The objectives of this paper are twofold. First, we provide an overview of prior research on immediate evaluative responses toward objects and persons depending on their entitativity and singularity. We do this because substantially research addresses these concepts, but an overview is still missing. The entitativity concept, rooted in Gestalt theory, was used in social psychology and its sub-discipline of social-identity theory. In these areas, the concept of singularity emerged as well. Moreover, researchers transferred these concepts to the fields of donation behavior and evaluations of family brands.

Second, we transfer these insights to a novel field: the advertising of fair-trade products. We found that most insights regarding the effects of entitativity and singularity achieved in other fields are also applicable in this special area. Our findings suggest that evaluations of fair-trade products become more positive with increasing entitativity of ingroups (producers with high similarity to consumers) and more negative with increasing entitativity of outgroups (producers with high dissimilarity to consumers). When producers of fair-trade products belong to the consumers’ ingroup, advertisements should depict one needy person and add a large amount of information that makes this person identifiable. When the producers of fair-trade products belong to the consumers’ outgroups, advertisements should either depict a low-entitativity group of needy persons without providing much additional information about these persons or provide a large amount of information that makes the depicted persons identifiable independently of their entitativity.

1. Introduction

People are frequently confronted to phenomena in everyday life that evoke impressions of singularity and different degrees of groupness. For instance, imagine a desk with either one pen or a number of pens on it. One pen represents singularity while a number of pens represent a group of items that could be perceived as more or less homogeneous (e.g., same/different colors, same/different sizes, same/different styles, and orderly/disorderly placed on the desk plate); the higher the commonality among the pens, the higher the sensations of groupness (i.e., entitativity). To provide another real-world example, envision assortment represented in retail stores. Clothing presented on a wobbler causes the impression of low groupness (low entitativity) while a clothing rack that presents only one certain clothing item in the same color and style (but in different sizes) leads to the impression of high groupness (high entitativity). We show how individuals respond to singularity and different degrees of groupness.

In this paper, we contribute to prior research by presenting an overview of prior research investigating theories and providing findings on the effects of entitativity and singularity on evaluative responses. In this part of our
paper, we summarize findings independently of the area of research (e. g., Gestalt theory, social psychology, family brands). Moreover, we contribute to marketing practice by transferring these concepts and findings to another field of research: the design of advertisements that promote fair-trade products. In this part of the paper, we derive hypotheses from prior research and provide empirical evidence for the effects of entitativity and singularity.

**Definitions:** In some fields of research, authors suggest the following: When perceivers evaluate targets such as objects or other persons, their evaluations are contingent on whether they are exposed to either one object (or one person) or a collection of objects (or a group of persons), e. g., whether they see an image of one person or an image depicting a group of persons. This characteristic of stimuli is denoted as singularity. Moreover, these streams of research hypothesize that evaluations of a collection of objects or a group of persons depend on whether the aggregate is perceived as a whole, i. e., as belonging together in a certain way. In Gestalt theory, this concept is denoted as the degree of unity. Social psychologists use entitativity as an equivalent term. In the field of family brands, the term (low) variability is used synonymously. Other authors use terms such as internal similarity, groupness, and coherence. In combining singularity with entitativity, different conditions can be created (Fig. 1). The three extremes consist of (1) a group of others who are highly heterogeneous, (2) a group of others who are highly similar to each other, and (3) one single other. The authors state that for evaluations it is essential, whether the target is a single entity, a high-entitativity collection, or a low-entitativity aggregate.

**Illustrative examples:** The concept of entitativity is rooted in Gestalt theory, which considers visual stimuli and impressions evoked by these stimuli. Thus, to illustrate the concept of entitativity and singularity, we provide some images in Fig. 2. In the first row, the geometric figure of a square is used to illustrate the differences. The middle row contains three images adopted from the Nivea website nivea.de. The image in the middle easily illustrates the concept of a family brand (i. e., the unity of the products), whereas the image on the left side makes it more difficult to recognize a family brand because there are no visual commonalities except the brand logo.[1]

![Fig. 1: Visualizing of the entitativity continuum and the singularity dichotomy](image)

The lower row shows three images from of a campaign promoting the work of Unicef. Looking at the image used to illustrate a high-entitativity group, the perceiver can easily create the impression of unity (e. g., a family). The image visualizing a low-entitativity group does not indicate particular connections among the people except the instance that they are in line for water.

**Type of responses to entitativity and singularity:** Prior research on entitativity and singularity has mainly focused on answering the question about how people store and retrieve information from memory depending on whether the target is an individual or a more or less entitative group of others. This issue is extensively discussed in state-of-the-art overviews and studies of Hamilton and his co-authors (e. g., Crawford et al. 2002; Crump et al. 2010; Hamilton 2007; Hamilton et al. 1998, 1999, 2002, 2004, and 2009; Hamilton and Sherman 1996; McConnell et al. 1994, and 1997; Sherman et al. 2002). Our review of literature on entitativity and singularity showed that there are also theories and studies investigating how these concepts are related to immediate evaluations. Thus, in contrast to the overviews and studies of Hamilton and his co-authors, we focus on immediate evaluative responses to others (individuals, homogenous group, and heterogeneous group) and objects. For this issue, an overview of prior research is missing thus far.

