first experimenter to the puzzle. The remaining procedure was identical to the procedure in the earlier study. Except for the anonymity of the partner/opponent, the procedure in the post condition was identical to the procedure of the earlier study (cf. Schmitt et al., 1994).

Hypotheses

Except for the hypotheses on the need factors, hypotheses in the present study correspond to those that were tested in the Schmitt et al. (1994) study. Following the theoretical reasoning given there,

¹ Several studies have found that attitude-behavior-consistency depends on the accessibility of attitudes (e.g., Fazio & Williams, 1986), and that attitude accessibility can be raised by asking subjects to reflect about their attitudes (e.g., Prislin, 1988; Snyder & Swann, 1976). It is reasonable to assume that questionnaires instigate such a reflection.

the following two person-situation-interaction effects were expected:

1. Interaction effect of relative achievement and attitude towards equity: The effect of relative achievement was expected to be stronger for subjects with a favorable attitude towards equity than for subjects with a less favorable attitude towards equity.
2. Interaction effect of relative achievement and attitude towards equality: The effect of relative achievement was expected to be weaker for subjects with a favorable attitude towards equality than for subjects with a less favorable attitude towards equality.

In addition, it was hypothesized in the present study that these effects may depend on the social relation between the subject and the other person. More specifically, it was expected:

3. that the achievement x equity interaction (Hypothesis 1) would be stronger in the competitive condition than in the cooperative condition since the equity principle is considered more appropriate in competitive contexts.
4. Furthermore, it was expected that the achievement x equality interaction (Hypothesis 2) would be stronger in the cooperative condition than in the competitive condition since the equality principle is considered more appropriate in cooperative contexts.

Finally, it was expected that the position factor may also operate as a situational moderator of the synergetic person-situation-interaction and may affect this interaction in the same manner as the social context factor:

5. The achievement x equity interaction (Hypothesis 1) will be stronger if the questionnaire was filled in prior to the experiment.
6. The achievement x equality interaction (Hypothesis 2) will be stronger if the questionnaire was filled in prior to the experiment.

Results

A 2 (relative achievement) x 2 (social context) x 2 (position of justice inventory) x 2 (gender) analysis of variance with gender as a control factor was computed first to estimate the effects of the situation factors and gender. Gender had no significant main or interaction effect. Therefore, a second analysis of variance was computed with the three situation factors only (relative achievement, social context, position of questionnaire). In this analysis, significant main effects were obtained for relative achievement ($F_{1, 104} = 28,9$; $p < .01$; 20% variance) and for position ($F_{1, 104} = 9,7$; $p < .05$; 3% variance).

The means of the corresponding experimental conditions are given in Figure 8. First, these means reveal once again the predominant impact of the relative achievement factor. Subjects who lost kept significantly less money for themselves than subjects whose achievement was superior. And again, subjects in the winning condition took exactly half of the money.

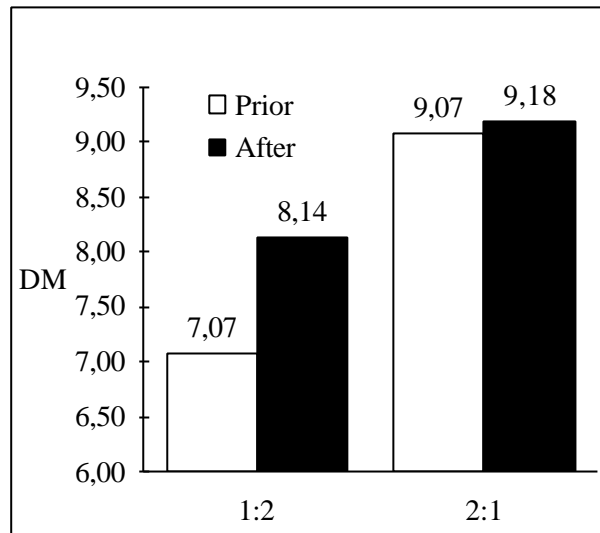


Figure 8

Mean Amount of Money (DM) Kept by the Subject of Study I Depending on Relative Achievement and Position of Questionnaire

Second, the means in Figure 8 show that the position factor operated in a similar manner as the social context factor in Schmitt et al.'s (1994) study. Filling in the justice inventory before the experiment seems to make subjects more modest (or careful or defensive?), especially when their relative achievement was low (note, however, that the position x achievement interaction was not significant).

Most importantly and different from the results obtained in the preceding experiment by Schmitt et al. (1994), social context had neither a significant main effect nor a significant interaction effect in combination with relative achievement. This indicates that the relation to an anonymous partner/opponent is less important than the same relation to a person one knows. The difference in results between the previous and the present study might also indicate that the intended reduction of social control by the partner/opponent was realized successfully.

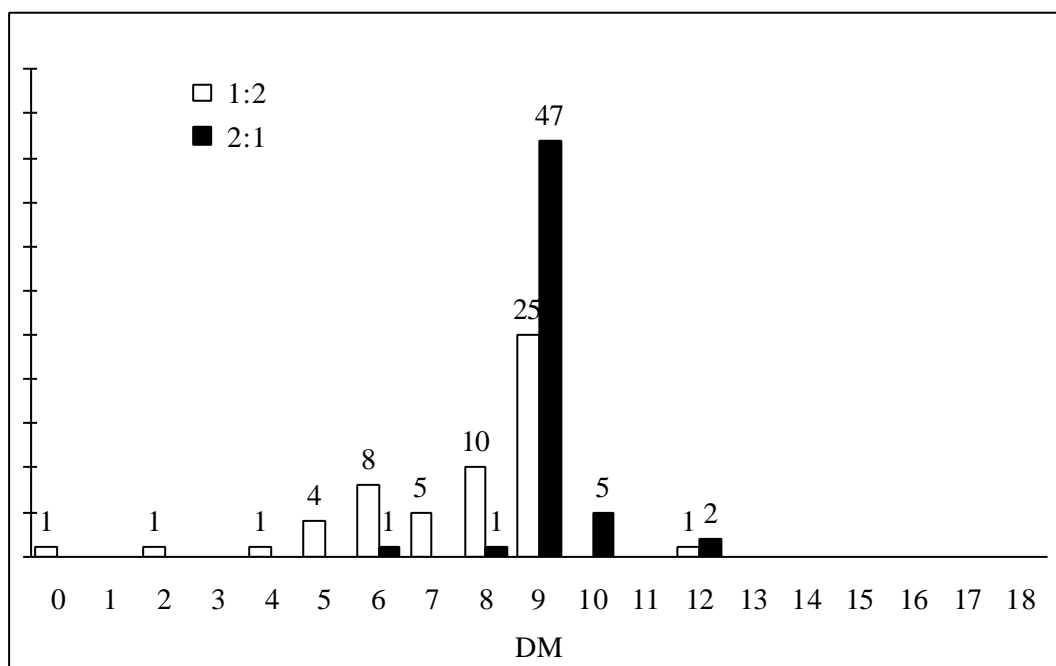


Figure 9

Number of Subjects in Study I who Kept Certain Amounts of DM, Depending on their Relative Achievement

However, the frequency distribution of the dependent variable (Figure 9) reveals a high similarity to the corresponding distribution that was obtained in the previous experiment (Figure 6). Regarding the winning condition, almost no change in the distribution of the dependent variable occurred. A little more change occurred in the losing condition. In this condition, a slight tendency towards a bimodal distribution can be observed. Without having yet tested any of the person-situation-interaction hypotheses, it can be concluded that the intended reduction of social control either failed or was only very small. It seems that the experimenter but not the partner/opponent is the significant other for the subject. Nevertheless, a small effect of leaving the partner/opponent anonymous was observed in the losing condition. Testing the interactionist hypotheses will show whether the variability in the subjects' distribution behavior was large enough for allowing individual differences in attitudes come into play.

Before the hypotheses could be tested, measures for the attitudes had to be formed. In the previous study, all a priori scales from the various authors as well as comprehensive scales, combining all items for the same attitude, were used for testing the interaction hypotheses. In order to replicate these analyses as closely as possible, the same measures were used here.² Multiple regression analyses with dummy-coded situation factors and product terms for testing the person-situation-interaction effects were performed for each available equity and equality/parity measure.

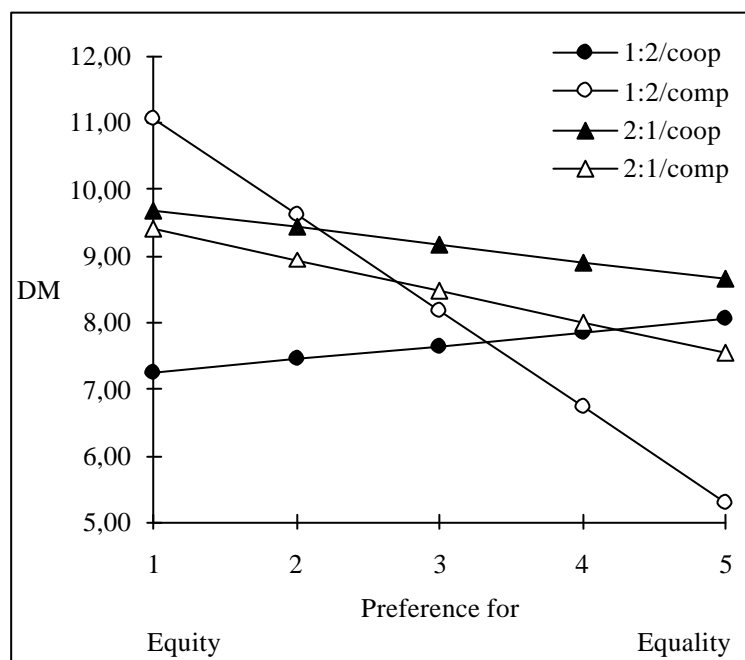


Figure 10

Three-Way Interaction between Relative Achievement, Social Relation, and Attitude Towards Eq-

² The factorial structure of the justice inventory and the correlations among the scales were investigated with the data from the present research (Study I and Study II) as well. The results of these analyses are not described here because they are only of secondary interest in the present context. All factor, reliability, and correlation analyses of the justice inventory that were conducted are given in Appendix 2

uity vs. Equality According to Bossong

None of the two-way interactions predicted by Hypotheses 1 and 2 were significant, no matter which attitude measure was used. Hypotheses 3 through 6 predict 4 three-way interaction effects. From all possible three-way interactions that were tested, using the various attitude measures, two effects were significant and both involved Bossong's questionnaire for measuring attitudes towards equity versus equality.

The first of these three-way interaction effects involved relative achievement and social relation as situation factors ($F_{1, 102} = 2,5$; $p < .05$; 4% unique variance). The corresponding conditional effects are presented in Figure 10. They do not correspond to Hypotheses 3 and 4, however, which had predicted a stronger relative achievement x attitude interaction in the competitive than in the cooperative condition. Rather, a substantial correlation between the subjects' attitudes and their distribution behavior was found only for subjects who had lost and who were in the cooperative condition. The sign of this correlation is wrong, however: Subjects with a favorable attitude towards equity according to Bossong tended to distribute the money equally while subjects with a favorable attitude towards equality tended to distribute the money unequally.

The second significant three-way interaction effect involved the two situation factors relative achievement and position of questionnaire ($F_{1, 102} = 2,1$; $p < .05$; 3% unique variance). Figure 11 gives the direction of this effect. Again, the pattern of conditional effects does not correspond to our expectations. Compared to subjects who were administered the justice inventory after the experiment, a stronger relative achievement x attitude interaction had been expected for subjects whose attitudes were measured prior to the experiment. This effect was not found. Rather, an interaction between attitude and position was found, but only for subjects in the losing condition. Once again, however, the directions of the corresponding conditional attitude effects are inconsistent with the theoretical assumptions underlying the variation of the position factor. Subjects from the low relative achievement condition tended to do the opposite of what they had disclosed as their attitudes prior to the experiment. A positive correlation between attitudes and behavior was found only for subjects who had answered the inventory after the experiment and who had lost.

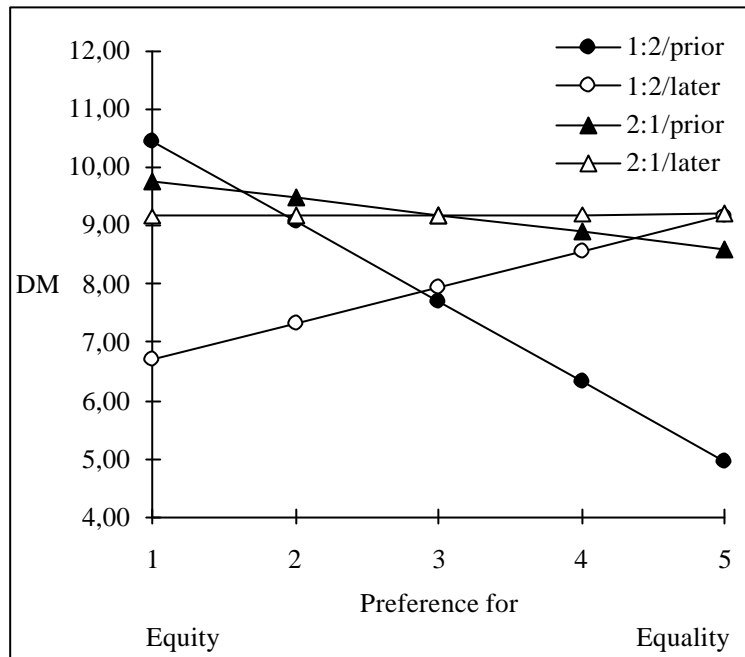


Figure 11

Three-Way Interaction between Relative Achievement, Position of Questionnaire, and Attitude Towards Equity vs. Equality According to Bossong

Although the significant three-way interaction effects were unexpected and partly paradoxical in direction, they do reflect the pattern of results shown in Figures 6 and 9, i.e., the differences in behavioral variability between the high and low relative achievement conditions. Behavioral differences between individuals were pronounced enough only in the low achievement condition of the present study to let individual differences in attitudes contribute to the prediction (or "postdiction") of individual differences in behavior. Phrased in terms of the powerful situation concept, the low relative achievement situation was "weak" enough to allow for effects from person(ality) factors.

Study II: Reducing the Subject's Responsibility for the Distribution

This study implements the second suggestion made by Schmitt et al. (1994) for reducing the normative power of the situation. Subjects were not asked to distribute money but instead chances to win money. This was done to reduce the subjects' objective responsibility and therefore their subjective sense of responsibility for the final event (distribution of money), since chance, in addition to the subjects' intentional behavior, operates as an intervening causal variable on which the final event depends.

Method

One hundred and twelve students from various majors at Trier University were recruited as subjects for this study. No advanced psychology students participated. Except for the following modifications, the study was identical to the corresponding Schmitt et al. (1994) study described earlier:

1. As in Study I of the present research, and for the same reasons, the situational need factor was dropped.
2. The subject was not asked to distribute money but chips. Subjects were told their and their partners'/opponents' chances to win one or several of three prizes worth 100 DM each would depend on how many chips they earn together and how many of these were allocated to each. Pretending a lottery as in the previous studies, subjects were always put in charge of the distribution. Furthermore, it was pretended that the common achievement of the subject and his or her partner/opponent was worth 18 chips. Subjects were given 18 chips and asked to distribute them between their partners/opponents and themselves. A transparent box with a slot for inserting the chips was sitting on the table. It contained chips from earlier subjects and their partners/opponents with numbers written on the chips. Subjects were told that after they had decided a distribution, numbers would be written on their chips as well as on their partners'/opponents' chips. After the experiment was finished, three chips would be drawn from the box to determine who would win the prizes.

Hypotheses

Except for the hypotheses involving the position factor, the hypotheses for this study corresponds to those for Study I. Specifically, the following person-situation-interaction effects were expected:

1. Interaction effect of relative achievement and attitude towards equity: The effect of relative achievement was expected to be stronger for subjects with a favorable attitude towards equity than for subjects with a less favorable attitude towards equity.
2. Interaction effect of relative achievement and attitude towards equality: The effect of relative achievement was expected to be weaker for subjects with a favorable attitude towards equality than for subjects with a less favorable attitude towards equality.
3. Interaction effect of relative achievement x social context x attitude towards equity: The achievement x equity interaction (Hypothesis 1) will be stronger in the competitive condition than in the cooperative condition.
4. Interaction effect of relative achievement x social context x attitude towards equality: The achievement x equality interaction (Hypothesis 2) will be stronger in the cooperative condition than in the competitive condition.

Results

A two (relative achievement) by two (social context) by two (gender) analysis of variance with gender as a control factor was computed first to estimate the effects of the situation factors and gender. Gender had no significant main or interaction effects. Therefore, a second analysis of variance was computed with the two situation factors only. In this analysis, only a significant main effect for relative achievement was found ($F_{1, 108} = 44,1$; $p < .01$; 28% variance). The means for all experimental conditions are given in Figure 12.