**Evaluative responses:** We found that the theories and achieved results did not systematically differ when the researchers investigated the general likeability of others, the evaluation of others’ traits and behaviors, and the willingness to help needy others. Even when objects or non-humans (e. g., arrangements of living-room furniture, butterflies, or family brands) were considered with regard to esthetic responses or likeability, mostly the same approaches were used. Thus, we subsume these dependent variables and denote them all as evaluative responses. However, we structure our presentation of prior research according to the kinds of evaluative responses to counter a possible objection that considering “evaluative responses” might be a too general concept.

**Objectives:** In this paper, we pursue two goals that are equally important. Our first objective is to provide an overview of prior research on the effects of singularity and entitativity on evaluative responses (e. g., esthetic evaluations, liking the depicted or described objects and people, or amount donated to needy people). We found theories and studies in the field of Gestalt theory, in general social psychology, in social-identity theory, in approaches investigating donation behavior, and in research on brand families. We explain how singularity and/or entitativity have been manipulated and describe what effects of these concepts on evaluations were hypothesized and substantiated by the authors. We report
what prior research on singularity and entitativity has found out in a state-of-the-art overview because prior findings have not been consolidated thus far. Our second goal is to transfer these insights to an additional area of research where considering singularity and entitativity has been neglected thus far: the promotion of fair-trade products. We do this because product labels used in practice and advertisements promoting this type of products differ with respect to singularity and entitativity; thus, investigating these factors and gaining insights into the effects might help marketers to promote fair-trade products. Admittedly, there is already research investigating the effectiveness of donation appeals which are similar to ads promoting fair-trade products. Thus, why considering fair-trade products since paying a higher price could be interpreted as a kind of donation? We do this because donation behavior is mainly triggered by emotions of empathy (that are affected by singularity and/or entitativity) while decisions to buy fair-trade products might primarily be affected by consumption goals such as product tastiness, quality, or (low) price and probably additionally are affected by evaluations of the needy producers. Thus, it is unclear whether manipulations of singularity and/or entitativity exert an effect on the evaluations of the producers that is strong enough to affect overall evaluations of fair-trade products together with consumption-related goals.

**Contribution to the theory on the effects of entitativity/singularity on evaluations:** The answer to the question about what contributions might be expected from additional research is contingent on the degree to which a theoretical approach is well established. When numerous studies already used the same theoretical framework, hypothesizing and testing additional variables to clarify discrepancies in prior research might be considered a contribution. When a theoretical framework is less established, authors frequently do not start by aiming to broaden a particular theoretical framework (e.g., entitativity) but by considering a novel area of application. The latter practice is used in the field of research on singularity and entitativity (or areas where equivalent terms are used). For instance, Smith et al. (2013) and Kogut and Ritov (2005a) aim to answer the question about how to increase the willingness to donate through creating more efficient appeals of charity organizations. Veryzer and Hutchinson (1998) ask the question about how to design products in order to improve product evaluations. Gürhan-Canli (2003) asks the question about how evaluations of family brands can be improved. These authors...
state that their contribution concerns the transference of
the concepts of singularity and/or entitativity (or con-
cepts with equivalent meanings) to these special fields of
research (e. g., creating efficient donation appeals or
pleasant product designs; presenting family brands in a
favorable way) without a claim to intend to broaden the
theoretical framework of singularity and/or entitativity.
In this sense, all these authors explicitly state that their
contributions published in journals such as the Journal of
Consumer Research (Gürhan-Canli 2003; Smith et al.
2013; Vergyzer and Hutchinson 1998) or Organizational
Behavior and Human Decision Processes (several arti-
cles of Kogut and Ritov) is to transfer a certain theoreti-
cal concept to a different area or context. We adopt this
position in our work. Thus, our contribution also is the
transference of the concepts of singularity and entitativi-
ty to a different field of research: the promotion of fair-
trade products.

Contribution to marketing practice (utilizing insights in-
to the effects of entitativity/singularity for creating ad-
vertisements that promote fair-trade products): The
strategy of selling fair-trade products has gained increas-
ing attention over the past decades. Wilson and Muters-
baukh (2015, p. 286) provide an overview of the origins
of this strategy and report that, in the US, the movement
started in the 1940s through the sale of handicrafts from
Puerto Rico. They state that the first certifying label of
fair-trade products, the Max Havelaar label, was intro-
duced in the Netherlands in 1988. Fair trade means that
producers of goods such as food, cosmetics, textiles,
plants, and jewelry and the producers of ingredients or
raw materials of such products receive compensation that
ensures the coverage of costs of sustainable production
and guarantees that they can ensure their costs of living.
Because these definitions do not limit the concept of fair
trade to solely considering producers from poor countries
we also consider needy producers located in industrial
countries when they have difficulties in receiving suffi-
cient compensation. For instance, the project “Die faire
Milch” (www.diefairemilch.de) aims to support milk
farmers in Germany who face the difficulty of very low
milk prices. According to reports of TransFair e.V.
(2016), the German section of Fairtrade International,
which is a major organization in the field of fair-trade
products, and FLO International e.V./FLO-CERT GmbH
(2006) sales of products with the “Fairtrade Interna-
tional” label increased from € 71 Mio in 2005 to € 978 Mio
in 2015 in Germany. This increase in sales shows that
fair-trade products are a more and more important prod-
uct category. We consider advertisements that promote
this type of products as a novel application, where mar-
keters could benefit from appropriately applying the con-
cepts of singularity and entitativity. Because all types of
images, i. e., depictions of single farmers or workers as
well as depictions of high- or low-entitativity groups of
farmers or workers, are used to promote fair-trade prod-
ucts in practice,[2] we presume that insights into the ef-
fectiveness of using one type of image are beneficial in
practice. By conducting experiments in this field, we
contribute to knowledge that could help organizations,
producers, and retailers in creating more effective adver-
sisements.

In the following, we present insights into the concepts
of entitativity and singularity. Because these concepts have
not been considered in academic research thus far in the
context of creating advertisements for fair-trade prod-
ucts, we provide an overview about the fields in which
these concepts already have been considered and what
results have been achieved in prior research (Section 2).
Based on these insights, we formulate and test hypothe-
ses when prior knowledge is applied to the question
about how ads promoting fair-trade products should be
created (Section 3).

2. Theoretical considerations and results in
prior research

2.1. Overview of the theoretical backgrounds

Originally, the concept of unity (or groupness, whole-
ness, entitativity, coherence, variability, etc.) originated
in Gestalt theory. This research posits that preferring or
liking a collection of visual stimuli depends on the de-
tree to which they are arranged as “a whole” (Werthei-
mer 1922, pp. 51 f. and 1923, pp. 322 f.). This idea was
adopted by researchers in the field of social psychology.
They used Gestalt principles to determine which factors
influence the degree to which a collection of individuals
is perceived as a social group. In this field, the entitativi-
y of a collection of individuals is defined as the degree
to which this aggregate has the nature of one entity from
the observer’s perspective (Campbell 1958, p. 17). More
specifically, researchers in the field of social-identity
theory investigate whether the likeability of a group (for
instance, in terms of one’s desire to become and maintain
the status as a member of this group, which is denoted as
identification) depends on the group’s entitativity; this
research combines entitativity with the concept of the in-
group/outgroup distinction. Theories on donation behav-
ior focus on the effect of the entitativity of a group of
needy persons or the singularity of the needy person(s)
on donation behavior. Moreover, the concepts of entitativi-
ity and singularity have been transferred to family
brands. Tab. 1 summarizes the streams of research that
have investigated relationships between entitativity and
evaluative responses.

Research on the singularity factor can also be found in
the field of social psychology and in its sub-disciplines
of social-identity theory and donation behavior, as well
as in the field of family brands. Initially, researchers as-
sumed that an individual as the target of evaluations rep-
resents the highest degree of entitativity and that re-
sponses to an individual are the same as responses to a
highly entitative group (e. g., Hamilton et al. 1999, p.
612; Hamilton et al. 2002, p. 155; McConnell et al. 1997,
In the first decades of the 20th century, the concept of Gestalt theory gained attention in psychology. This research did not use the term entitativity but terms such as unity or wholeness, which have an equivalent meaning.

What is unity? Max Wertheimer (1923) developed a set of fundamental principles of Gestalt theory, which led discrete elements to be perceived as parts of “a whole.” According to Wertheimer, elements that are spatially close together, that are similar to each other, that are arranged in “good shape” (i.e., in a shape that can easily be recognized such as a triangle, a heart, or a silhouette of a flower), that move in the same direction, that induce the imagination of a whole even when some elements are absent, and/or that are arranged on a curve can be perceived as a whole.

Presumption: Theorists in this field generally postulate that the degree to which a collection of elements is perceived as a whole affects evaluations about how pleasant the collection looks or preferences for such a collection (Hartmann 1935, p. 97). As a rationale for the impact of unity on evaluations, this research refers to the presumption that violations of Gestalt principles produce feelings of misfit that “hurt our sense of beauty” (Koffka 1935, p. 175). Similarly, Hartmann (1935, p. 12) states: “What we call beauty is none other than ‘degree’ of Gestalt.” In the discipline of design, Lauer (1979, p. 2) asserts that another term of unity is harmony, which refers to the evaluative component of the arrangement of elements.