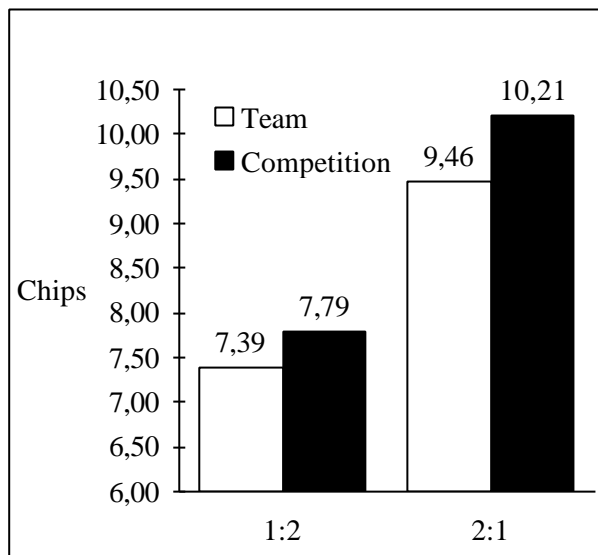


Figure 12

Number of Chips Kept by the Subject of Study II Depending on Relative Achievement and Social

Replicating all previous studies, the means in Figure 12 show the predominant impact of the relative achievement factor. Subjects who lost kept significantly less chips for themselves than subjects whose achievement was superior.

Compared to the corresponding Figures 5 and 8, the means in Figure 12 differ remarkably in two regards. First, subjects in the winning condition took more than half of the chips. Second, there is no interaction between relative achievement and social context. Both differences between the results of this experiment and the results from the two previous studies suggest that reducing the responsibility of the subject for the final outcome (winning 100, 200, or 300 DM in the lottery after the experiment) relaxed the situational constraints. This conclusion is supported by the conditional frequency distributions of the dependent variable (cf. Figure 13).

Comparing the frequency distribution from Figure 13 with the corresponding frequency distributions from Figures 6 and 9 shows that now, a bimodal distribution was obtained for both relative achievement conditions. Like the subjects in the losing condition of this study and Study I, subjects in the winning condition of the present study tended to behave either according to equality or according to equity. Both experimental conditions no longer constrain interindividual differences in behavior. Consequently, the prerequisites for attitude effects are given.

Hypotheses 1 through 4 were tested in the same manner as in Study I, i.e., for each attitude measure separately. None of the interaction effects predicted by Hypotheses 1, 3, and 4 was signifi-

cant: Attitudes towards equity did not moderate the situation effect of relative achievement (Hypothesis 1), and none of the two-way interactions between relative achievement x social context x attitude towards equity/equality were significant (Hypotheses 3 and 4).

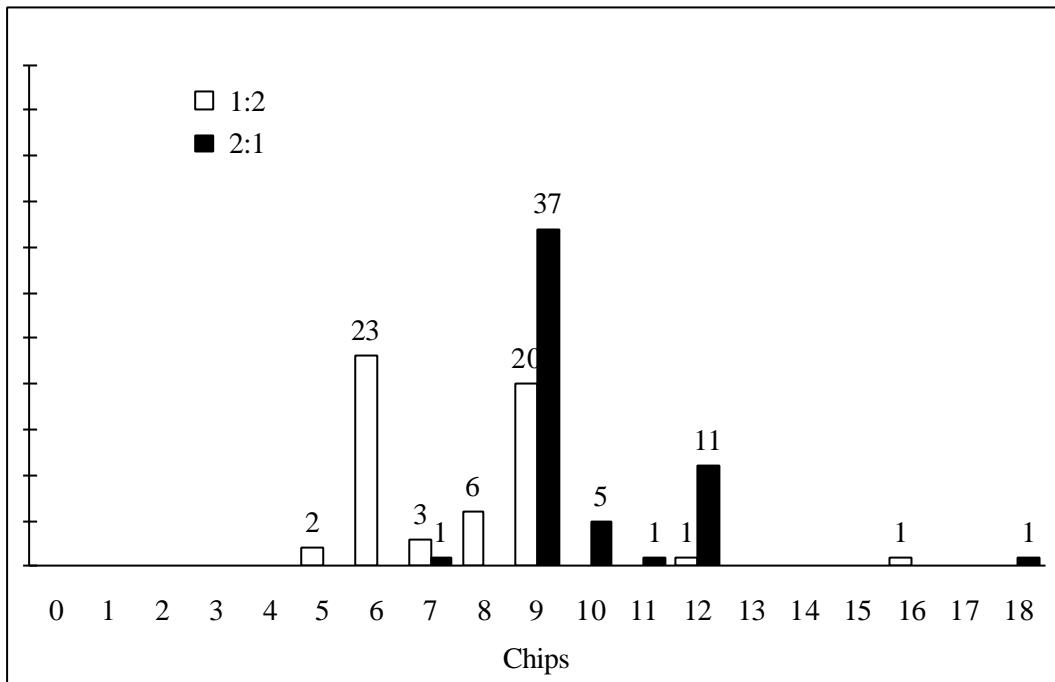


Figure 13

Number of Subjects in Study II who Kept Certain Amounts of Chips, Depending on their Relative Achievement

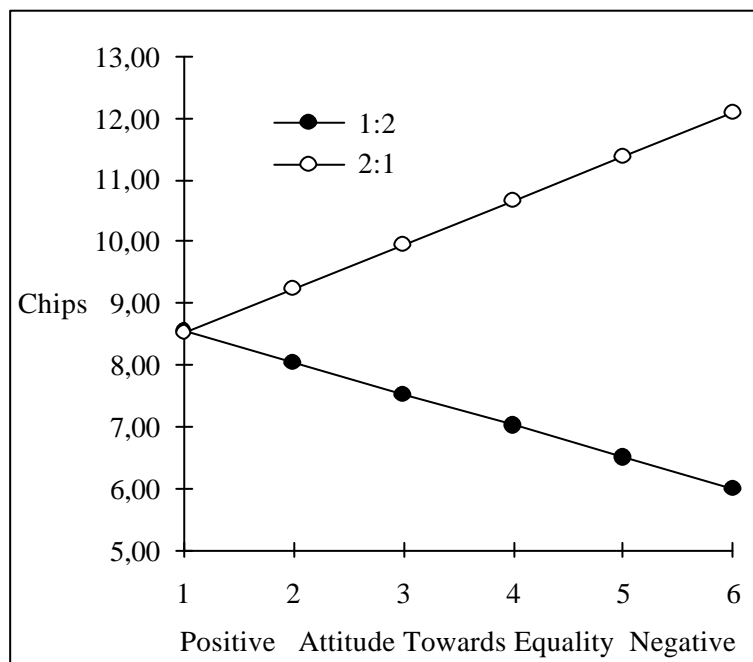


Figure 14

Interaction of Relative Achievement x Attitude Towards Equality (Comprehensive Scale)

Empirical support was found for Hypothesis 2, however: For two of the measures of attitude towards equality, significant interaction effects with relative achievement were obtained. The interaction effect of Montada, Schmitt, & Dalbert's (1983) measure for attitude towards equality of chances accounted for 3% of the variance of the dependent variable ($F_{1, 105} = 2.2$; $p < .05$). The second significant interaction effect was obtained with the comprehensive equality scale which consists of all equality/parity items from the justice inventory ($F_{1, 105} = 2.4$; $p < .05$; 3% variance). The direction of both effects was consistent with Hypothesis 2. The effect for the comprehensive scale is given in Figure 14. The conditional means reveal that, in line with expectations, relative achievement made a greater difference for subjects with a negative attitude towards equality than for subjects with a favorable attitude towards this distribution principle.

DISCUSSION

Starting out from the general premise of modern interactionism (Magnusson & Endler, 1977) that functionally equivalent situation factors and personality factors operate synergetically, exerting joint, mutually amplifying effect on behavior, several studies have been conducted to investigate this premise in the realm of distributive justice. The general assumption of this line of research states that attitudes towards a certain distribution principle affects subjects' sensitivity for information which is relevant with regard to the principle at issue and influences the weight subjects give to that information.

Some interaction effects, but not all that were expected on theoretical grounds, have been found in vignette studies in which subjects had to suggest a fair distribution for a hypothetical distribution conflict (Bossong 1983a, Experiment 3; Schmitt et al., 1994, Study 2). Furthermore, interactions between attitude type and relative achievement were found in two very similar experiments by Herrmann & Winterhoff-Spurk (1980) in which subjects distributed rewards in the role of a corecipient. This result could not be replicated in a similar study by Schmitt et al. (1994). Rather, these authors found that high-achieving subjects tended to be polite and took only half of the money. Almost no variation in distribution behavior was observed for subjects in this condition suggesting a strong social norm which constrained behavioral freedom.

The present research was conducted to test this suggestion. In two independent studies, it was intended to relax normative constraints on subjects' behavior and to thereby generate room for individual differences in attitudes in order to have effects on the distribution behavior at issue. In Study I, the subjects' partners or opponents were kept anonymous to them. This strategy was adopted from Herrmann & Winterhoff-Spurk's (1980) experiments in which interaction effects had been found. Contrary to these studies, no substantive increase in behavioral variability between subjects was found here. While in the winning condition, no change in variability could be observed, there was a slight tendency towards more variance in the losing condition and a slight tendency towards a bimodal distribution of the dependent variable, the two modes corresponding to a pure application of the parity and the equity principle, respectively. Despite this effect, none of the expected person-situation-interactions could be observed.

In Study II, normative constraints on the subjects' behavior were loosened by reducing subjects' responsibility for the final outcome of their behavior. Instead of having subjects distribute money, they were asked to distribute probabilities to win money in a lottery. Consequently, chance was "responsible" in addition to the subject for the final outcome of the lottery. This measure was successfully employed for reducing the previous homogeneity in subjects' behavior. Subjects now differed

considerably in the distribution they performed in both conditions, the winning condition and the losing condition. Bimodal frequency distributions of the dependent variable now emerged in both conditions, and the modes corresponded in both conditions to perfect equity and perfect equality. Consequently, both conditions were weak situations regarding subjects' distribution behavior. Nonetheless, only one out of the four interaction hypotheses was supported empirically, and this was true only for two out of five measures for the attitude that was involved in this effect. Two equality scales interacted with relative achievement in the expected manner: The more favorable subjects' attitudes towards equality was according to these measures, the more they tended to disregard achievement differences and to distribute winning probabilities equally between themselves and their partners/opponents. The corresponding interaction between relative achievement and attitude towards equity was not significant. Thus, the interactionist premise was supported only partially although the prerequisites for detecting such interactions were given.

Summarizing all interactionist studies described in this paper, the following can be safely stated:

1. Many expected person-situation-interactions were not significant despite sufficient power of the statistical tests.
2. Significant person-situation-interactions explained much less variance in behavior than differences between situations. Situation effects were 7 to 12 times stronger than person-situation-interaction effects.
3. All significant person-situation-interaction effects were due to attitudes towards equality or to a confound of attitude towards equity and attitude towards equality (Bossong's bipolar construct and the corresponding attitude measure).
4. Relative achievement as a situation factor had the only effect that was significant and large in all studies.
5. A similar consistency across research contexts was not found for person-situation-interactions -- which seem to depend on the methodological framework used. Person-situation-interactions were observed only in situations that were easy with regard to unequal distributions. One type of "easy situations" were hypothetical distribution conflicts (vignette studies) to which the subject reacted by suggesting a fair distribution from the perspective of an outside judge. Another type of "easy situations" seems to have been realized in Herrmann & Winterhoff-Spurk's (1980) experiments and in Study II of the present research. In this type of situations, the distribution had "game appeal" to the subjects either due to the task (computer game) or due to the kind of reward to be distributed (tokens with more symbolic than material value), or due to a lottery in which chance "acted" as an intervening variable between the subjects behavior and the final outcome (Study II of the present research). No interactions were found in situations where the subjects' task was more serious in nature because a considerable amount of money was at issue. In this type of difficult situation (difficult regarding an unequal distribution), social norms seem to have constrained subjects' behavior and therefore overpowered subjects' attitudes.

Interestingly, similar inconsistencies regarding person-situation-interactions have been reported from other substantive domains as well. One example is research on emotions, another example is aptitude-treatment-interaction research (ATI). Regarding the first example, Spielberger's anxiety (1972) and anger (1988) theories start out from an interactionist assumption. Anxious and anger-prone individuals are defined by a high sensitivity, i.e., a low perceptual threshold to threatening and frustrating situations, respectively. It is assumed that a constant increase in threat or frustration leads

to differential increases in emotion depending on the subject's anxiety or anger proneness. In line with the present pattern of findings, findings regarding this interaction has been inconsistent and inconclusive. Some studies have supported the interactionist premise, others have failed to find the crucial interaction effects (for reviews see, e.g., Hank, 1995; Schwenkmezger, 1985).

Regarding the second example, ATI research, Cronbach (1975) writes:

"Let me turn next to some synoptic statements about ATI findings. It is not possible to qualify these statements adequately, nor to describe the strength of the evidence. Quite a lot of work shows student personality interaction with teacher press [...]. But results were strangely inconsistent from year to year and from course to course. [...] In attempting to generalize from the literature, Snow and I have been thwarted by the inconsistent findings coming from roughly similar inquiries. Successive studies employing the same treatment variable find different outcome-on-aptitude slopes. Some fraction of this inconsistency arises from statistical sampling error, but the remainder is evidence of unidentified interactions [...]. An ATI result can be taken as a general conclusion only if it is not in turn moderated by further variables. [...] Once we attend to interactions, we enter a hall of mirrors that extends to infinity. However far we carry our analysis -- to third order or fifth order or any other -- untested interactions of a still higher order can be envisioned." (p. 118-119)

Drawing upon the concepts of strong vs. weak situations (Mischel, 1973; Price & Buffard, 1974) or the related concept of situational press (Murray, 1938), Schmitt et al. (1994) suggested the exploration of the limits of linear interactions. Regarding the present substantive domain and the studies that were reported, this was done by changing the normative constraints of the situation. However, the success of this strategy was only partly successful. Searching for conclusions from the present state of evidence, one could first focus on the general weakness of person-situation-interactions in the domain of distributive justice. The weak effects could mean at least two things:

1. The general postulate of modern interactionism is simply wrong for the domain of distributive justice. This is not a very convincing conclusion, at least not until psychological explanations can be offered and have been tested.
2. The second possible conclusion from the overall weak person-situation-interactions is that the attitude measures used here and in the previous studies lack construct validity. This conclusion is supported by findings of poor convergent and discriminant validities of the various attitude scales in Schmitt et al.'s (1994) sample. Although the results from the present samples are somewhat better (cf. Appendix 2), they are certainly far behind the ideal pattern of correlations according to Campbell & Fiske (1959). However, there are several empirical results that speak against this conclusion. First, Herrmann & Winterhoff-Spurk (1980) and Bossong (1983) did find the expected interaction effects. Second, theoretically meaningful, significant, and substantial correlations between the attitude measures and other constructs have been found in several survey studies (Montada, Schmitt, & Dalbert, 1986; Montada & Schneider, 1989; Schwinger & Winterhoff-Spurk, 1984).

A second starting point for drawing conclusions from the current state of empirical evidence is to focus on the inconsistency of the results, i.e., the fact that interactions were found for some measures but not for others and for some research contexts but not for others. The summary of results given above suggests that the inconsistency is not random but systematic. The pattern of results suggests that person-situation-effects require weak situations. Weak situations are:

1. ambiguous situations,³
2. situations which do not imply obvious, general, and strong behavioral norms,
3. situations in which conflicting behavioral norms or conflicting motives exist, or
4. situations in which the violation of social norms has no consequences for the actor.

The experimental procedure of Study II of the present research seems to have been successful to some extent in implementing the third of these types of weak situations. Figure 13 shows that in the losing condition, two conflicting norms were followed, the equity and the equality norm. The same was true in the winning condition. However, the equality norm seems to have prevailed in this condition. One may speculate that the winning condition was still not weak enough to leave room for individual attitudes. This assumption can only be tested by further "weakening" the situation(s) of the experimental paradigm used. Several strategies may be pursued for this purpose. The first of the following suggestion has been made by Schmitt et al. (1994) already, the remaining proposals have been considered in the meantime. Studies are currently being designed for investigating these ideas.

1. A first possibility besides the ones realized in Study II of the present research for reducing normative restrictions would be to disentangle the roles of recipient and judge. Judges who cannot serve their own interests by the allocation they suggests may be less restricted in their behavior than the subjects in the Schmitt et al. (1994) study and the two studies of the present research. These subjects may have experienced a role conflict. On one hand, they were allowed to maximize their profit, on the other hand, they were expected to be fair. Perhaps the subjects in the high achievement condition took less money than they deserved according to equity because they wanted to rule out any doubts that being fair was the only motivation for the distribution they conducted. Paradoxically, such an impression management, if it occurred, decreases the construct validity of the behavioral justice criterion. Compared to a corecipient, a mere judge without personal interests in a particular decision is less suspect regarding the motivations of his behavior. Consequently, defensive impression management is less likely and the judgment is probably more indicative of justice considerations. This strategy would generate a weak situation according to Type 2 mentioned above.
2. A second strategy would be to create conflicting motives by increasing the incentive for an unequal distribution in the winning condition. The motive to receive a lot of money can be expected to counteract the motive for social approval on behalf of the experimenter. The strategy could be implemented by increasing the amount of money to be distributed (e.g. 90 DM instead of 18 DM, or by raising the probability to win money in the lottery (more prizes, fewer subjects), or by raising the amount of money to be won in a lottery (e.g., 500 instead of 100 DM). This strategy would generate a weak situation according to Type 3 mentioned above.
3. A third strategy could remove social control by having the subject distribute the money or the chips anonymously, i.e., without being observed by the experimenter or any other significant other person. This strategy would generate a weak situation according to Type 2 mentioned above.
4. A fourth strategy could be to suggest attributions for the inequality in achievement which justify

³ As a matter of fact, projective testing implements this strategy by presenting situations or stimuli to subjects which can be construed subjectively in many different ways and therefore leave room for effects on behalf of personality variables, personal norms, attitudes, values, etc.

unequal rewards⁴. Compared to situations in which unequal contributions are due to uncontrollable factors such as talent, unequal rewards are considered more appropriate in cases where unequal contributions are obviously due to controllable factors such as effort (Lamm & Kayser, 1978).

⁴ We owe this idea to Dr. Jacqueline Modde, University of Twente, the Netherlands.

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Bierhoff, H.W. (1981). Sozialer Kontext als Determinante der wahrgenommenen Gerechtigkeit: Absolute und relative Gleichheit der Gewinnaufteilung. In W. Michaelis (Hrsg.), *Bericht über den 32. Kongreß der Deutschen Gesellschaft für Psychologie in Zürich, 1980* (S. 407-410). Göttingen: Hogrefe.
- Bossong, B. (1983a). Gerechtigkeitsnormen und angemessenes Einkommen. *Zeitschrift für experimentelle und angewandte Psychologie*, 30, 32-44.
- Bossong, B. (1983b). Verteilungspräferenzen, Art der sozialen Beziehung und Bedürftigkeit. *Zeitschrift für experimentelle und angewandte Psychologie*, 30, 566-572.
- Bowers, K.S. (1973). Situationism in psychology: An analysis and a critique. *Psychological Review*, 80, 307-336.
- Campbell, D.T. & Fiske, D.W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
- Cattell, R. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Cohen, J. (1978). Partialled products are interactions; partialled powers are curve components. *Psychological Bulletin*, 85, 858-866.
- Cronbach, L.J. (1975). Beyond the two disciplines of scientific psychology. *American Psychologist*, 30, 116-127.
- Dalbert, C. & Schmitt, M. (1986). Einige Anmerkungen und Beispiele zur Formulierung und Prüfung von Moderatorhypothesen. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 7, 29-43.
- Dalbert, C., Montada, L., & Schmitt, M. (1987). Glaube an eine gerechte Welt als Motiv: Validierungskorrelate zweier Skalen. *Psychologische Beiträge*, 29, 596-615.
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice? *Journal of Social Issues*, 31, 137-149.
- Deutsch, M. (1985). *Distributive justice: A social psychological perspective*. New Haven, CT: Yale University Press.
- Dion, K.L. & Dion, K.K. (1987). Belief in a just world and physical attractiveness stereotyping. *Journal of Personality and Social Psychology*, 52, 775-780.
- Endler, N.S. & Hunt, J.McV. (1966). Sources of behavioral variance as measured by the S-R Inventory of Anxiousness. *Psychological Bulletin*, 65, 336-346.
- Epstein, S. & O'Brien, E. (1985). The person-situation debate in historical and current perspective. *Psychological Bulletin*, 98, 513-537.
- Hafer, C.L. & Olson, J.M. (1989). Beliefs in a just world and reactions to personal deprivation. *Journal of Personality*, 57, 799-823.
- Hank, P. (1995). *Ärgererleben und Ärgerverarbeitung im Alltag*. Hamburg: Kovac.

- Herrmann, T. & Winterhoff, P. (1980). Leistungsbezogenes Aufteilen als situationsspezifische Korrektur von Gerechtigkeitskonzepten - Zum Einfluß von Personenmerkmalen auf die Gewinnaufteilung. *Zeitschrift für Sozialpsychologie*, *11*, 259-273.
- Jasso, G. (1983). Fairness of individual rewards and fairness of the reward distribution: Specifying the inconsistency between the micro and macro principles of justice. *Social Psychology Quarterly*, *46*, 185-199.
- Kenrick, D.T. & Funder, D.C. (1988). Profiting from controversy. *American Psychologist*, *43*, 23-34.
- Lamm, H. & Schwinger, T. (1980). Norms concerning distributive justice: Are needs taken into consideration in allocation decisions? *Social Psychology Quarterly*, *43*, 425-429.
- Lerner, M.J. (1977). The justice motive: Some hypotheses as to its origins and forms. *Journal of Personality*, *45*, 1-52.
- Lerner, M.J. & Simmons, C.H. (1966). The observer's reaction to the "innocent victim": Compassion or rejection? *Journal of Personality and Social Psychology*, *4*, 203-210.
- Magnusson, D. & Endler, N.S. (1977). Interactional psychology: Present status and future prospects. In D. Magnusson & N.S. Endler (Eds.), *Personality at the crossroads* (pp. 3-31). Hillsdale, NJ: Erlbaum.
- Major, B. & Deaux, K. (1982). Individual differences in justice behavior. In J. Greenberg & R.L. Cohen (Eds.) (1982). *Equity and justice in social behavior* (pp. 43-76). New York: Academic Press.
- Mikula, G. (1981). Concepts of distributive justice in allocation decisions: A review of research in German-speaking countries. *The German Journal of Psychology*, *5*, 222-236.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, *80*, 252-283.
- Montada, L., Schmitt, M., & Dalbert, C. (1983). *Existentielle Schuld: Rekrutierung der Untersuchungsstichprobe, Erhebungsinstrumente und Untersuchungsplan* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 20). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Schmitt, M. & Dalbert, C. (1986). Thinking about justice and dealing with one's own privileges: A study of existential guilt. In H.-W. Bierhoff, R.L. Cohen & J. Greenberg (Eds.), *Justice in Social Relations* (pp. 125-143). New York: Plenum Press.
- Montada, L. & Schneider, A. (1989). Justice and Emotional Reactions to the Disadvantaged. *Social Justice Research*, *3*, 313-344.
- Murray, H.A. (1938). *Explorations in personality*. New York: Oxford.
- Price, R.H. & Bouffard, D.L. (1974). Behavioral appropriateness and situational constraints as dimensions of social behavior. *Journal of Personality and Social Psychology*, *30*, 579-586.
- Rubin, Z. & Peplau, L.A. (1973). Belief in a just world and reactions to another's lot: A study of participants in the national draft lottery. *Journal of Social Issues*, *29* (4), 73-93.
- Sabbagh, C., Dar, Y., Hurrelmann, K., & Resh, N. (1994). *Types of social justice judgments among adolescents: A comparative view on structure and links to social resources*. Jerusalem:

- lem, Israel: The Hebrew University of Jerusalem (unpublished manuscript).
- Sabbagh, C., Dar, Y. & Resh, N. (1994). The structure of social justice judgments: A facet approach. *Social Psychology Quarterly*, 57, 244-261.
- Sarason, K.G., Smith, R.E., & Diener, E. (1975). Personality research: Components of variance attributable to the person and the situation. *Journal of Personality and Social Psychology*, 32, 199-204.
- Schmitt, M. (1990). *Konsistenz als Persönlichkeitseigenschaft? Moderatorvariablen in der Persönlichkeits- und Einstellungsforschung*. Berlin: Springer.
- Schmitt, M. (1980). *Person, Situation oder Interaktion? Eine zeitlose Streitfrage diskutiert aus der Sicht der Gerechtigkeitsforschung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 6). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Barbacsy, R., Binz, S., Buttgerit, C., Heinz, J., Hesse, J., Kraft, S., Kuhlmann, N., Lischetzke, T., Nisslmüller, K. & Wunsch, U. (1994). *Distributive justice research from an interactionist perspective* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 78). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. & Montada, L. (1982). Determinanten erlebter Gerechtigkeit. *Zeitschrift für Sozialpsychologie*, 13, 32-44.
- Schwinger, T. (1980). Just allocations of goods: Decisions among three principles. In G. Mikula (Ed.), *Justice and social interaction* (pp. 95-125). Bern: Huber.
- Schwinger, T. & Winterhoff-Spurk, P. (1984). Gleichheits- vs. Leistungsprinzip. Rasch-Skalen zur Messung dispositioneller Einstellungen zu zwei Prinzipien distributiver Gerechtigkeit. *Diagnostica*, 30, 125-143.
- Spielberger, C.D. (1972). Anxiety as an emotional state. In C.D. Spielberger (Ed.), *Anxiety: Current trends in theory and research* (Vol. 1, pp. 23-49). New York: Academic Press.
- Spielberger, C.D. (1988). State-Trait Anger Expression Inventory. Research Edition. Odessa, FL: PAR.
- Törnblom, K.Y. (1992). The social psychology of distributive justice. In K. Scherer (Ed.), *Justice: Interdisciplinary perspectives* (pp. 175-236). Cambridge: Cambridge University Press.
- Winterhoff, P. & Herrmann, T. (1979a). *Verteilungsgerechtigkeit als Persönlichkeitsmerkmal* (Arbeiten der Forschungsgruppe Sprache und Kognition Nr. 7). Mannheim: Lehrstuhl Psychologie III der Universität Mannheim.
- Winterhoff, P. & Herrmann, T. (1979b). *Dispositionelle Einstellung zur Verteilungsgerechtigkeit und tatsächliche Aufteilung* (Arbeiten der Forschungsgruppe Sprache und Kognition Nr. 9). Mannheim: Lehrstuhl Psychologie III der Universität Mannheim.
- Zuckerman, M, Gerbasi, K.C., Kravitz, R.I., & Wheeler, L. (1975). The belief in a just world and reactions to innocent victims. *Catalog of Selected Documents in Psychology*, 5, 326.

APPENDIX 1: JUSTICE INVENTORY

First Part of the Justice Inventory

No.	German wording of item	English wording of item	Label ¹
1.	Wer mehr leistet als andere, muß auch mehr bekommen.	Those who achieve more than others should get more.	EYW1
2.	Bei allen Unterschieden sollte trotzdem jeder die gleichen Chancen im Leben haben.	Despite all differences everybody should have the same chances in life.	PAW1
3.	Gibt es in einer Lehrwerkstatt zu viele Bewerber um die vorhandenen Ausbildungsplätze, finde ich es gerecht, wenn die Plätze verlost werden.	If there are too many applicants for apprenticeships, I would find it just to decide by lottery.	ECM1
4.	Diejenigen, die sich anstrengen und viel arbeiten, sollten auch mehr Geld bekommen.	Those who try harder and invest more should receive more money.	EYS1
5.	Geld und Einkommen sollten so gleichmäßig wie möglich verteilt werden.	The distribution of money and income should be as equal as possible.	PAS1
6.	Bedürftige Menschen sollten mehr Geld bekommen.	People in greater need should receive more money.	NES1
7.	Ein Spitzensportler muß auch mehr verdienen als ein Ersatzmann.	Front runners in sports should earn more money than those in the reserve.	EYW2
8.	Begabte Studenten sollten den weniger Begabten bei den Prüfungsvorbereitungen helfen, damit alle einen etwa gleichen Abschluß erreichen können.	Talented students should help less talented students to prepare for exams so that all students receive about the same grades.	PAW2
9.	Ich finde, daß es auf der Welt im allgemeinen gerecht zugeht.	Basically the world is a just place.	JWM1
10.	Menschen, die wichtige Arbeit leisten und viel zur Gesellschaft beitragen, sollten mehr Geld bekommen.	People whose work is more important and who contribute more to society should receive more money.	EYS2
11.	Unabhängig von den Leistungen sollte jeder Schüler das gleiche Recht auf Weiterbildung haben.	No matter how well they achieve, all students should have the same right to continue their studies.	PAW3
12.	Es gibt kaum etwas, das mich so erzürmt, wie die Beobachtung von Ungerechtigkeit.	Hardly anything infuriates me more than the observation of injustice.	CJM1
13.	Wer eine bessere Ausbildung hat, soll auch mehr verdienen.	Those who have a better education should earn more money.	EYW3
14.	In einer Ehe müssen Mann und Frau absolut gleiche Rechte und Pflichten haben.	Spouses should have absolutely the same rights and duties.	PAW4
15.	Ich finde es gerecht, wenn Freunde gemeinsam erwirtschafteten Gewinn so unter sich aufteilen, daß der mehr bekommt, der mehr braucht, weil er eine größere Familie ernähren muß.	I find it just if friends would distribute their common earnings in such a manner that the one who needs more for his family gets more.	NEM1

16.	Ehrlichen, aufrichtigen und fleißigen Menschen sollte mehr Ehre und Respekt entgegengebracht werden.	Honest, devoted and industrious people should be given more honor and respect.	EYS3
17.	Ich finde es gerecht, wenn in einem Betrieb, der wegen Absatzschwierigkeiten Kurzarbeit beschließt, die Arbeitnehmer abwechselnd zu Kurzarbeit eingeteilt werden.	I find it just if a company who suffers from lowered sales has their employees take turns in working reduced hours.	FEM1
18.	Ich glaube, daß die Leute im großen und ganzen das bekommen, was ihnen gerechterweise zusteht.	By and large, people get what they deserve.	JWM2
19.	Wer mehr Verantwortung trägt als andere, muß dafür besser bezahlt werden.	People with more responsibility should, in turn, earn more money.	EYW4
20.	Auf den Abgangszeugnissen der Universitäten sollte statt Noten nur der Vermerk 'Bestanden' stehen.	Students who leave the university before finishing a degree should be given reports stating 'passed' instead of numbered grades.	PAW5
21.	Bewerben sich mehrere Behinderte auf eine für Behinderte geschaffene Arbeitsstelle, finde ich es gerecht, wenn das Los darüber entscheidet, wer eingestellt wird.	If several handicapped applicants apply for a job especially created for a handicapped employee, I find it just to decide by lottery.	ECM2
22.	Begabten Menschen, deren Arbeit zur gesellschaftlichen Entwicklung beiträgt, sollte mehr Ehre und Respekt entgegengebracht werden.	Talented people whose activities contribute to society should be given more honor and respect.	EYS4
23.	Allen Menschen sollte in gleichem Maße Ehre und Respekt entgegengebracht werden.	Every person should be given equal honor and respect.	PAS2
24.	Menschen aus benachteiligten Gruppen sollten mehr Möglichkeiten haben, Einfluß zu nehmen.	People from weaker groups, who did not have a chance to be influential in the past, should be given more of an opportunity to speak out.	NES2
25.	Gewinnen zwei Freunde in einem Tennisturnier das Doppel, finde ich es fair, wenn der den Pokal bekommt, dem der Erfolg in erster Linie zu verdanken ist.	If friends win doubles in tennis, I find it just if the one who contributed more to the common success receives the trophy.	EYM1
26.	Gewinnt eine Gruppe befreundeter Filmemacher gemeinsam einen Preis, finde ich es gerecht, wenn jeder einen gleich großen Anteil des Geldes erhält.	If a group of friends win a prize for a film they produced together, it would be just to distribute the money equally.	FEM2
27.	Ich bin sicher, daß immer wieder die Gerechtigkeit in der Welt die Oberhand gewinnt.	Justice always prevails over injustice.	JWM3
28.	BAFÖG sollte jemand, der immer schlechte Noten hat, nicht bekommen.	Financial aid should not be given to students with bad grades.	EYW5

29.	In einer idealen Gesellschaft müßten alle Menschen das Gleiche verdienen.	In an ideal society, everybody would earn the same income.	PAW6
30.	Ich könnte mit niemandem eng befreundet sein, der kein ausgeprägtes Gefühl für Gerechtigkeit hat.	I could not be friends with someone who wasn't sensitive to justice issues.	CJM2
31.	Ehrliche und aufrichtige Menschen sollten mehr Einfluß haben.	People who are known to be honest and have high morals should have more influence.	EYS5
32.	Im Zweifel zwischen Leistungsprinzip und Gleichheitsprinzip sollte man sich für die Gleichheit entscheiden.	In case of doubt, the equality principle should be given preference to the achievement principle.	PAW7
33.	Gewinnen zwei gute Freunde gemeinsam in einem Preisausschreiben Geld, finde ich es gerecht, wenn der mehr bekommt, der das Geld dringender benötigt.	If two friends win a prize together in a competition, I would find it just to give more money to the one who needs more.	NEM2
34.	Wenn ich mit einem Freund zusammen ein Klassenlos kaufe und ich zahle 2/3 des Lospreises, dann stehen mir auch 2/3 des Gewinns zu.	If I by a lottery ticket together with a friend and pay 2/3 of it, I should also receive 2/3 of the prize.	EYW6
35.	Der Grundsatz "Wer nicht arbeitet, soll auch nicht essen" ist unmenschlich und brutal.	The saying "who doesn't work shouldn't eat" is degrading and brutal.	PAW8
36.	Ich bin überzeugt, daß irgendwann jeder für erlittene Ungerechtigkeit entschädigt wird.	In the long run people will be compensated for injustices they have suffered.	JWM4
37.	Menschen mit Sachverstand und Begabung sollten mehr Einfluß haben.	People with expertise and talent should have more influence.	EYS6
38.	Jeder Mensch sollte die gleiche Möglichkeit haben, einflußreich zu sein.	Every person should be given an equal chance to be influential.	PAS3
39.	Bewerben sich mehrere Abiturienten um einen Studienplatz, finde ich es gerecht, wenn der Platz verlost wird.	If the number of applicants exceeds the capacity of a college, admission should be determined by lottery.	ECM3
40.	Arbeiten zwei Freunde zusammen, finde ich es gerecht, wenn der tüchtigere mehr vom gemeinsam erarbeiteten Gewinn erhält.	If two friends work together on a job, I would find it fair if the one who works harder gets paid more.	EYM2
41.	Jeder sollte die Möglichkeit zum Hochschulstudium haben - letztlich ist jedes Auswahlverfahren undemokratisch.	Everybody should have a chance to get a college degree - because every type of selection process is undemocratic.	PAW9
42.	Ich finde, Gewinnbeteiligung in einem Betrieb ist dann gerecht geregelt, wenn Bedienstete mit niedrigem Einkommen eine höhere Prämie bekommen als Bedienstete mit hohem Einkommen.	I would consider profit-sharing in a company just if employees with small salaries receive a larger bonus than employees with large salaries.	NEM3