Empirical evidence: Research on the linkage between Gestalt principles and evaluative responses is scarce. Veryzer and Hutchinson (1998, p. 375) state that “it is surprising that there is very little experimental research that relates unity to esthetic response.” We found four experiments in prior research that have linked unity to evaluative responses (including the research cited by Veryzer and Hutchinson). Researchers considering unity of non-humans or objects manipulate entitativity by using different images for each condition. Lennon (1990) produced 28 photos of female models wearing garments and accessories that either matched or did not match in color, style, or pattern. She reports that clothing consisting of matching components was perceived as more attractive. Bell et al. (1991) created images of living room furniture. They combined five furnishing items (chair, table, sculpture, lamp, and painting) that differed regarding the design style (either traditional or contemporary), resulting in 32 combinations. Each test participant rated the images that were designed for each combination with regard to unity (high/low unity, well-poorly-coordinated, and consistent/inconsistent) and pleasantness (enjoyable/offensive, nice-poor-looking, pleasing/displeasing, attractive/unattractive, good/bad appearance, and beautiful/ugly). The authors found that the perceived unity of style had a positive effect on impressions of the pleasantness of the room’s furniture. Veryzer and Hutchinson (1998) investigated the esthetic response to designs of products that were composed of similarly vs. dissimilarly looking components (e.g., the shape of the telephone receiver looked either similar or dissimilar to the shape of the telephone docking station). They report that consumers judge products higher in terms of visual attractiveness when the products are composed of similar components. Smith et al. (2013, p. 964 f.) also found a positive effect of the degree of unity in depicting a swarm of butterflies. To provide examples about what the authors denote as different degrees of unity or entitativity, we show the test stimuli used in two of these studies in Fig. 3.

Conclusion: These findings indicate that a collection of elements results in more favorable evaluations when they are arranged or shaped in a homogeneous or similar way, i.e., when entitativity is high.
2.2.2. The concept in social psychology

The idea that objects and nonhumans as targets can be arranged in ways that create different degrees of unity has been transferred to people as targets of evaluations. 

What is group entitativity? In this section, we provide the explanations suggested in the literature regarding what makes a group of persons appear as more or less entitative. Campbell (1958, p. 17) invented the term entitativity by adding the suffix “-ity” to the adjective “entitative” to create a term describing the “degree of having the nature of an entity.” He introduced this concept into social psychology and directly adopted a set of the fundamental Gestalt principles, which have just been listed above, to derive criteria that have to be met for an aggregate of persons to qualify as a “social group.” He postulates that a social group exists from the point of view of its observer when the members of the group are spatially close together, are similar, and have a common fate (the latter criterion reflects the “move in the same direction” principle from Gestalt theory). The more these characteristics are prevalent, the higher the entitativity of the social group. Lickel et al. (2000) provide a more detailed list of determinants of group entitativity. They postulate that individuals consult a larger number of properties to judge the entitativity of a collection of people. These properties are as follows: presumptions about how important the collection is for the collection’s members, how frequently interactions occur among the members, how common their goals are, how similar they are, and how permeable and durable the collection is. A collection’s entitativity increases with the level of these characteristics. Lickel et al. (2000) also aimed to provide meaningful interpretations of particular ranges of the entitativity continuum for groups of persons. They created a list of forty collections of people (e. g., family, political party, women, and people at a bus stop), verbally expressed these groups on a list, and asked test participants to rate the extent to which each collection can be qualified as “a group.” Based on these judgments, the authors classified collections of people into five types of groups: intimacy groups (e. g., family, two people in a romantic relationship, a small group of friends), task-oriented groups (e. g., committees or work groups), social categories (e. g., women, Jews, Americans), weak social relationship groups (e. g., people who live in the same neighborhood, people who enjoy classical music), and transitory groups (e. g., people in line at a bank). Intimacy groups have the highest degree of entitativity of a collection of people, whereas transitory groups have the lowest degree of entitativity.

Presumptions: This field of research directly adopted the presumptions stated in Gestalt theory. The authors in this field presume that the likeability of a group and evaluations of its members’ traits and behaviors increase with group entitativity. The extensive work of Hamilton and his coauthors has already been mentioned above. In brief, they argue that the way in which information about a group is processed depends on the group’s entitativity. They presume that perceivers of a group can only form coherent overall impressions of the group when entitativity is high; this type of information processing is denoted as on-line processing (e. g., Hamilton and Sherman 1996; Hastie and Park 1986) or integrative processing (e. g., Hamilton et al. 1999). For a low-entitativity group, perceivers are also expected to encode but not to be able to integrate information about its members to infer an overall evaluation. The researchers presume that it is more difficult, effortful, or even impossible for perceivers to form an overall impression about a low-entitativity group compared to a high-entitativity group (McConnell et al. 1994). People dislike information that is difficult or impossible to process. The argument that ease of processing is linked to entitativity is used to predict a positive effect of entitativity on group evaluations at the moment when information about the group is given.