43.	Ein Sieger mit 10 Metern Vorsprung ist besser als einer mit 10 Zentimetern Vorsprung.	Winning a race with a 10 meter lead is better than winning with a 10 centimeter lead.	EYW7
44.	Ich finde es gerecht, wenn zwei berufstätige Ehepartner ihr gemeinsames Auto abwechselnd für die Fahrt zum Arbeitsplatz benutzen.	I find it just if spouses take turns in using their car for commuting to work.	FEM3
45.	Ungerechtigkeiten sind nach meiner Auffassung in allen Lebensbereichen (z.B. Beruf, Familie, Politik) eher die Ausnahme als die Regel.	Injustices in all areas of life (e.g., career, family, politics) are the exception rather than the rule.	JWM5
46.	Diejenigen, die bereit sind, sich anzustrengen und viel zu arbeiten, sollten besondere Lern- und Entfaltungsmöglichkeiten bekommen.	Those who are willing to make an effort should be given preference [regarding learning opportunities].	EYS7
47.	Wenn ich mit einem Freund zusammenarbeite, dann ist das Endprodukt eine gemeinsame Sache, an der beide gleichen Anteil haben.	If I work together with a friend, I consider the product to be a common achievement which is due to both of us equally.	PAW10
48.	Ich glaube, daß es mich stärker betroffen macht als die meisten anderen Leute, wenn ich Ungerechtigkeiten beobachte.	The observation of injustice makes me more upset than most other people.	CJM3
49.	In einer idealen Gesellschaft sollte jeder nur soviel an Einkommen, Rechten und Einfluß haben, wie ihm aufgrund seiner Tätigkeit für die Gesellschaft zusteht.	In an ideal society, everybody should have only as much income, rights, and power as he deserves on the basis of his contributions to society.	EYW8
50.	Eine Ungerechtigkeit, die ich begangen habe oder die ich nicht verhindert habe, quält mich noch lange.	I feel guilty for a long time when I did something unjust or when I have not prevented some injustice.	CJM4
51.	Die Noten auf der Hochschule sind einfach notwendig, damit die besten Leute auf die besten Arbeitsplätze kommen.	Grades at the university are needed to ensure that the best individuals are given the best jobs.	EYW9
52.	Eine Arbeitsgruppe ist am produktivsten, wenn alle genau gleichviel verdienen.	A team is most productive if everybody earns exactly the same salary.	PAW11
53.	Bewerben sich mehrere LKW-Fahrer bei einer Spedition um eine Stelle, finde ich es gerecht, wenn die Stelle verlost wird.	If several truck drivers apply for the same job, I would find it just to determine by lottery who gets it.	ECM4
54.	Diejenigen, die etwas zur Gesellschaft beitragen, sollten besondere Lern- und Entfaltungsmöglichkeiten bekommen.	Those who can contribute to society should be given preference [regarding learning opportunities].	EYS8
55.	Diejenigen, die bisher benachteiligt waren, sollten besondere Lern- und Entfaltungsmöglichkeiten bekommen.	Those who were not given enough [learning] opportunities in the past should be given preference.	NES3
56.	Ich finde es gerecht, daß knappe Studienplätze an die Bewerber mit den besseren Abiturnoten vergeben werden.	It think it is only fair to regulate college admission on the basis of the applicants grade point average.	EYM3

57.	Jeder sollte die gleichen Lern- und Entfaltungsmöglichkeiten haben.	Everyone should have an equal opportunity to learn, develop and do interesting things.	PAS4
58.	Ich denke, daß sich bei wichtigen Entscheidungen alle Beteiligten um Gerechtigkeit bemühen.	People try to be fair when making important decisions.	JWM6
59.	Schüler von Eliteschulen oder Spitzenkräfte innerhalb einer Belegschaft durch Abzeichen kenntlich zu machen, ist eigentlich eine gute Idee.	It would be a good idea to distinguish students from elite schools and top professionals in a company.	EYW10
60.	Ich würde gern in einem Betrieb arbeiten, in dem der Gewinn unter allen Mitarbeitern - vom Direktor bis zur Putzfrau - gleich verteilt wird.	I would like to work in company where the profits are shared equally among all employees - from the top manager to the cleaning woman.	PAW12
61.	Begabte sollten besondere Lern- und Entfaltungsmöglichkeiten bekommen.	Those with special talents and abilities should be given preference [regarding learning opportunities].	EYS9
62.	Wenn zwei Schüler beim Schmücken eines Klassenzimmers geholfen haben, finde ich ihre Lehrerin dann gerecht, wenn sie beide grundsätzlich gleich viel lobt.	If two students help decorating their classroom, I would find it just if their teacher would praise them equally.	FEM4
63.	Ich finde es gerecht, wenn Arbeitnehmer mit dem geringsten Einkommen am längsten von Kurzarbeit verschont bleiben.	I find it just if employees with small salaries are exempted as long as possible from reduced working hours.	NEM4
64.	Ich würde lieber einen Job annehmen, wo sich das Gehalt danach richtet, was ich schaffe, als einen, wo ich ein Fixum bekomme.	I would rather take a job where my salary depends on my achievement than a job with a fixed pay.	EYW11
65.	Wenn ich jemandem begegne, der gleichgültig gegenüber Ungerechtigkeiten ist, bringt mich das auf.	People who don't care for justice make me angry.	CJM5
66.	Ich finde es fair, wenn der Urlaubspartner, der für den gemeinsamen Urlaub mehr Geld beisteuert, auch das Urlaubsziel bestimmen darf.	If partners go on a vacation together, it is fair to let the one who pays more for the costs decide where to go.	EYM4

Notes:

¹ The first two letters of the item labels refer to the construct, the third letter to the author of the scale. The numbers indicate the number of the item in the original scale.

- EYM: Equity/Montada, Schmitt, & Dalbert (1983)
- EYS: Equity/Sabbagh, Dar, & Resh (1994)
- EYW: Equity/Schwinger & Winterhoff-Spurk (1984)
- EYB: Equity vs. Equality/Bossong (1983a). **These items are in the second part of the inventory; see below**
- FEM: Factual Equality/Montada et al.
- ECM: Equality of Chances/Montada et al.
- PAS: Parity/Sabbagh et al.
- PAW: Parity/Schwinger & Winterhoff-Spurk
- NEM: Need/Montada et al.
- NES: Need/Sabbagh et al.
- CJM: Centrality of Justice/Dalbert, Montada, & Schmitt (1987)

JWM: **Belief in a Just World/Dalbert, Montada, & Schmitt (1987)**

Second Part of the Justice Inventory (Adopted from Bossong, 1983a)

1.	Für die Zubereitung der Mahlzeiten anlässlich einer großen Hochzeit engagiert eine Familie eine Köchin und eine Küchenhilfe. Die Köchin stellt die Menüs zusammen und bereitet diese zu. Die Küchenhilfe verrichtet einfache Arbeiten wie Kartoffeln schälen oder Salat putzen. Die Familie zahlt den beiden Frauen für ihre Arbeit zusammen 400,- DM. Was wäre nach Ihrer Meinung eine faire Aufteilung des Lohns?		A family hires a cook and an aid for preparing food for a large wedding party. The cook selects the food and prepares the meals. The aid does simple work such as peeling potatoes and washing the salad. The family pays both women 400,- DM together. What would you consider a fair distribution of the money?
		Köchin/cook	Küchenhilfe/aid
	1	260,- DM	140,- DM
	2	245,- DM	155,- DM
	3	230,- DM	170,- DM
	4	215,- DM	185,- DM
5	200,- DM	200,- DM	
2.	Zwei Brüder spaten zusammen für die kranke Tante den Garten um. Sie gibt den beiden 200,- DM. Der Ältere hat knapp drei Viertel, der Jüngere gut ein Viertel der Arbeit geleistet. Was wäre nach Ihrer Meinung eine faire Aufteilung des Lohns?		Two brothers spade the garden of their aunt who is sick. She gives the two 200,- DM. The older brother did a little less than three fourths of the work, the younger brother a little more than one fourth. What would you consider a fair distribution of the reward?
		der ältere Bruder/the older brother	der jüngere Bruder/the younger brother
	1	140,- DM	60,- DM
	2	130,- DM	70,- DM
	3	120,- DM	80,- DM
	4	110,- DM	90,- DM
5	100,- DM	100,- DM	
3.	Eine Abteilung der Firma X besteht aus zwei Arbeitsgruppen A und B. Gruppe A liegt in ihrer Leistung aufgrund größerer Erfahrung und Routine um etwa 25% über Gruppe B. Die gute Arbeit der Abteilung wird von der Geschäftsführung mit einer Prämie von 8 000,- DM honoriert. Was wäre nach Ihrer Meinung eine faire Aufteilung der Prämie?		A department of company X consists of two teams A and B. Due to their greater experience and routine, team A achieves about 25% more than team B. The manager awards 8 000, - DM to the entire department for their good work. What would you consider a fair distribution of the award?
		Gruppe A/team A	Gruppe B/team B
	1	5 200,- DM	2 800,- DM
	2	4 900,- DM	3 100,- DM
	3	4 600,- DM	3 400,- DM
	4	4 300,- DM	3 700,- DM
5	4 000,- DM	4 000,- DM	

4.	<p>Herr Müller spielt ausnahmsweise beim Pferdelotto mit. Da er praktisch keine Erfahrung hat, bittet er einen Freund, ihn beim Ausfüllen des Lottoscheins zu beraten. Herr Müller tippt gut und gewinnt 8 000,- DM.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung des Gewinns?</p>	<p>Mr. Miller wants to try betting at the horse races. Since he has practically no experience, he asks his friend to advise him. Mr. Miller bets well and wins 8 000,- DM.</p> <p>What would you consider a fair distribution of the prize?</p>
	Herr Müller/Mr. Müller	Freund/friend
1	8 000,- DM	-
2	7 000,- DM	1 000,- DM
3	6 000,- DM	2 000,- DM
4	5 000,- DM	3 000,- DM
5	4 000,- DM	4 000,- DM
5.	<p>Zwei Maler, ein Geselle und ein Auszubildender, tapezieren nach Feierabend die Wohnung eines Bekannten, der 600,- DM dafür zahlt. Der Geselle mit der größeren Erfahrung verrichtet alle schwierigen Arbeiten und trägt die Gesamtverantwortung; der Auszubildende übernimmt alle Handlangerdienste und kleistert die Tapete ein.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung des Lohns?</p>	<p>Two painters, one experienced and an apprentice, wallpaper the apartment of an acquaintance who pays them 600,- DM. The more experienced person does all the difficult work and is responsible for the job. The apprentice does all the simple work such as putting paste on the paper.</p> <p>What would you consider a fair distribution of the reward?</p>
	Geselle/fellow	Auszubildender/apprentice
1	380,- DM	220,- DM
2	360,- DM	240,- DM
3	340,- DM	260,- DM
4	320,- DM	280,- DM
5	300,- DM	300,- DM
6.	<p>Ein KFZ-Mechaniker und ein Bürokaufmann eröffnen zusammen einen Autoreparaturbetrieb. Für den KFZ-Mechaniker fällt mit der Reparatur der Autos viel Arbeit an. Der Bürokaufmann hat in dem kleinen Betrieb vergleichsweise wenig zu tun. Im ersten Monat wird ein Gewinn von 6 000,- DM erwirtschaftet.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung des Gewinns?</p>	<p>A car mechanic and a salesman start a car repair shop. The mechanic has a lot of repair work to do. In comparison, there is little to do for the salesman in their little garage. In the first month, they make 6 000,- DM.</p> <p>What would you consider a fair distribution of the profit?</p>
	KFZ-Mechaniker/mechanic	Bürokaufmann/salesman
1	3 600,- DM	2 400,- DM
2	3 450,- DM	2 550,- DM
3	3 300,- DM	2 700,- DM
4	3 150,- DM	2 850,- DM
5	3 000,- DM	3 000,- DM

7.	<p>Einer fünfköpfigen Bergsteigergruppe gelingt im Himalaja eine schwierige Erstbesteigung. Das Unternehmen wurde vom Leiter der Gruppe geplant und vorbereitet. Eine Werbeagentur hatte die Exklusivrechte zur Vermarktung der Aktion erworben und der Gruppe hierfür 100 000,- DM gezahlt.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung dieser Summe?</p>	<p>A group of five mountaineers are the first to climb a very difficult peak in the Himalayas. The leader had planned and prepared the tour. An advertising company had bought the right to market the enterprise exclusively and paid the group 100 000,- DM</p> <p>What would you consider a fair distribution of the money?</p>	
		Leiter/leader	die vier anderen zusammen/the remaining four together
	1	40 000,- DM	60 000,- DM
	2	35 000,- DM	65 000,- DM
	3	30 000,- DM	70 000,- DM
	4	25 000,- DM	75 000,- DM
	5	20 000,- DM	80 000,- DM
8.	<p>Zwei befreundete Jungen, Eckhard und Rudi, waschen das Auto der Nachbarin. Diese gibt ihnen 15,- DM dafür. Eckhard ist 11 Jahre alt. Er wäscht das Auto innen und außen. Rudi, der erst 8 Jahre alt ist, verrichtet die kleineren Arbeiten wie Aschenbecher ausleeren, Wasser an- und abdrehen usw.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung des Lohns?</p>	<p>Two friends, Eckhard and Rudi, wash their neighbour's car. She pays them 15,- DM. Eckhard is 11 years old. He washes the outside of the car and cleans the inside. Rudi, who is only 8 years old, does little work such as clean the ashtray and turn the water on and off.</p> <p>What would you consider a fair distribution of the profit?</p>	
		Eckhard	Rudi
	1	9,50 DM	5,50 DM
	2	9,00 DM	6,00 DM
	3	8,50 DM	6,50 DM
	4	8,00 DM	7,00 DM
	5	7,50 DM	7,50 DM
9.	<p>Der Kapitän eines Fischkutters und seine siebenköpfige Mannschaft machen in der Nordsee einen beträchtlichen Tagesfang, der 8 000,- DM einbringt.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung des Gewinns?</p>	<p>The captain of a trawler and his crew of seven have had a very successful day in the North Sea fishing and make a profit of 8 000,- DM.</p> <p>What would you consider a fair distribution of the money?</p>	
		Kapitän/captain	Mannschaft/crew
	1	2 200,- DM	5 800,- DM
	2	1 900,- DM	6 100,- DM
	3	1 600,- DM	6 400,- DM
	4	1 300,- DM	6 700,- DM
	5	1 000,- DM	7 000,- DM

10.	<p>Ein Hobbygärtner und ein Berufsgärtner bepflanzen samstags in nebenberuflicher Tätigkeit ein Grundstück. Als Lohn wurden pauschal 600,- DM ausgehandelt. Beide investieren die gleiche Zeit und Mühe, aber natürlich arbeitet der Berufsgärtner wesentlich effizienter und trägt damit deutlich mehr zur Gesamtleistung bei.</p> <p>Was wäre nach Ihrer Meinung eine faire Aufteilung des Lohns?</p>	<p>To make some extra money, a professional gardener and a hobby gardener plant a piece of land one Saturday. They were paid 600,- DM. Both spend the same amount of time and energy, but of course the professional gardener works more efficiently and thus contributes more to the total achievement.</p> <p>What would you consider a fair distribution of the reward?</p>	
		Berufsgärtner/professional gardener	Hobbygärtner/hobby gardener
	1	400,- DM	200,- DM
	2	375,- DM	225,- DM
	3	350,- DM	250,- DM
	4	325,- DM	275,- DM
	5	300,- DM	300,- DM

APPENDIX 2: PSYCHOMETRIC ANALYSES OF THE JUSTICE INVENTORY

The psychometric analyses of the justice inventory were conducted in the same way as in the Schmitt et al.'s (1994; pp. 16-19) paper. In order to increase the statistical robustness of these analyses, the samples from Study 1 and 2 were pooled (N = 224).

Factor Analyses of the Justice Inventory

In a first step of analyses, the correlation matrix of the 76 items of the justice inventory were submitted to an exploratory principle axes common factor analysis. According to the scree test (Cattell, 1966), the 76 items have seven factors in common. This number would be equal to the number of constructs measured by the inventory if Bossong's bipolar construct is treated as a unique construct and if equality of chances is treated as a different construct than factual equality/parity. In this case, the seven constructs are:

1. equity
2. factual equality/parity
3. equity vs. equality (Bossong)
4. equality of chances (Montada et al.)
5. need
6. belief in a just world
7. centrality of justice

Table 1 gives the factor loadings of the varimax rotated seven factor solution. It can be seen that the factors correspond only partially to the constructs. A similar, yet much more pronounced, discrepancy between the a priori constructs and the empirically identified factors had been found by Schmitt et al. (1994).

Factor 1 in Table 1 is without a doubt an equity factor. Factor 2 is a mixture of parity and need items. The same kind of mixture was found by Schmitt et al. (1994) as well. Factor 3 loads predominantly parity items but also two equity items (with opposite signs) and one need item. Factor 4 is a pure Bossong factor with some substantial loadings on Factors 1 and 2 which makes sense because Bossong's items were constructed to measure equity versus equality. Factor 5 is a clear equality of chances factor which has come out as a robust factor in all previous analyses of the justice inventory and analyses of subsets of items of this inventory. Factor 6 is a rather clear centrality of justice factor, containing to equity items with loadings about as high as the lowest loading for a centrality item. Factor 7 is a pure belief in a just world factor.

Several additional analyses were conducted to investigate the robustness of the solution given in Table 1.

First, an oblique rotation (oblimin criterion) of the seven principle axes was performed to see whether separate need and parity factors with simple structures could be identified. This was not the case even if small angles between factors were allowed. As in the orthogonal solution, need and parity items tended to load on the same common factor.

Second, eight factors were rotated to see whether need and parity would appear as separate factors in this solution. This was not the case, however. The simple structure of the entire solution was worse. More importantly, several need and parity items still tended to load on the same factor.

Third, an exploratory principle axes common factor analysis was conducted only with the distributive justice items, i.e., without the centrality of justice items and the belief in a just world items. The scree test suggests a four or a five common factor solution. Four and five factors were rotated according to the vari-

max and the oblimin criteria. In the orthogonal and in the oblique five factor solutions, the first five factors corresponded well with the first five factors in Table 1. Consequently, the inclusion of the belief in a just world items and the centrality of justice items in the previous analyses had not disguised a possibly clearer factorial structure of the distributive justice items, and it had not disturbed the structure of the loading patterns.

Fourth, an exploratory principle axes common factor analysis was conducted with the distributive justice items, but without Bossong's items, to test the possibility that the confound of equity and parity in Bossong's items might prevent a clear parity factor which is separate from need. According to the scree test, the items have four factors in common. Varimax and oblimin rotations of the four principle axes lead to very similar solutions, and the factors corresponded very well with Factors 1, 2, 3, and 5 of the solution given in Table 1. Consequently, the inclusion of Bossong's items in the previous analyses had not disturbed the factorial structure of the remaining distributive justice items.

To summarize, the lack of discriminant construct validity of the need and parity items contained in Factor 2 of the solution in Table 1 reflects either a lack of psychological discrimination of the two attitudes or a lack of construct validity of the items (or, of course, both).

Factor Analyses of Author-Specific Items

In order to replicate the analyses by Schmitt et al. (1994), the items of the justice inventory were factor analyzed again in a second series of analyses, but separately for authors.

Montada's and his Colleagues' Items

Like in the corresponding analyses conducted by Schmitt et al. (1994), six common factors with a good simple structure after varimax rotation, were found for the items from Montada and his colleagues. Together, the six factors explain 53% of the total item variance. As can be seen from Table 2, the pattern of empirical loadings is perfectly consistent with the definition of the constructs. The scales, therefore, have a very high factorial validity. Most interestingly, the factor loadings in Table 2 are extremely similar to the corresponding values reported by Schmitt et al. (1994, Table 4). Finally, and unlike the solution for the entire Justice Inventory (Table 1), the need and equality items satisfy the criterion of discriminant validity ideally here. This finding qualifies the statement made earlier regarding possible interpretations of the mixed need-parity factor found when all items were factored simultaneously.

Sabbagh, Dar, & Resh's Items

Regarding the Sabbagh et al. (1994) scales, three eigenvalues were greater than one and there was a substantial drop between the third and fourth eigenvalue. The first three principle axes explained 49% of the total item variance. The loading matrix of the varimax solution is given in Table 3. It can be seen that the loading pattern does not correspond to the a priori dimensions equity, equality, and need. Rather, two resource specific equity factors appear, while all but one need and equality items load on one common factor. This result corresponds to the results obtained by Schmitt et al. (1994, p. 18, Footnote 2) and to the results from an unpublished analysis with data collected by Sabbagh, Dar, Hurrelmann, & Resh (1993) from a large sample of East German students (Maes, Schmitt, & Sabbagh, 1995). The appearance of two equity factors suggest to rotate a two factor solution as in the Schmitt et al. (1994) analysis. The first two principle axes explain 39% of the total item variance. A single equity factor emerges from varimax rotation, the second factor being again a mixture of need and equality (cf. Table 4). The same result had been obtained by Schmitt et al. (1994, Table 5) and by Maes, Schmitt, & Sabbagh (1995).

Table 1

Factor Loading Matrix of the Seven Factor Varimax Solution for the Justice Inventory

Item ¹	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
EY9S	.66	-.00	.08	.07	-.16	-.07	.00
EY8S	.64	.22	.03	.10	-.18	.06	.00
EY6S	.61	-.09	-.10	.05	-.01	.05	-.06
EY7S	.60	-.12	.03	.12	-.13	.03	-.14
EY8W	.50	.13	-.02	.07	.04	.05	.15
EY1S	.49	-.23	.22	.20	-.00	.02	.02
EY11W	.49	-.09	-.06	.07	-.02	.11	.11
EY3W	.47	-.16	.04	.22	-.03	.02	.16
EY2S	.46	-.19	.05	.17	-.21	.08	.13
EY9W	.46	-.23	-.17	.14	-.11	.11	.16
EY1W	.46	-.39	.14	.20	-.05	.20	-.01
EY3M	.44	-.15	-.15	.16	-.15	-.07	.09
EY4W	.39	-.34	.11	.21	-.00	-.06	.16
EY2M	.38	.06	.07	.23	.17	-.08	.07
EY4S	.36	-.04	-.19	.05	.11	.30	-.05
EY4M	.33	.12	-.16	.01	.21	.09	.12
EY6W	.32	-.14	-.06	.17	.11	.03	.02
EY2W	.31	-.20	-.08	.10	-.14	.07	.16
EY1M	.29	.16	-.11	.06	.25	-.03	.13
PA7W	-.08	.68	.17	-.17	.03	-.00	.02
PA12W	-.21	.64	-.03	-.09	.00	.12	-.12
PA6W	-.15	.63	.01	-.09	.16	-.00	.00
NE3M	.07	.57	.03	-.07	.09	.06	-.00
NE2M	.06	.57	.12	-.14	.08	.07	-.13
PA1S	-.10	.53	.12	-.14	.10	.10	-.05
NE3S	.24	.50	.39	-.03	-.14	-.01	-.04
NE1M	-.03	.45	.18	.08	.06	.07	-.19
NE1S	-.06	.43	.24	-.06	-.00	.16	-.07
NE4M	.24	.42	.08	-.04	.04	.11	.04
PA11W	-.12	.41	-.00	-.11	.16	.03	.06
PA5W	-.34	.40	.10	-.08	.22	-.07	.07
PA9W	-.24	.38	.15	-.11	.23	-.11	.04
EYB4	.13	-.30	-.09	.30	-.09	-.02	-.11
PA2S	-.10	.16	.50	-.03	.06	-.07	.07
PA1W	.04	.20	.49	-.01	-.03	.07	-.04
PA4S	-.17	.17	.49	-.02	.03	-.02	-.09
FE4M	.05	-.03	.47	-.12	.12	.20	.04

PA4W	-.04	.10	.44	-.10	-.00	.06	-.03
EY5W	.35	-.12	-.39	.25	.05	.06	.02
EY10W	.20	.13	-.39	.30	.05	-.04	.21
FE2M	.07	.03	.38	-.15	.22	.14	-.10
NE2S	-.05	.38	.38	-.10	-.04	.15	-.22
PA10W	.10	.02	.36	-.06	.12	.18	-.01
PA3W	-.19	.22	.34	-.06	.19	-.14	.04
FE3M	.13	.00	.34	-.03	.15	.02	-.03
PA3S	-.24	.23	.33	.05	.09	-.02	.01
FE1M	.03	-.05	.30	-.06	.11	.17	.02
PA2W	-.11	.28	.28	-.11	.21	.15	-.01
PA8W	-.11	.22	.26	-.00	-.06	.07	-.05
EYB5	.17	-.25	-.08	.61	-.04	.02	.04
EYB10	.17	-.09	-.09	.60	-.09	.00	-.00
EYB7	.02	-.15	-.11	.50	-.12	.07	.13
EYB6	.11	.09	-.06	.49	.07	.09	-.10
EYB9	.16	-.20	-.15	.48	-.20	-.01	.05
EYB1	.11	-.32	-.19	.47	-.04	-.00	.05
EYB2	.18	-.14	-.02	.47	.23	-.03	-.02
EYB3	.22	-.25	-.12	.46	-.08	.00	.08
EYB8	.17	-.02	-.01	.45	.17	-.00	-.00
EC4M	-.12	.22	.14	-.05	.74	.00	-.01
EC2M	-.06	.13	.15	-.11	.73	.04	.11
EC1M	-.15	.18	.22	.08	.65	.01	-.06
EC3M	-.14	.16	.22	.03	.60	.08	-.01
EY7W	.22	-.03	-.13	.17	.24	.07	-.07
CJ1M	-.00	.10	.29	.06	.01	.64	.02
CJ5M	.02	.15	.26	.03	.06	.59	.07
CJ3M	.05	.15	-.03	.09	-.00	.54	.05
CJ2M	.18	.06	.12	.06	.05	.52	.12
EY5S	.40	.10	-.02	.02	.05	.45	-.15
EY3S	.41	-.03	-.13	-.05	.16	.43	-.07
CJ4M	-.03	.03	.22	-.09	-.11	.43	-.05
JW1M	.07	-.20	-.09	-.05	.04	-.15	.61
JW2M	.20	-.22	-.11	-.03	-.00	-.04	.61
JW3M	.07	-.02	-.03	-.01	-.02	.08	.58
JW6M	.21	.09	.12	.05	.13	-.04	.53
JW4M	-.04	.13	-.05	-.00	.02	.10	.51
JW5M	-.04	-.14	-.03	.14	-.10	.07	.41

¹ *Note.* The scale labels for this table, the following tables, and the following text are given after the first part of the Justice Inventory in Appendix A and again in Table 6.

Table 2

Factor Loading Matrix of the Six Factor Varimax Solution for Montada's and his Colleagues' Items

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
EC4M	.81	-.06	.01	.11	.05	.10
EC1M	.78	-.09	.02	.09	.11	.02
EC2M	.72	.10	-.00	.08	.25	.10
EC3M	.69	-.03	.10	.11	.13	-.00
JW3M	-.00	.65	.11	.05	-.06	-.01
JW2M	-.06	.63	-.06	-.19	-.08	.16
JW1M	-.05	.62	-.23	-.13	.13	.14
JW4M	.08	.48	.14	.03	-.06	.06
JW6M	.03	.45	-.01	.04	.21	.38
JW5M	-.09	.44	-.00	-.12	-.00	-.03
CJ1M	.09	.02	.69	.02	.20	-.09
CJ3M	.03	.02	.62	.06	-.08	.05
CJ5M	.01	-.01	.60	.13	.35	.16
CJ4M	.01	-.07	.50	.07	.07	-.16
CJ2M	-.00	.11	.50	.10	.18	.13
NE2M	.10	-.18	.03	.73	.10	.10
NE3M	.13	-.00	.11	.59	-.01	.00
NE4M	.05	.05	.22	.49	-.01	.09
NE1M	.09	-.19	-.00	.48	.16	.01
FE4M	.04	-.00	.17	.00	.68	.04
FE2M	.15	-.06	.09	.08	.45	-.10
FE3M	.09	-.02	.00	-.01	.39	.02
FE1M	.07	.04	.11	.07	.38	-.00
EY2M	.01	-.00	-.02	.03	.14	.59
EY1M	.17	.09	.01	.14	-.10	.44
EY3M	-.31	.06	-.03	-.12	-.06	.38
EY4M	.08	.13	.09	.12	-.07	.26

Schwinger & Winterhoff-Spurk's Items

The eigenvalue diagram for the Schwinger and Winterhoff-Spurk (1984) scales suggests three common factors, although only two common factors were expected theoretically. The first three principle axes explain only 30% of the total item variance. Varimax rotation of the first three principle axes did not lead to a satisfactory simple structure of the loading matrix. Therefore, for theoretical reasons, and in order to replicate the analyses conducted by Schmitt et al. (1994), the first two axes were varimax rotated. The loading

matrix of this solution is given in Table 5.

Table 3

Factor Loading Matrix of the Three Factor Varimax Solution for Sabbagh, Dar, & Resh's Items

Item	Factor 1	Factor 2	Factor 3
EY9S	.73	.01	.04
EY8S	.67	.17	.23
EY7S	.64	-.06	.12
EY6S	.57	-.16	.28
EY2S	.54	-.14	.09
EY1S	.51	-.07	.07
NE2S	.00	.60	-.00
NE3S	.28	.59	-.14
NE1S	-.09	.54	.10
PA1S	-.22	.52	.13
PA4S	-.03	.42	-.26
PA3S	-.16	.36	-.27
EY3S	.21	.00	.67
EY4S	.16	-.04	.63
EY5S	.32	.17	.45
PA2S	.00	.33	-.39

Table 4

Factor Loading Matrix of the Two Factor Varimax Solution for Sabbagh, Dar, & Resh's Items

Item	Factor 1	Factor 2
EY8S	.73	.14
EY9S	.66	.03
EY6S	.63	-.20
EY7S	.62	-.06
EY2S	.51	-.13
EY5S	.49	.06
EY1S	.48	-.06
EY3S	.45	-.14
EY4S	.40	-.18
NE3S	.23	.62
NE2S	.04	.58
PA4S	-.12	.48
NE1S	.00	.47
PA1S	-.10	.43
PA3S	-.24	.42

PA2S	-.14	.41
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As can be seen from the numbers in Table 5, the pattern of loadings does again not come close to simple structure. Furthermore, some items have very low commonalities. To test whether an oblique rotation would lead to a better simple structure, an oblimin rotation was performed. The two factors had a substantial negative correlation of $-.44$, but with regard to simple structure, no improvement compared to the varimax solution could be achieved. Therefore, the varimax solution was accepted as the relatively best solution.

Table 5

Factor Loading Matrix of the Three Factor Varimax Solution for Schwinger & Winterhoff-Spurk's Items

Item	Factor 1	Factor 2
PA6W	.73	.03
PA12W	.68	-.00
PA7W	.64	-.11
EY1W	-.55	.19
PA5W	.51	-.29
PA11W	.50	-.01
PA9W	.48	-.26
EY4W	-.42	.19
EY2W	-.33	.20
PA2W	.31	-.30
PA8W	.21	-.20
EY5W	-.17	.55
EY9W	-.36	.54
EY10W	.05	.50
PA3W	.29	-.38
EY11W	-.25	.37
EY8W	-.06	.34
EY3W	-.33	.33
EY7W	-.02	.33
PA1W	.08	-.30
PA4W	.10	-.26
EY6W	-.20	.24
PA10W	.01	-.13

Bossong's Items

The eigenvalue diagram for the ten Bossong items shows that, consistent with the definition of the bipolar construct and consistent with previous analyses (Schmitt et al., 1994), they have only one factor in common. This factor explains a substantial amount of 37% of the total item variance.

Reliability Analyses and Factor Analyses of the A Priori Scales

In a third series of analyses, the twelve a priori scales from the various authors were submitted to a principle axes common factor analysis. The correlation matrix for this analysis is given in Table 6. Table 6 also contains the number of items per scale and the internal consistency coefficients alpha.