Empirical evidence: The studies can be classified according to the procedure used for manipulating entitativi-
ty. We use this criterion because the findings depend on
the underlying manipulation.

One would expect that researchers in social psychology
used visual stimuli for entitativity manipulations analogously
to research in Gestalt theory because they directly
refer to Gestalt theory; i.e., one visual stimulus is used to
express low entitativity, and one visual stimulus is used to
to create high entitativity of a group of humans. Howev-
er, we found an example of such manipulations neither in
studies investigating group evaluations nor in studies ex-
amining the storage and retrieval of information about a
group.[3]

Some authors provided visual information about people
but solely used textual information to express whether or
not an individual belongs to a particular group. For in-
stance, researchers presented a series of pictures each
portraying the face of one person on a computer screen
for one or two seconds. Below each image, textual infor-
mation that this particular person belongs or does not be-
ong to a certain group is given (e.g., Sherman et al. 2002).
Smith et al. (2013, p. 969) showed one image that
portrayed a group of six children. Entitativity was
manipulated by providing or not providing the verbal infor-
mation that these children belong to the same family. The
authors investigated whether this manipulation affects
the likeability of the group of children. They asked the
test participants to estimate how beautiful, pleasant, and
good the children are and found that the children verbally
denoted as siblings (high-entitativity group) were evalu-
ated more favorably than the group of children for whom
no such information was given (low-entitativity group).

Other authors solely utilized textual descriptions of con-
crete characteristics and behaviors of the group members
for entitativity manipulations. Spencer-Rodgers et al.
(2007) used the classification of groups according to Li-
ckel et al. (2000), which has been explained above, and
compared evaluative responses to task groups (higher in
entitativity) vs. responses to social categories (lower in
entitativity). They exposed test participants to the verbal
names of a sample of 24 social groups that consisted of
twelve task groups (e.g., professional baseball teams,
brain surgeons, and Santa Barbara city council) and
twelve social categories (e.g., Americans, women, and
Jews) and asked the test participants to list and rate their
thoughts that come to mind when they read the names of
each of these groups. They found that the listed thoughts
were more favorable for the groups higher in entitativity.

Susskind et al. (1999) verbally described a group of stu-
dents from the same university either as “randomly chosen
students from different dorms” or as “close-knit
friends who know each other well and do a lot of things
together.” They found no effect of this manipulation on
the evaluations of the characteristics of these groups.
This might be due to the fact that perceived entitativity
did not differ between the two conditions in the study,
which indicates that the manipulation of entitativity has
not successful.

Finally, research has also manipulated group entitativity
by means of abstract items. McConnell et al. (1997), Wel-
bourne (1999), and Crump et al. (2010) utilized the list of
determinants of group entitativity suggested by Lickel
et al. (2000) for the purpose of verbally characterizing two
groups. McConnell et al. (1997, study 1) described two
groups as consisting of members who are very diverse/
very similar and differ/do not differ in many ways from
each other; who come from different/similar back-
grounds; who have different/similar opinions, beliefs, and
personalities; and who act in different/similar manners.
Welbourne (1999, study 2) asked test participants either
to envision a group of “loosely connected people with no
single identity, (who) are very different from one another,
so the group’s behaviors may be inconsistent from one
member to another” (low-entitativity condition) or “a uni-
ified group of people with a single identity, (who) are very
similar to one another, so the group’s behaviors are usu-
ally consistent from one member to another” (high-entitati-
vity condition). Crump et al. (2010) characterized two
groups as consisting of members who have a variety/
common set of goals, who are primarily concerned with
completing their task assignments/achieving their com-
mon goals, who do not depend on each other a great deal/
depend on each other to a large extent, and who belong to
a loosely/tightly structured group. None of these re-
searchers found an effect of entitativity on the likeability
of the group or on evaluations of the group’s characteris-
tics, such as intelligence or kindness.

Conclusion: This research shows that group entitativity
can have a positive impact on group evaluations when
the group’s entitativity is described by means of concrete
attributes (e.g., “the children belong to the same family”
or “envision a baseball team”). However, it seems to be
highly difficult to effectively manipulate the degree of
entitativity even when verbal descriptions of concrete at-
tributes are used. When abstract items are used (e.g.,
“the members act in a similar manner”), no effects have
consistently been observed. Surprisingly, the question of
whether visual manipulations of group entitativity affect
evaluations has not been answered thus far. The findings
from prior research emphasize the importance of consid-
ering the use of visual stimuli when researchers aim to
elicit effects through entitativity.