Table 6

Internal Consistency Coefficients, Number of Items, and Correlations among the A Priori Scales of the Justice Inventory

	EYM	EYS	EYW	EYB	FEM	ECM	PAS	PAW	NEM	NES	CJM	α	n
EYM												.43	4
EYS	.45											.80	9
EYW	.58	.67										.73	11
EYB	.29	.33	.53									.80	10
FEM	-.02	.09	-.02	-.12								.57	4
ECM	.02	<u>-.16</u>	<u>-.16</u>	-.17	.25							.85	4
PAS	-.12	-.27	-.39	-.32	.30	.34						.51	4
PAW	<u>-.17</u>	-.27	-.49	-.44	.27	.42	.59					.77	12
NEM	.09	.03	<u>-.15</u>	-.23	<u>.14</u>	.25	.35	.52				.69	4
NES	-.08	.03	-.23	-.29	.22	.19	.45	.55	.53			.62	3
CJM	.03	.22	.09	-.01	.27	.12	.18	.18	.21	.28		.74	5
JWM	.22	.07	.26	.08	-.01	-.02	-.09	-.10	<u>-.13</u>	-.17	.02	.72	6

Notes:

- (1) Significance levels: bold numbers: $p < .01$; underlined numbers: $p < .05$
- (2) Scale labels:

- EYM: Equity/Montada, Schmitt, & Dalbert (1983)
- EYS: Equity/Sabbagh, Dar, & Resh (1994)
- EYW: Equity/Schwinger & Winterhoff-Spurk (1984)
- EYB: Equity vs. Equality/Bossong (1983a)
- FEM: Factual Equality/Montada et al.
- ECM: Equality of Chances/Montada et al.
- PAS: Parity/Sabbagh et al.
- PAW: Parity/Schwinger & Winterhoff-Spurk
- NEM: Need/Montada et al.
- NES: Need/Sabbagh et al.
- CJM: Centrality of Justice/Dalbert, Montada, & Schmitt (1987)
- JWM: Belief in a Just World/Dalbert, Montada, & Schmitt (1987)

Before we turn to the results from the factor analysis, we will comment on the coefficients in Table 6. The gray cells contain coefficients of convergent validity, the white cells coefficients of discriminant validity. Although the coefficients differ in size from the corresponding coefficients in the previous study (Schmitt et al., 1994), the general pattern is similar. Most importantly, the pattern of correlations that is required according to Campbell & Fiske (1959) to corroborate the convergent and discriminant validity of the involved measures is not well achieved. For example, the discriminant (negative) correlation between Schwinger & Winterhoff-Spurk's (1984) equity and parity scales (EYW, PAW) is higher than the convergent (positive) correlation between the parity scale and two other equality scales (FEM, ECM). Similarly, the convergent correlation between the two need scales (NES, NEM) is only about as high or even lower than the discriminant correlations between these need scales with one of the parity scales (PAW). Interest-

ingly and in good agreement with the construct, Bossong's measure (attitude towards equity versus equality) correlates about as highly with the equity scales as it correlates with the parity scales.

According to the scree test of the eigenvalue plot of the correlation matrix (Table 6), the twelve scales have only two factors in common. Their loadings on the scales are given in Table 7.

Table 7

Factor Loading Matrix for the A Priori Scales of the Justice Inventory (Varimax Solution)

Scale	Factor 1	Factor 2
PAW	.75	-.40
NES	.69	-.12
NEM	.64	-.03
PAS	.60	-.33
ECM	.40	-.13
FEM	.40	.02
CJM	.39	.18
EYW	-.16	.94
EYS	.08	.75
EYM	.06	.60
EYB	-.30	.49
JWM	-.09	.21

Factor 1 is a mixture of need, equality, and centrality of justice, Factor 2 loads all equity scales. Belief in a just world has low loadings on both factors; previous replication studies and the results reported in Table 2 show that belief in a just world is relatively independent from attitudes towards principles of distributive justice.⁵

Reliability Analyses for the Comprehensive Scales

Schmitt et al. (1994) suggested to form comprehensive scales containing all items which had been devised by the various authors for measuring the same attitude construct. They argued that despite low convergent and discriminant validity coefficients, these comprehensive scales may represent the constructs more fully than the more specific components. Following the procedure of Schmitt et al. (1994), comprehensive scales were used here also for testing the interaction hypotheses. We will briefly report the results from analyses of the internal consistency reliability of these scales.

Attitude Towards Equity

The comprehensive equity scale consists of 34 items (Montada, Sabbagh, Winterhoff-Spurk, Bossong) and has an internal consistency of $\alpha = .89$. All items have positive corrected item-total correlations ranging from .21 to (EYM1) to .54 (EYW1). Schmitt et al. (1994) had found a similar reliability estimate ($\alpha = .88$). Due to its length, the scale is thus reliable despite its internal heterogeneity.

⁵ Achieving such an independence on the level of item content had been a major criterion for Dalbert, Montada, & Schmitt (1987) for developing a new belief in a just world scale.

Attitude Towards Equality

The comprehensive equality scale consists of the Sabbagh et al. and the Schwinger and Winterhoff parity scales as well as of the Montada et al. factual equality and equality of chances scales. The internal consistency of the scale amounts to .85. Schmitt et al. (1994) report exactly the same value. The corrected item-total correlations of the 24 items are all positive, ranging from .17 (FEM1) to .56 (ECM4). Again, the reliability of the scale is sufficient despite its internal heterogeneity.

Attitude Towards Need

Given that the comprehensive need scale has seven items (Montada, Sabbagh) only, its internal consistency of .76 is sufficient. All items have corrected item-total correlations greater than .43.

Summary of Psychometric Analyses and Conclusions

Despite some differences between the results reported by Schmitt et al. (1994) and the results reported here, the general tendency is similar. The conclusions that were drawn by Schmitt et al. (1994) from their results apply to the present results as well.

In terms of explained item variance, approximation of simple structure, and consistency of the empirical loading patterns with the definition of the constructs (factorial validity), the scales developed by Montada, Schmitt, & Dalbert (1983) and by Dalbert, Montada, & Schmitt (1987) perform better than the scales devised by Sabbagh, Dar, & Resh. (1994) and by Schwinger and Winterhoff-Spurk (1984). However, most Montada scales have only moderate internal consistencies and less internal consistencies than the scales from other authors. This is partly due to the shortness of the Montada scales.

Bossong's (1983a) instrument is one-dimensional, internally consistent, and reliable. Furthermore, the pattern of convergent and discriminant validity coefficients of the Bossong scale agrees well to what follows from the bipolar nature of the construct (attitude towards equity versus equality).

Regarding the convergent and discriminant validity of the scales vis à vis each other, results were somewhat better than those obtained by Schmitt et al. (1994), but still not satisfactory. Within-construct correlations among the scales were rather low in some cases and sometimes even lower than cross-construct correlations. Since no firm external criterion for the construct validity of the scales exists, it seems reasonable to rely on the face validity of the items from the perspective of their authors and to assume that the scales tap different facets of the same construct. This reasoning suggests combination of the scales which were developed for measuring the "same" constructs. Such a "comprehensive" scale may cover a larger range of manifestations of the constructs than each single scale. Despite their internal heterogeneity, the estimated reliability coefficients for these scales are sufficient to justify their usage for testing the interaction hypotheses that were to be tested in the present research.

BISHER ERSCHIENENE ARBEITEN DIESER REIHE

- Montada, L. (1978). *Schuld als Schicksal? Zur Psychologie des Erlebens moralischer Verantwortung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 1). Trier: Universität Trier, Fachbereich I - Psychologie.
- Doenges, D. (1978). *Die Fähigkeitskonzeption der Persönlichkeit und ihre Bedeutung für die Moralerziehung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 2). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1978). *Moralerziehung und die Konsistenzproblematik in der Differentiellen Psychologie* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 3). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1980). *Spannungen zwischen formellen und informellen Ordnungen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 4). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C. (1980). *Verantwortlichkeit und Handeln* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 5). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. (1980). *Person, Situation oder Interaktion? Eine zeitlose Streitfrage diskutiert aus der Sicht der Gerechtigkeitsforschung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 6). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. & Montada, L. (1981). *Entscheidungsgegenstand, Sozialkontext und Verfahrensregel als Determinanten des Gerechtigkeitsurteils* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 7). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1981). *Entwicklung interpersonaler Verantwortlichkeit und interpersonaler Schuld. Projektantrag an die Stiftung Volkswagenwerk* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 8). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. (1982). *Empathie: Konzepte, Entwicklung, Quantifizierung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 9). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C. (1981). *Der Glaube an die gerechte Welt: Zur Güte einer deutschen Version der Skala von Rubin & Peplau* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 10). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. (1982). *Zur Erfassung des moralischen Urteils: Zwei standardisierte objektive Verfahren im Vergleich* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 11). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. (1982). *Über die Angemessenheit verschiedener Analyse-Modelle zur Prüfung dreier Typen von Hypothesen über multivariate Zusammenhänge in Handlungsmodellen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 12). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C. (1982). *Ein Strukturmodell interpersonaler Verantwortlichkeit erwachsener Töchter ihren Müttern gegenüber* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 13). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Dalbert, C. & Montada, L. (1982). *Interpersonale Verantwortlichkeit erwachsener Töchter ihren Müttern gegenüber: Rekrutierung der Ausgangsstichprobe, Erhebungsinstrumente in erster Version und Untersuchungsplan* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 14). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Dalbert, C. & Schmitt, M. (1982). *Interpersonale Verantwortlichkeit erwachsener Töchter ihren Müttern gegenüber: Hypothesen über Zusammenhänge innerhalb der Kernvariablen und zwischen Kernvariablen und Kovariaten* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 15). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C., Schmitt, M. & Montada, L. (1982). *Überlegungen zu Möglichkeiten der Erfassung von Schuldkognitionen und Schuldgefühlen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 16). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. & Gehle, H. (1983). *Interpersonale Verantwortlichkeit erwachsener Töchter ihren Müttern gegenüber: Verantwortlichkeitsnormen, Hilfeleistungen und ihre Korrelate - ein Überblick über die Literatur* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 17). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Reichle, B. (1983). *Existentielle Schuld: Explikation eines Konzeptes* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 18). Trier: Universität Trier, Fachbereich I - Psychologie.
- Reichle, B. & Dalbert, C. (1983). *Kontrolle: Konzepte und ausgewählte Bezüge zu existentieller Schuld* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 19). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Schmitt, M. & Dalbert, C. (1983). *Existentielle Schuld: Rekrutierung der Untersuchungsstichprobe, Erhebungsinstrumente und Untersuchungsplan* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 20). Trier: Universität Trier, Fachbereich I - Psychologie.

- Dalbert, C., Schmitt, M. & Montada, L. (1983). *Existentielle Schuld: Ausgewählte Untersuchungshypothesen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 21). Trier: Universität Trier, Fachbereich I - Psychologie.
- Kreuzer, C. & Montada, L. (1983). *Vorhersage der Befriedigung wahrgenommener Bedürfnisse der eigenen Eltern: Ergebnisse einer Pilotstudie* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 22). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Dalbert, C. & Montada, L. (1983). *Interpersonale Verantwortlichkeit erwachsener Töchter ihren Müttern gegenüber: Ergebnisse der Item- und Skalenanalysen (erster Untersuchungszeitraum)* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 23). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C., Montada, L., Schmitt, M. & Schneider, A. (1984). *Existentielle Schuld: Ergebnisse der Item- und Skalenanalysen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 24). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Montada, L. & Dalbert, C. (1984). *Erste Befunde zur Validität des Konstruktes Existentielle Schuld* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 25). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1984). *Feindseligkeit - Friedfertigkeit* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 26). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Boll, T. (1984). *Moralisches Urteil und moralisches Handeln* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 27). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C. & Schmitt, M. (1984). *Einige Anmerkungen und Beispiele zur Formulierung und Prüfung von Moderatorhypothesen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 28). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Dalbert, C. & Montada, L. (1985). *Drei Wege zu mehr Konsistenz: Theoriepräzisierung, Korrespondenzbildung und Datenaggregation* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 29). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C., Montada, L. & Schmitt, M. (1985). *Bereichsspezifischer und allgemeiner Glaube an die Gerechte Welt: Kennwerte und erste Befunde zur Validität zweier Skalen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 30). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Dalbert, C. & Montada, L. (1985). *Beabsichtigung und Ausführung prosozialen Handelns: Merkmals- versus Handlungstheorie?* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 31). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Schmitt, M. & Dalbert, C. (1985). *Thinking about justice and dealing with one's own privileges: A study on existential guilt* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 32). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Dalbert, C. & Montada, L. (1985). *Personale Normen und prosoziales Handeln: Kritische Anmerkungen und eine empirische Untersuchung zum Modell von S.H. Schwartz* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 33). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C., Schmitt, M. & Montada, L. (1985). *Disdain of the disadvantaged: The role of responsibility denial and belief in a just world* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 34). Trier: Universität Trier, Fachbereich I - Psychologie.
- Reichle, B., Montada, L. & Schneider, A. (1985). *Existentielle Schuld: Differenzierung eines Konstrukts* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 35). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schneider, A., Reichle, B. & Montada, L. (1986). *Existentielle Schuld: Stichprobenrekrutierung, Erhebungsinstrumente und Untersuchungsplan* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 36). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schneider, A., Montada, L., Reichle, B. & Meissner, A. (1986). *Auseinandersetzung mit Privilegunterschieden und existentieller Schuld: Item- und Skalenanalysen I* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 37). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1986). *Life stress, injustice, and the question "Who is responsible?"* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 38). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C. (1986). *Einige Anmerkungen zur Verwendung unterschiedlicher Veränderungskriterien* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 39). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1987). *Die Bewältigung von "Schicksalsschlägen" - erlebte Ungerechtigkeit und wahrgenommene Verantwortlichkeit* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 40). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schneider, A., Meissner, A., Montada, L. & Reichle, B. (1987). *Validierung von Selbstberichten über Fremdratings* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 41). Trier: Universität Trier, Fachbereich I - Psychologie.

- Dalbert, C., Steyer, R. & Montada, L. (1988). *Die konzeptuelle Differenzierung zwischen Emotionen mit Hilfe von Strukturgleichungsmodellen: Existentielle Schuld und Mitleid* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 42). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1988). *Schuld wegen Wohlstand?* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 43). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schneider, A. (1988). *Glaube an die gerechte Welt: Replikation der Validierungskorrelate zweier Skalen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 44). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1988). *Schuld und Sühne in strafrechtlicher und psychologischer Beurteilung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 45). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C., Montada, L. & Schmitt, M. (1988). *Intention and ability as predictors of change in adult daughters' prosocial behavior towards their mothers* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 46). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Schneider, A. (1988). *Justice and emotional reactions to victims* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 47). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Bäuerle, C., Dohmke, E., Eckmann, J., Ganseforth, A., Gartelmann, A., Mosthaf, U., Siebert, G. & Wiedemann, R. (1988). *Existentielle Schuld und Mitleid: Ein experimenteller Differenzierungsversuch anhand der Schadensverantwortlichkeit* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 48). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Schneider, A. & Meissner, A. (1988). *Blaming the victim: Schuldvorwürfe und Abwertung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 49). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Figura, E. (1988). *Some psychological factors underlying the request for social isolation of Aids victims* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 50). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1989). *Möglichkeiten der Kontrolle von Ärger im Polizeidienst* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 51). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Schneider, A. (1990). *Coping mit Problemen sozial Schwacher: Annotierte Ergebnistabellen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 52). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Dalbert, C. & Schneider, A. (1990). *Coping mit Problemen sozial schwacher Menschen. Ergebnisse der Längsschnittuntersuchung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 53). Trier: Universität Trier, Fachbereich I - Psychologie.
- Elbers, K. & Montada, L. (1990). *Schutz vor AIDS in neuen Partnerschaften. Dokumentation der Untersuchung und Untersuchungsergebnisse* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 54). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L., Hermes, H. & Schmal, A. (1990). *Ausgrenzung von AIDS-Opfern: Erkrankungsängste oder Vorurteile gegenüber Risikogruppen* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 55). Trier: Universität Trier, Fachbereich I - Psychologie.
- Gehri, U. & Montada, L. (1990). *Schutz vor AIDS: Thematisierung in neuen Partnerschaften* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 56). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Albs, B. (1990). *Emotionale Bewertung von Verlusten und erfolgreiche Bewältigung bei Unfallopfern* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 57). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Kilders, M., Mösele, A., Müller, L., Pfrengle, A., Rabenberg, H., Schott, F., Stolz, J., Suda, U., Williams, M. & Zimmermann, G. (1990). *Validierung der Skala Allgemeiner Gerechte-Welt-Glaube über ein Glücksspielexperiment* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 58). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Bräunling, S., Burkard, P., Jakobi, F., Kobel, M., Krämer, E., Michel, K., Nickel, C., Orth, M., Schaaf, S. & Sonntag, T. (1990). *Schicksal, Gerechte-Welt-Glaube, Verteilungsgerechtigkeit und Personbewertung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 59). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Montada, L. & Dalbert, C. (1990). *Struktur und Funktion der Verantwortlichkeitsabwehr* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 60). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Hoser, K. & Schwenkmezger, P. (1991). *Ärgerintensität und Ärgerausdruck infolge zugeschriebener Verantwortlichkeit für eine Anspruchsverletzung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 61). Trier: Universität Trier, Fachbereich I - Psychologie.