2.2.3. The concept in social-identity theory

Social-identity theory focuses on the antecedents and
consequences of the “social self” of individuals. A key
element in this research is the desire to belong to particu-
lar social groups (denoted as ingroups) and the aversion
toward other social groups (denoted as outgroups).
Because both in- and outgroups can also be described by
their entitativity, some researchers examined the in-/out-
group × group entitativity interaction effect on group
evaluations.

What is the difference between in- and outgroups? So-
cial-identity theory premises that individuals hold be-
beliefs about their social self (Sirgy 1982). The social self (or social identity) can be defined as the individuals’ actual belonging and/or desire to belong to particular social groups. An individual builds and maintains a social identity if s/he belongs or feels belongingness to particular social groups. The ingroup/outgroup distinction is an important aspect in this research (Tajfel and Turner 1979) since ingroups determine the social identity of a person (Tajfel 1982, p. 11; Tyler et al. 1999, p. 3). According to this view, “people tend to judge in-group members more favorably than out-group members” (Krumm and Corning 2008, p. 692). In other words, individuals assign favorable characteristics to their ingroups and devaluate properties of their outgroups. This phenomenon is denoted as ingroup-outgroup bias (Ruffle and Sosis 2006), prejudice (Krumm and Corning 2008, p. 689), ingroup bias (Perdue et al. 1990, p. 475; Ruffle and Sosis 2006), ingroup favoritism (Ruffle and Sosis, p. 148; Turner et al. 1979), or (in-)tolerance (Roccas and Brewer 2002, p. 88). Individuals are interested in the welfare of the people who belong to their ingroups (Triandis 1988), and they care more about the welfare of their ingroups than that of their outgroups. People do this because they expect to get valuable assets from their ingroups’ members, such as social recognition or help in the case of need, because they rely on we-feelings. There is consensus that the ingroup/outgroup distinction exerts a main effect on how individuals respond to such groups.[4] However, we focus on the interaction with entitativity.

Presumptions: First, it is supposed that evaluations of a low-entitativity group do not depend on whether the perceiver counts this group as part of her/his in- or outgroups. As a rationale for this presumption, the authors argue that any piece of information about a low-entitativity group cannot be processed accurately. When information processing is highly difficult or impossible, the fact whether a group belongs to one’s in- or outgroups is unlikely to affect group evaluations. By contrast, a highly entitative group is supposed to be evaluated more accurately (Dasgupta et al. 1999). Rydell and McConnell (2005, p. 99) state that greater information processing occurs for groups higher in entitativity. Second, this presumption implies that evaluations of ingroups improve with their entitativity. The positive impact of entitativity on ingroup evaluations can be derived from the presumption that information about favorable ingroup characteristics gains strong weight when this information is processed accurately. Moreover, highly entitative ingroups offer a higher potential for identification than less entitative ingroups. In this sense, Lewis and Sherman (2010) state that highly entitative ingroups are more important for an individual’s social identity than low-entitativity ingroups. Third, evaluations of outgroups are expected to deteriorate with greater group entitativity. The negative influence of entitativity on outgroup evaluations could arise because information about unfavorable outgroup characteristics gains higher weight when this information is processed accurately. Moreover, general outgroup aversion could play a more important role when a group of highly entitative outsiders is evaluated. Highly entitative outgroups could even have a greater potential to harm individuals than low-entitativity outgroups.

Empirical evidence: We found three studies that have investigated the effect of entitativity depending on ingroup/outgroup belongingness. These studies did not consider groups of people but analyzed rather similar targets. Dasgupta et al. (1999) examined the effect of entitativity in the outgroup condition. They asked test participants to envision the existence of a species of humanoid creatures denoted as “Greebles,” which should be interpreted as a representative of an outgroup from the perspective of other humanoid creatures. The authors created pictures showing homogenous or heterogeneous Greebles. For instance, they compared a picture containing five Greebles with the same body color (high in entitativity) to a picture of five Greebles with different body colors (low in entitativity). They then assessed how the test participants evaluated the likelihood of the Greebles’ engagement in positive and in negative behavior toward another non-human species and found that the participants indicated a higher likelihood of the Greebles with high (vs. low) entitativity behaving in a harmful (vs. friendly) manner. In summation, they found a positive entitativity-harmfulness relationship for the Greebles as a kind of outgroup. Castano et al. (2003b, study 2) used the EU countries as test objects and students from Belgium as test subjects; the effects of entitativity in the ingroup condition were thus analyzed. The authors provided textual information about the countries of the EU and asked the test participants either to concentrate on commonalities or differences between the countries to create the high- and low-entitativity conditions. They found higher ratings of identification with the EU when the students’ attention was directed to commonalities indicating a positive entitativity-evaluation relationship in the ingroup condition. While Dasgupta et al. (1999) focused on the outgroup condition and Castano et al. (2003b) focused on the ingroup condition, Castano et al. (2003a) considered the in- and outgroup conditions. They used the countries belonging to the European Union as test objects and students from the US as test subjects. To manipulate entitativity, they showed a map of Europe that depicted either 15 EU countries in different colors and showed them separated by their borders (low-entitativity condition) or that depicted the same countries without any internal borders and in the same blue color (high-entitativity condition). To assess values for the ingroup/outgroup dichotomy, the test participants had to indicate whether they tend to associate the EU with either an ally image or an enemy image. For the ingroup condition (ally image of the EU), the test participants reported lower perceptions of the EU’s harmfulness in the high- compared to the low-entitativity condition. By contrast, for the outgroup condition (enemy image of the EU), higher perceptions of the EU’s harmfulness were reported in the high-entitativity than in the low-entitativity condition.
Stimuli used by Dasgupta et al. (1990)  
Low-entitativity group of extraterrestrial humanoid creatures  
High-entitativity group of extraterrestrial humanoid creatures  

Stimuli used by Castano et al. (2003a)  
Low-entitativity group of EU countries  
High-entitativity group of EU countries  

Fig. 4: Manipulation of entitativity by means of visual stimuli in research in the field of social-identity theory

For the purpose of illustrating how entitativity was manipulated (because groupness originally is a visual concept), the test stimuli used by Dasgupta et al. (1999) and Castano et al. (2003a) are shown in Fig. 4.\[5\]

**Conclusion:** Prior research indicates that evaluations of low-entitativity ingroups are the same as evaluations of low-entitativity outgroups. With increasing entitativity, evaluations of ingroups improve, and evaluations of outgroups deteriorate.

2.2.4. The concept in research on donation behavior

In some studies, group entitativity was manipulated to influence the effectiveness of donation appeals. This stream of research did not develop additional theories that are relevant for the issue of entitativity. However, the results can be used to check whether the effects of entitativity conform to the findings from the streams of research described above. Moreover, they contribute to findings on the interaction effect of entitativity with the size of the group and with the co-presence of negative information about the group.

**Main effect of entitativity:** In an experiment conducted by Smith et al. (2013, p. 965), the test participants read a donation appeal that was combined with a picture portraying six needy children from Rwanda. The versions differed regarding whether or not verbal information that the children belong to the same family was provided; thus, group entitativity was manipulated. The test participants were rewarded with £10 for participation in the experiment and had to indicate whether and what portion of this amount they would actually donate to help these children. The authors found that the amount was higher for the high-entitativity condition (six siblings) compared to the low-entitativity condition (six unrelated children).

**Interaction effect with the number of needy persons:** Västfjäll et al. (2014, study 3) contributed findings on the relevancy of the group size. They created images of needy children and varied entitativity and the number of these children. Entitativity was manipulated by including one picture showing a group of needy children and providing the textual information that the children are siblings (high-entitativity condition) or by including a set of pictures each showing one needy child in a donation appeal (low-entitativity condition). Moreover, the authors manipulated the number of depicted children (two or eight). The test participants (students living in Sweden) were asked to report the amount that they would donate for these needy children. The authors found a positive effect of entitativity on the amount willing to donate both for the two-child and eight-child conditions. Moreover, they report that the size of the group of needy children had a negative effect in the low-entitativity condition.

**Interaction effect with the co-presence of negative information about the needy persons:** In another experiment, Smith et al. (2013, pp. 968 f.) added or did not add unfavorable information to a donation appeal that the needy children were currently in prison for committing crimes. Entitativity was manipulated by providing or not providing information that the children are siblings. The authors assessed the amount that the test participants (students from the US) were willing to donate to these children. The authors found no effect of the presence vs. absence of negative information in the low-entitativity condition, i.e., when the information that the children are siblings was not given. However, entitativity affected the test participants’ response negatively when additional negative information was available.

**Conclusion:** Research on donation behavior also reveals a positive effect of the entitativity of a group of needy persons on donation behavior when negative information is absent. Moreover, group size turned out to be an important moderator of the relationship between entitativity and evaluations.
2.2.5. The concept in research on family brands

Presumption: Chang and Lou (2005, 2006) propose that the concept of the entitativity continuum is applicable not only to social groups but also to family brands, i.e., brands that offer a variety of products from different categories. They adopted the procedure of Lickel et al. (2000), who had classified 40 social groups into the categories of intimacy groups, task-oriented groups, social categories, weak social relationship groups, and transitory groups. Analogously, Chang and Lou (2010) classified 40 family brands into five entitativity clusters and hypothesized that family brand entitativity affects brand evaluations. They refer to the thesis of Hamilton and his co-authors that perceivers can form overall impressions more easily for highly entitative objects (Chang and Lou 2009).