- Montada, L. (1991). *Grundlagen der Anwendungspraxis* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 62). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1992). *Abwertung von Krebskranken - Der Einfluß von Gerechte-Welt- und Kontrollüberzeugungen* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 63). Trier: Universität Trier, Fachbereich I - Psy- chologie.
- Maes, J. (1992). *Konstruktion und Analyse eines mehrdimensionalen Gerechte-Welt-Fragebogens* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 64). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1992). *Attributsverknüpfungen - Eine neue Art der Erfassung von Gerechtigkeitsüberzeugungen?* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 65). Trier: Universität Trier, Fachbereich I - Psy- chologie.
- Janetzko, E. & Schmitt, M. (1992). *Verantwortlichkeits- und Schuldzuschreibungen bei Ost- und Westdeutschen* (Be- richte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 66). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Neumann, R. & Montada, L. (1992). *Sensitivity to experienced injustice: Structural equation measurement and validation models* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 67). Trier: Uni- versität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Behner, R., Müller, L. & Montada, L. (1992). *Werte, existentielle Schuld und Hilfsbereitschaft gegenüber Indios und landlosen Bauern in Paraguay* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 68). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Janetzko, E., Große, K., Haas, J., Jöhren, B., Lachenmeir, K., Menninger, P., Nechvatal, A., Ostner, J., Rauch, P., Roth, E. & Stifter, R. (1992). *Verantwortlichkeits- und Schuldzuschreibungen: Auto- und Heterostereotype Ost- und Westdeutscher* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 69). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. (1993). *Abriß der Gerechtigkeitspsychologie* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtig- keit, Moral" Nr. 70). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M.J., Montada, L. & Falkenau, K. (1994). *Modellierung der generalisierten und bereichsspezifischen Eifer- suchtsneigung mittels Strukturgleichungen* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 71). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Kals, E. (1994). *Perceived Justice of Ecological Policy and Proenvironmental Commitments* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 72). Trier: Universität Trier, Fachbereich I - Psycho- logie.
- Kals, E. & Becker, R.P. (1994). *Zusammenschau von drei umweltpsychologischen Untersuchungen zur Erklärung ver- kehrsbezogener Verbotsforderungen, Engagementbereitschaften und Handlungsentscheidungen* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 73). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1994). *Korrelate des Gerechte-Welt-Glaubens: Ergebnisse aus einer Untersuchung zur Wahrnehmung von Krebskrankheiten und Krebskranken* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 74). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Maes, J. & Neumann, R. (1994). *Gerechtigkeit als innerdeutsches Problem: Skizze eines Forschungsvor- habens* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 75). Trier: Universität Trier, Fach- bereich I - Psychologie.
- Maes, J. (1994). *Psychologische Überlegungen zu Rache* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerech- tigkeit, Moral" Nr. 76). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Barbacsy, R., Binz, S., Buttgerit, C., Heinz, J., Hesse, J., Kraft, S., Kuhlmann, N., Lischetzke, T., Nissmüller, K. & Wunsch, U. (1994). *Distributive justice research from an interactionist perspective* (Berichte aus der Arbeits- gruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 77). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1994). *Drakonität als Personmerkmal: Entwicklung und erste Erprobung eines Fragebogens zur Erfassung von Urteilsstrenge (Drakonität) versus Milde* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Mor- al" Nr. 78). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1995). *Kontrollieren und kontrolliert werden: Konstruktion und Analyse eines Zwei-Wege-Fragebogens zur Erfassung von Kontrollüberzeugungen* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr. 79). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Maes, J. & Schmal, A. (1995). *Gerechtigkeit als innerdeutsches Problem: Auswahl von Indikatoren see- lischer Gesundheit.* (Berichte aus der Arbeitsgruppe "Verantwortung, Ge rechtigkeit, Moral" Nr.80). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1995). *Befunde zur Unterscheidung von immanenter und ultimativer Gerechtigkeit: 1. Ergebnisse aus einer Untersuchung zur Wahrnehmung von Krebskrankheiten und Krebskranken* (Berichte aus der Arbeitsgruppe "Ver- antwortung, Ge rechtigkeit, Moral" Nr.81). Trier: Universität Trier, Fachbereich I - Psychologie.

- Schmitt, M., Maes, J. & Schmal, A. (1995). *Gerechtigkeit als innerdeutsches Problem: Einstellungen zu Verteilungsprinzipien, Ungerechtigkeitsensibilität und Glaube an eine gerechte Welt als Kovariate*. (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.82). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Maes, J. & Schmal, A. (1995). *Gerechtigkeit als innerdeutsches Problem: Kernvariablen*. (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.83). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J. (1995). *Freiheit oder Determinismus - ein Kurzfragebogen zur Erfassung individueller Unterschiede* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.84). Trier: Universität Trier, Fachbereich I - Psychologie.
- Maes, J., Schmitt, M. & Schmal, A. (1995). *Gerechtigkeit als innerdeutsches Problem: Werthaltungen, Kontrollüberzeugungen, Freiheitsüberzeugungen, Drakonität, Soziale Einstellungen, Empathie und Protestantische Arbeitsethik als Kovariate* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.85). Trier: Universität Trier, Fachbereich I - Psychologie.
- Dalbert, C. & Schneider, A. (1995). *Die Allgemeine Gerechte-Welt-Skala: Dimensionalität, Stabilität & Fremdurteiler-Validität* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.86). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Mohiyeddini, C. (1995). *Arbeitslosigkeit und Gerechtigkeit* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.87). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. & Kals, E. (1995). *Motivvergleich umwelt- und gesundheitsrelevanten Verhaltens: Beschreibung eines Projekts* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.88). Trier: Universität Trier, Fachbereich I - Psychologie..
- Kals, E. & Becker, R.P. (1995). *Item- und Skalenanalyse umwelt- und gesundheitsbezogener Meßinstrumente*. (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr.89). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M. & Mohiyeddini, C. (1995). *Sensitivity to befallen injustice and reactions to a real life disadvantage* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 90). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1995). *Kategorien der Angst und Möglichkeiten der Angstbewältigung* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 91). Trier: Universität Trier, Fachbereich I - Psychologie.
- Montada, L. (1995). *Ein Modell der Eifersucht* (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 92). Trier: Universität Trier, Fachbereich I - Psychologie.

ANDERNORTS PUBLIZIERTE ARBEITEN AUS DIESER ARBEITSGRUPPE

- Montada, L. (1977). Moralisches Verhalten. In T. Herrmann, P.R. Hofstätter, H. Huber & F.E. Weinert (Hrsg.), *Handbuch psychologischer Grundbegriffe* (S. 289-296). München: Kösel.
- Montada, L. (1980). Gerechtigkeit im Wandel der Entwicklung. In G. Mikula (Hrsg.), *Gerechtigkeit und soziale Interaktion* (S. 301-329). Bern: Huber.
- Montada, L. (1980). Moralische Kompetenz: Aufbau und Aktualisierung. In L.H. Eckensberger & R.K. Silbereisen (Hrsg.), *Entwicklung sozialer Kognitionen: Modelle, Theorien, Methoden, Anwendungen* (S. 237-256). Stuttgart: Klett-Cotta.
- Montada, L. (1981). Gedanken zur Psychologie moralischer Verantwortung. In V. Zsifkovits & R. Weiler (Hrsg.), *Erfahrungsbezogene Ethik* (S. 67-88). Berlin: Duncker & Humblot.
- Montada, L. (1981). Voreingenommenheiten im Urteil über Schuld und Verantwortlichkeit. *Trierer Psychologische Berichte*, 8, Heft 10.
- Schmitt, M. & Montada, L. (1982). Determinanten erlebter Gerechtigkeit. *Zeitschrift für Sozialpsychologie*, 13, 32-44.
- Dahl, U., Montada, L. & Schmitt, M. (1982). Hilfsbereitschaft als Personmerkmal. *Trierer Psychologische Berichte*, 9, Heft 8.
- Dalbert, C. & Montada, L. (1982). Vorurteile und Gerechtigkeit in der Beurteilung von Straftaten. Eine Untersuchung zur Verantwortlichkeitsattribution. *Trierer Psychologische Berichte*, 9, Heft 9.
- Montada, L. (1982). Entwicklung moralischer Urteilsstrukturen und Aufbau von Werthaltungen. In R. Oerter, L. Montada u.a. *Entwicklungspsychologie* (S. 633-673). München: Urban & Schwarzenberg.
- Schmitt, M. (1982). Schuldgefühle erwachsener Töchter gegenüber ihren Müttern: Zwei Modelle. *Bremer Beiträge zur Psychologie*, 17, 84-90.
- Montada, L. (1983). Moralisches Urteil und moralisches Handeln - Gutachten über die Fruchtbarkeit des Kohlberg-Ansatzes. Bonn: Bundesministerium der Verteidigung (Hrsg.), *Wehrpsychologische Untersuchungen*, 18,(2).
- Montada, L. (1983). Delinquenz. In R.K. Silbereisen & L. Montada (Hrsg.), *Entwicklungspsychologie. Ein Handbuch in Schlüsselbegriffen* (S. 201-212). München: Urban & Schwarzenberg.

- Montada, L. (1983). Voreingenommenheiten im Urteilen über Schuld und Verantwortlichkeit. In L. Montada, K. Reusser & G. Steiner (Hrsg.), *Kognition und Handeln* (S. 165-168). Stuttgart: Klett-Cotta.
- Montada, L. (1983). Verantwortlichkeit und das Menschenbild in der Psychologie. In G. Jüttemann (Hrsg.), *Psychologie in der Veränderung* (S. 162-188). Weinheim: Beltz.
- Schmitt, M., Montada, L. & Dalbert, C. (1985). Zur Vorhersage von Hilfeleistungen erwachsener Töchter ihren Müttern gegenüber. In D. Albert (Hrsg.), *Bericht über den 34. Kongreß der Deutschen Gesellschaft für Psychologie in Wien 1984* (Band 1, S. 435-438). Göttingen: Hogrefe.
- Schmitt, M., Dalbert, C. & Montada, L. (1985). Drei Wege zu mehr Konsistenz in der Selbstbeschreibung: Theoriepräzisierung, Korrespondenzbildung und Datenaggregation. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 6, 147-159.
- Montada, L., Dalbert, C., Reichle, B. & Schmitt, M. (1986). Urteile über Gerechtigkeit, "Existentielle Schuld" und Strategien der Schuldabwehr. In F. Oser, W. Althof & D. Garz (Hrsg.), *Moralische Zugänge zum Menschen - Zugänge zum moralischen Menschen* (S. 205-225). München: Peter Kindt Verlag.
- Montada, L., Schmitt, M. & Dalbert, C. (1986). Thinking about justice and dealing with one's own privileges: A study of existential guilt. In H.W. Bierhoff, R. Cohen, & J. Greenberg (Eds.), *Justice in social relations* (pp. 125-143). New York: Plenum Press.
- Montada, L. (1986). Vom Werden der Moral. Wann wir wissen, was gut und böse ist. In P. Fischer & F. Kubli (Hrsg.), *Das Erwachen der Intelligenz* (S. 45-56). Berlin: Schering.
- Dalbert, C. & Schmitt, M. (1986). Einige Anmerkungen und Beispiele zur Formulierung und Prüfung von Moderatorhypothesen. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 7, 29-43.
- Schmitt, M., Dalbert, C. & Montada, L. (1986). Personale Normen und prosoziales Handeln: Kritische Anmerkungen und eine empirische Untersuchung zum Modell von S.H. SCHWARTZ. *Zeitschrift für Sozialpsychologie*, 17, 40-49.
- Schmitt, M., Dalbert, C. & Montada, L. (1986). Prosoziale Leistungen erwachsener Töchter gegenüber ihren Müttern: Unterschiede in den Bedingungen von Absicht und Ausführung. *Psychologische Beiträge*, 28, 139-163.
- Bartussek, D. & Schmitt, M. (1986). Die Abhängigkeit des evozierten EEG-Potentials von Reizbedeutung, Extraversion und Neurotizismus. Eine Untersuchung zur Extraversionstheorie von J.A. Gray. *Trierer Psychologische Berichte*, 13, Heft 8.
- Dalbert, C. (1987). *Ein Veränderungsmodell prosozialer Handlungen. Leistungen erwachsener Töchter für ihre Mütter*. Regensburg: Roderer.
- Dalbert, C. (1987). Einige Anmerkungen zur Verwendung unterschiedlicher Veränderungskriterien. *Psychologische Beiträge*, 29, 423-438.
- Dalbert, C., Montada, L. & Schmitt, M. (1987). Glaube an eine gerechte Welt als Motiv: Validierungskorrelate zweier Skalen. *Psychologische Beiträge*, 29, 596-615.
- Steyer, R. & Schmitt, M.J. (1987). Psychometric theory of persons-in-situations: Definitions of consistency, specificity and reliability, and the effects of aggregation. *Trierer Psychologische Berichte*, 14, Heft 3.
- Montada, L., Schneider, A. & Reichle, B. (1988). Emotionen und Hilfsbereitschaft. In H.W. Bierhoff & L. Montada (Hrsg.), *Altruismus - Bedingungen der Hilfsbereitschaft* (S. 130-153). Göttingen: Hogrefe.
- Montada, L., Dalbert, C. & Schmitt, M. (1988). Ist prosoziales Handeln im Kontext Familie abhängig von situationalen, personalen oder systemischen Faktoren? In H.W. Bierhoff & L. Montada (Hrsg.), *Altruismus - Bedingungen der Hilfsbereitschaft* (S. 179-205). Göttingen: Hogrefe.
- Montada, L. (1988). Die Bewältigung von 'Schicksalsschlägen' - erlebte Ungerechtigkeit und wahrgenommene Verantwortlichkeit. *Schweizerische Zeitschrift für Psychologie*, 47, 203-216.
- Montada, L., Dalbert, C. & Schmitt, M. (1988). Wahrgenommener Handlungsspielraum und emotionale Reaktionen gegenüber Benachteiligten. In G. Krampen (Hrsg.), *Diagnostik von Kausalattributionen und Kontrollüberzeugungen* (S. 119-126). Göttingen: Hogrefe.
- Montada, L. (1988). Verantwortlichkeitsattribution und ihre Wirkung im Sport. *Psychologie und Sport*, 20, 13-39.
- Montada, L. & Boll, T. (1988). Auflösung und Dämpfung von Feindseligkeit. *Untersuchungen des Psychologischen Dienstes der Bundeswehr*, 23, 43-144.
- Montada, L., Dalbert, C. & Steyer, R. (1988). Die konzeptuelle Differenzierung zwischen Emotionen mit Hilfe von Strukturgleichungsmodellen: Existentielle Schuld und Mitleid. *Psychologische Beiträge*, 31, 541 - 555.
- Maes, J. & Montada, L. (1989). Verantwortlichkeit für "Schicksalsschläge": Eine Pilotstudie. *Psychologische Beiträge*, 31, 107 - 124.
- Montada, L. (1989). Sozialisation zu Pflicht und Gehorsam. *Politicum*, 42, 16-21.
- Montada, L. (1989). Bildung der Gefühle? *Zeitschrift für Pädagogik*, 35, 294-312.
- Montada, L. (1989). Strafzwecküberlegungen aus psychologischer Sicht. In C. Pfeiffer & M. Oswald (Hrsg.), *Strafzumessung - Empirische Forschung und Strafrechtsdogmatik im Dialog* (S. 261-268). Stuttgart: Enke-Verlag.

- Schmitt, M. (1989). Ipsative Konsistenz (Kohärenz) als Profilähnlichkeit. *Trierer Psychologische Berichte*, 16, Heft 2.
- Schmitt, M., Bäuerle, C., Dohmke, E., Eckmann, J., Ganseforth, A., Gartelmann, A., Mosthaf, U., Siebert, G. & Wiedemann, R. (1989). Zur Differenzierung von Existentieller Schuld und Mitleid über Verantwortlichkeitsinduktion: Ein Filmexperiment. *Zeitschrift für experimentelle und angewandte Psychologie*, 36, 274-291.
- Montada, L. & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. *Social Justice Research*, 3, 313-344.
- Schmitt, M. (1990). Further evidence on the invalidity of self-reported consistency. In P.J.D. Drenth, J.A. Sergeant & R.J. Takens (Eds.), *European perspectives in psychology* (Vol. 1, pp. 57-68). New York: Wiley.
- Schmitt, M. (1990). *Konsistenz als Persönlichkeitseigenschaft? Moderatorvariablen in der Persönlichkeits- und Einstellungsforschung*. Berlin: Springer.
- Steyer, R. & Schmitt, M. (1990). The effects of aggregation across and within occasions on consistency, specificity, and reliability. *Methodika*, 4, 58-94.
- Steyer, R. & Schmitt, M. (1990). Latent state-trait models in attitude research. *Quality and Quantity*, 24, 427-445.
- Schmitt, M. & Steyer, R. (1990). Beyond intuition and classical test theory: A reply to Epstein. *Methodika*, 4, 101-107.
- Schmitt, M. (1990). Zur (mangelnden) Konstruktvalidität von Konsistenz-Selbsteinschätzungen. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 11, 149-166.
- Montada, L., Schmitt, M. & Dalbert, C. (1991). Prosocial commitments in the family: Situational, personality, and systemic factors. In L. Montada & H.W. Bierhoff (Eds.), *Altruism in social systems* (pp. 177-203). Toronto: Hogrefe.
- Montada, L. & Schneider, A. (1991). Justice and prosocial commitments. In L. Montada & H.W. Bierhoff (Eds.), *Altruism in social systems* (pp. 58-81). Toronto: Hogrefe.
- Schmitt, M. (1991). Differentielle differentielle Psychologie: Ursachen individueller Konsistenzunterschiede und Probleme der Moderatorforschung. *Trierer Psychologische Berichte*, 18, Heft 2.
- Schmitt, M. (1991). Beauty is not always talent: Untersuchungen zum Verschwinden des Halo-Effekts. *Trierer Psychologische Berichte*, 18, Heft 10.
- Schmitt, M., Kilders, M., Möhle, A., Müller, L., Prengle, A., Rabenberg, H., Schott, F., Stolz, J., Suda, U., Williams, M. & Zimmermann, G. (1991). Gerechte-Welt-Glaube, Gewinn und Verlust: Rechtfertigung oder ausgleichende Gerechtigkeit? *Zeitschrift für Sozialpsychologie*, 22, 37-45.
- Schmitt, M. (1991). Zur Differenzierung des Eigenschaftsmodells durch Moderatorstrukturen: Bestandsaufnahme, Probleme, Perspektiven. In D. Frey (Hrsg.), *Bericht über den 37. Kongress der Deutschen Gesellschaft für Psychologie in Kiel 1990* (Band 2, S. 429-434). Göttingen: Hogrefe.
- Schmitt, M. (1991). Ungerechtes Schicksal und Personbewertung. *Zeitschrift für Sozialpsychologie*, 22, 208-210.
- Schmitt, M., Hoser, K. & Schwenkmezger, P. (1991). Schadensverantwortlichkeit und Ärger. *Zeitschrift für experimentelle und angewandte Psychologie*, 38, 634-647.
- Schmitt, M., Montada, L. & Dalbert, C. (1991). Struktur und Funktion der Verantwortlichkeitsabwehr. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 11, 203-214.
- Montada, L. (1991). Life stress, injustice, and the question "Who is responsible?". In: H. Steensma & R. Vermunt (Eds.), *Social justice in human relations* (Vol. 2, pp. 9 - 30). New York: Plenum Press.
- Montada, L. (1992). Predicting prosocial commitment in different social contexts. In P.M. Oliner, S.P. Oliner, L. Baron, L.A. Blum, D.L. Krebs & M.Z. Smolenska (Eds.), *Embracing the other: Philosophical, psychological and historical perspectives* (pp. 226 - 252). New York: New York University Press.
- Montada, L. (1992). Attribution of responsibility for losses and perceived injustice. In L. Montada, S.- H. Filipp & M.J. Lerner (Eds.), *Life crises and the experience of loss in adulthood* (pp. 133 - 162). Hillsdale, NJ: Lawrence Erlbaum.
- Steyer, R., Ferring, D. & Schmitt, M. (1992). On the definition of states and traits. *Trierer Psychologische Berichte*, 19, Heft 2.
- Schmitt, M. (1992). Interindividuelle Konsistenzunterschiede als Herausforderung für die Differentielle Psychologie. *Psychologische Rundschau*, 43, 30-45.
- Schmitt, M. & Borkenau, P. (1992). The consistency of personality. In G.-V. Caprara & G.L. Van Heck (Eds.), *Modern personality psychology. Critical reviews and new directions* (pp. 29-55). New York: Harvester-Wheatsheaf.
- Schmitt, M. & Baltes-Götz, B. (1992). Common and uncommon moderator concepts: Comment on Wermuth's „Moderating Effects in Multivariate Normal Distributions“. *Methodika*, 6, 1-4.
- Montada, L. (1992). Moralische Gefühle. In W. Edelstein, G. Nunner-Winkler & G. Noam (Hrsg.), *Moral und Person* (S. 259-277). Frankfurt: Suhrkamp.
- Steyer, R., Ferring, D. & Schmitt, M. (1992). States and traits in psychological assessment. *European Journal of Psychological Assessment*, 2, 79-98.

- Montada, L. (1992). Eine Pädagogische Psychologie der Gefühle. Kognitionen und die Steuerung erlebter Emotionen. In H. Mandl, M. Dreher & H.-J. Kornadt (Hrsg.), *Entwicklung und Denken im kulturellen Kontext* (S. 229 - 249). Göttingen: Hogrefe.
- Dalbert, C., Fisch, U. & Montada, L. (1992). Is inequality unjust? Evaluating women's career chances. *European Review of Applied Psychology*, 42, 11-17.
- Schmitt, M. (1992). Schönheit und Talent: Untersuchungen zum Verschwinden des Halo-Effekts. *Zeitschrift für experimentelle und angewandte Psychologie*, 39, 475-492.
- Hoser, K., Schmitt, M. & Schwenkmezger, P. (1992). Verantwortlichkeit und Ärger. In V. Hodapp & P. Schwenkmezger (Hrsg.), *Ärger und Ärgerausdruck* (S. 143-168). Bern: Huber.
- Lüken, A., Kaiser, A., Maes, J., Schmillen, A. & Winkels, R. (1992). Begabtenförderung am Gymnasium mit Schulzeitverkürzung. Ein Schulversuch des Landes Rheinland-Pfalz zur Förderung leistungsfähiger und lernwilliger Schüler und Schülerinnen. In H. Drewelow & K. Urban (Hrsg.), *Besondere Begabungen - spezielle Schulen? Beiträge zur wissenschaftlichen Arbeitstagung vom 23.-25. April 1992 in Rostock* (S. 53-59). Rostock: Universität Rostock.
- Kaiser, A., Lüken, A., Maes, J., Schmillen, A., Winkels, R. & Kaiser, R. (1992). *Schulversuch "Begabtenförderung am Gymnasium mit Verkürzung der Schulzeit" des Ministeriums für Bildung und Kultur Rheinland-Pfalz. Zwischenbericht der wissenschaftlichen Begleitung*. Trier: Forschungsstelle Begys.
- Maes, J. (1993). Bibliothherapie: Wirksam und erforschbar. *Fremde Verse*, 3(1), 10-11.
- Schmitt, M. & Steyer, R. (1993). A latent state-trait model for social desirability. In R. Steyer, K.F. Wender, & K.F. Widaman (Eds.), *Proceedings of the 7th European Meeting of the Psychometric Society in Trier* (pp. 463-468). Stuttgart: Gustav Fischer Verlag.
- Montada, L. (1993). Victimization by critical life events. In W. Bilsky, C. Pfeiffer, & P. Wetzels (Eds.), *Fear of crime and criminal victimization* (pp. 83-98). Stuttgart: Enke.
- Montada, L. (1993). Understanding oughts by assessing moral reasoning or moral emotions. In G. Noam & T. Wren (Eds.), *The moral self* (pp. 292-309). Boston: MIT-Press.
- Schmitt, M. & Steyer, R. (1993). A latent state-trait model (not only) for social desirability. *Personality and Individual Differences*, 14, 519-529.
- Janetzko, E. & Schmitt, M. (1993). Verantwortlichkeits- und Schuldzuschreibungen bei Ost- und Westdeutschen. *Report Psychologie*, 18(9), 18-27.
- Montada, L. (1993). Umverteilungen nach der Vereinigung: Über den Bedarf an Psychologie nach dem Beitritt der ehemaligen DDR zur Bundesrepublik. In G. Trommsdorf (Hrsg.), *Psychologische Aspekte des sozio-politischen Wandels in Ostdeutschland* (pp. 50-62). Berlin: de Gruyter.
- Schmitt, M. & Janetzko, E. (1993). Verantwortlichkeitsüberzeugungen bei Ost- und Westdeutschen. In G. Trommsdorff (Hrsg.), *Psychologische Aspekte des sozio-politischen Wandels in Ostdeutschland* (S. 169-179). Berlin: de Gruyter.
- Dalbert, C. & Schmitt, M. (1993). Kriterien, Perspektiven und Konsequenzen von Gerechtigkeitsurteilen. In L. Montada (Hrsg.), *Bericht über den 38. Kongreß der Deutschen Gesellschaft für Psychologie in Trier 1992* (Band 2, S. 858-860). Göttingen: Hogrefe.
- Schmitt, M. & Dalbert, C. (1993). Gerechtigkeitsbedrohliche Lebensereignisse. In L. Montada (Hrsg.), *Bericht über den 38. Kongreß der Deutschen Gesellschaft für Psychologie in Trier 1992* (Band 2, S. 951-954). Göttingen: Hogrefe.
- Montada, L. (1993). Fallen der Gerechtigkeit: Probleme der Umverteilung von West nach Ost. In L. Montada (Hrsg.), *Bericht über den 38. Kongreß der Deutschen Gesellschaft für Psychologie in Trier 1992* (Band 2, S. 31-48). Göttingen: Hogrefe.
- Schmitt, M., Schwartz, S.H., Steyer, R., & Schmitt, T. (1993). Measurement models for the Schwartz Values Inventory. *European Journal of Psychological Assessment*, 9, 107-121.
- Bartussek, D. & Schmitt, M. (1993). Persönlichkeit. In A. Schorr (Hrsg.), *Handwörterbuch der Angewandten Psychologie* (S. 502-507). Bonn: Deutscher Psychologen Verlag.
- Schmal, A. (1993). *Problemgruppen oder Reserven für den Arbeitsmarkt. Ältere Arbeitnehmer, ausländische Jugendliche, Berufsrückkehrerinnen und arbeitslose Akademiker*. Frankfurt: Campus.
- Schmitt, M. (1993). Handlung als Synthese von Person und Situation: Lehren aus der Konsistenzkontroverse. *Zeitschrift für Sozialpsychologie*, 24, 71-75 [Rezension von: Krahe, B. (1992). *Personality and Social Psychology. Towards a Synthesis*. London: Sage.].
- Montada, L. (Hrsg.) (1994). *Arbeitslosigkeit und soziale Gerechtigkeit*. Frankfurt: Campus.
- Montada, L. (1994). Arbeitslosigkeit ein Gerechtigkeitsproblem? In L. Montada (Hrsg.), *Arbeitslosigkeit und soziale Gerechtigkeit* (S. 53-86). Frankfurt: Campus.
- Schmal, A. (1994). Ungleichheiten auf dem Arbeitsmarkt zwischen Bevölkerungsgruppen und Regionen. In L. Montada (Hrsg.), *Arbeitslosigkeit und soziale Gerechtigkeit* (S. 87-106). Frankfurt: Campus.
- Maes, J. (1994). Blaming the victim - belief in control or belief in justice? *Social Justice Research*, 7, 69-90.

- Montada, L. (1994). Maßnahmen gegen Arbeitslosigkeit: Bewertungen unter Gerechtigkeitsaspekten. In L. Montada (Hrsg.), *Arbeitslosigkeit und soziale Gerechtigkeit* (S. 264-281). Frankfurt: Campus.
- Reichle, B. (1994). *Die Geburt des ersten Kindes - eine Herausforderung für die Partnerschaft. Verarbeitung und Folgen einer einschneidenden Lebensveränderung*. Bielefeld: Kleine.
- Reichle, B. (1994). Die Zuschreibung von Verantwortlichkeit für negative Ereignisse in Partnerschaften: Ein Modell und erste empirische Befunde. *Zeitschrift für Sozialpsychologie*, 25, 227-237.
- Reichle, B. & Montada, L. (1994). Problems with the transition to parenthood: Perceived responsibility for restrictions and losses and the experience of injustice. In M.J. Lerner & G. Mikula (Eds.), *Entitlement and the affectional bond. Justice in Close Relationships* (pp. 205-228). New York: Plenum Press.
- Montada, L. (1994). Problems and crises in human development. In T. Husén & T.N. Postlethwaite (Eds.), *International encyclopedia of education* (Vol. 8, pp. 4715-4719). London: Pergamon.
- Montada, L. (1994). Die Sozialisation von Moral. In K.A. Schneewind (Hrsg.), *Enzyklopädie der Psychologie. Psychologie der Erziehung und Sozialisation* (S. 315-344). Göttingen: Hogrefe.
- Kaiser, A., Lüken, A., Maes, J. & Winkels, R. (1994). Schulzeitverkürzung - Auf der Suche nach dem bildungspolitischen Kompromiß. *Grundlagen der Weiterbildung. Zeitschrift für Weiterbildung und Bildungspolitik im In- und Ausland*, 5, 219-223.
- Schmitt, M. (1994). Gerechtigkeit. In M. Hockel, W. Molt & L. von Rosenstiel (Hrsg.), *Handbuch der Angewandten Psychologie* (Kapitel VII - 10). München: ecomed.
- Montada, L. (1994). Injustice in harm and loss. *Social Justice Research*, 7, 5-28.
- Kals, E. (1994). Straßenverkehr und Umweltschutz: Die ökologische Verantwortung des Bürgers. In A. Flade (Hrsg.), *Mobilitätsverhalten - Bedingungen und Veränderungsmöglichkeiten aus umweltsychologischer Sicht* (S. 255-266). Weinheim: Psychologie Verlags Union.
- Kals, E. & Montada, L. (1994). Umweltschutz und die Verantwortung der Bürger. *Zeitschrift für Sozialpsychologie*, 25, 326-337.
- Montada, L. (1995). Applying Social Psychology: The case of redistributions in unified Germany. *Social Justice Research*, 8, 73-90.
- Montada, L. (1995). Bewältigung von Ungerechtigkeiten in erlittenen Verlusten. *Report Psychologie*, 20(2), 14-26.
- Schmitt, M., Schick, A. & Becker, J.H. (1995). Subjective quality and subjective wearing comfort of running shoes. *Triester Psychologische Berichte*, 22, Heft 2.
- Montada, L. (1995). Gerechtigkeitsprobleme bei Umverteilungen im vereinigten Deutschland. In H.-P. Müller & B. Wegener (Hrsg.), *Soziale Ungleichheit und soziale Gerechtigkeit* (S. 313-333). Opladen: Leske & Budrich.
- Schmitt, M., Falkenau, K. & Montada, L. (1995). Zur Messung von Eifersucht über stellvertretende Emotionsbegriffe und zur Bereichsspezifität der Eifersuchtsneigung. *Diagnostica*, 41, 131-149.
- Montada, L. (1995). Fragen, Konzepte, Perspektiven. In R. Oerter & L. Montada (Hrsg.), *Entwicklungspsychologie* (S. 1-83). Weinheim: Psychologie Verlags Union.
- Montada, L. (1995). Die geistige Entwicklung aus der Sicht Jean Piagets. In R. Oerter & L. Montada (Hrsg.), *Entwicklungspsychologie* (S. 518-560). Weinheim: Psychologie Verlags Union.
- Montada, L. (1995). Moralische Entwicklung und moralische Sozialisation. In R. Oerter & L. Montada (Hrsg.), *Entwicklungspsychologie* (S. 862-894). Weinheim: Psychologie Verlags Union.
- Montada, L. (1995). Entwicklungspsychologie und Anwendungspraxis. In R. Oerter & L. Montada (Hrsg.), *Entwicklungspsychologie* (S. 895-928). Weinheim: Psychologie Verlags Union.
- Montada, L. (1995). Delinquenz. In R. Oerter & L. Montada (Hrsg.), *Entwicklungspsychologie* (S. 1024-1036). Weinheim: Psychologie Verlags Union.
- Schick, A., Schmitt, M., & Becker, J.H. (1995). Subjektive Beurteilung der Qualität von Laufschuhen. *Psychologie und Sport*, 2, 46-56.
- Montada, L. (1995). Machen Gebrechlichkeit und chronische Krankheit produktives Altern unmöglich? In Baltes, M.M. & Montada, L. (Hrsg.). (1995). *Produktives Leben im Alter* (S. 382-392). Frankfurt: Campus.
- Montada, L. & Kals, E. (1995). Perceived justice of ecological policy and proenvironmental commitments. *Social Justice Research*, 8, 305-327.
- Montada, L., Becker, J., Schoepflin, U. & Baltes, P.B. (1995). Die internationale Rezeption der deutschen Psychologie. *Psychologische Rundschau*, 46, 186-199.
- Schmitt, M. (1995). Politische Legitimation und kollektives Selbstwertgefühl durch Propaganda. *Zeitschrift für Sozialpsychologie*, 26, 119-121 [Rezension von: Gibas, M. & Schindelbeck, D. (Hrsg.) (1994). *"Die Heimat hat sich schön gemacht ..."* (Comparativ - Leipziger Beiträge zur Universalgeschichte und vergleichenden Gesellschaftsforschung, Band 4, Heft 3). Leipzig: Leipziger Universitätsverlag.].
- Montada, L. & Oerter, R. (Hrsg.). (1995). *Entwicklungspsychologie*. Weinheim: Psychologie Verlags Union.
- Baltes, M.M. & Montada, L. (Hrsg.). (1995). *Produktives Leben im Alter*. Frankfurt: Campus.

- Reichle, B. (1995). Lastenverteilung als Gerechtigkeitsproblem: Umverteilungen nach der Geburt des ersten Kindes und ihre Folgen. In Zentrum für Gerechtigkeitsforschung an der Universität Potsdam (Hrsg.), *Auseinandersetzung mit Verlusterfahrungen* (S. 145-155). Potsdam: Zentrum fuer Gerechtigkeitsforschung an der Universität Potsdam.
- Kals, E. (1995). Umwelt- und gesundheitsrelevantes Verhalten: Ein Vergleich der motivationalen Grundlagen. In A. Keul (Hrsg.), *Menschliches Wohlbefinden in der Stadt* (S. 43-68). Weinheim: Psychologie Verlags Union.
- Kals, E. (1995). Wird Umweltschutz als Schutz der eigenen Gesundheit verstanden? *Zeitschrift für Gesundheitspsychologie*, 3, 114-134.
- Kals, E. (1995). Promotion of proecological behavior to enhance quality of life. In J. Rodriguez-Marin (Ed.), *Health psychology and quality of life research* (pp. 190-203). Alicante: University of Alicante & Sociedad Valenciana de Psicología Social.