Empirical evidence: Gürhan-Canli (2003, study 2) investigated the effect of the entitativity of family brands on brand evaluations. She asked test participants to imagine a brand that offers a range of electronic products. First, they received the textual information that “most of the products of this family brand do (not) differ from each other in terms of quality;” this piece of information aimed to manipulate family brand entitativity. Next, they received one piece of information for each of the products; because there were 13 products of the brand, they received 13 pieces of textual attribute information. For the clock radio, boom box, and stereo system, one piece of neutral information was provided (e.g., for the clock radio: “it is available in two standard sizes”). For the DVD player, HDTV set, cordless phone, portable MP3 player, and digital camera, they received positive information (e.g., for the HDTV set: “it comes with a well-functioning universal remote that can also operate other electronic equipment”), and for the CD player, receiver, camcorder, VCR, and TV set, negative information was given (e.g., for the receiver: “it is difficult to use because it does not have advanced automatic features”). Finally, the test participants rated the family brand (negative/positive, not at all/very favorable, bad/good, and undesirable/desirable). The author found no main effect of entitativity on the evaluation of the family brand.[6] Gürhan-Canli (2003, study 3) replicated this experiment and also found no effect.

Conclusion: We surmise that the fact that Gürhan-Canli did not find an effect of brand entitativity on family brand evaluations is the result of solely providing very little textual information that the products of a brand “do differ/do not differ” regarding quality compared to the extensive information about the products’ quality. Moreover, the information about entitativity and product quality was incongruent (vs. congruent) in the high (vs. low) entitativity condition because they dislike conditions in which impression formation is easy and because they like conditions in which impression formation is difficult, evaluations of individuals are expected to be more favorable than evaluations of low-entitativity groups.

2.2.6. Summary of prior research

The overview of literature shows that there are sometimes missing effects of entitativity on evaluations. We argue that this might be due to the fact that researchers have manipulated entitativity by means of textual and/or abstract group descriptions or incongruent information. However, in many studies, effects were reported. For these cases, Fig. 5 illustrates the findings of the effect of entitativity on evaluative responses toward a group of persons or a collection of objects. The figure shows a positive effect for ingroups and/or for groups when additional negative information is absent and a negative effect for outgroups and/or for groups when negative information is co-present. It also demonstrates how group size is expected to matter in the low-entitativity condition.[7]

2.3. Singularity

In this section, we compare evaluative responses for conditions (1) and (3) indicated in Fig. 1. Thus, in this section, we focus on studies that compared evaluative responses toward an individual versus a low-entitativity group. We adopt the scheme that has already guided us in structuring prior research (see Tab. 1) and report findings from general social psychology, from research in the field of donation behavior and from research on family brands. At the end of this section, we will also add findings from prior research that compared conditions (2) and (3); we report these results separately because studies comparing these conditions are very scarce thus far and have yielded mixed results.

2.3.1. The concept in social psychology

Presumptions: Some researchers hypothesize that perceivers can evaluate individuals as easily as a highly entitative groups (e.g., Hamilton et al. 1999, p. 612; Hamilton et al. 2002, p. 155; McConnell et al. 1994, p. 175; McConnell et al. 1997, p. 759; Yzerbyt et al. 2001, p. 142). Thus, the arguments that are used to predict differences between evaluations of a high-entitativity and a low-entitativity group can also be used to infer differences between evaluations of an individual and evaluations of a low-entitativity group. The main argument is as follows: It is comparatively easy to form an overall impression toward an individual; because perceivers like conditions in which impression formation is easy and because they dislike conditions in which impression formation is difficult, evaluations of individuals are expected to be more favorable than evaluations of low-entitativity groups.

Empirical evidence: In the experiment conducted by McConnell et al. (1997, pp. 752 f.), the singularity dichotomy was also included. The test participants had to judge the likeability of “a real person named Jim” who was verbally described by a set of positive and negative characteristics (e.g., “he collects cans and bottles for recycling but often forgets family birthdays”) or the likeability of “a real group” whose members were described...
### Main effect of entitativity

<table>
<thead>
<tr>
<th>Evaluations</th>
<th>Evaluations</th>
<th>Evaluations</th>
<th>Evaluations</th>
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<tbody>
<tr>
<td>Low-entitativity group</td>
<td>High-entitativity group</td>
<td>Low-entitativity group</td>
<td>High-entitativity group</td>
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### Interaction between entitativity and the ingroup/outgroup distinction

<table>
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<tr>
<th>Evaluations</th>
<th>Evaluations</th>
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<tr>
<td>Ingroup</td>
<td>Outgroup</td>
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### Interaction between entitativity and group size

<table>
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<th>Evaluations</th>
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<tbody>
<tr>
<td>Small group size</td>
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<td>Large group size</td>
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### Interaction between entitativity and the co-presence of negative information

<table>
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<th>Evaluations</th>
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<tr>
<td>Absence of additional negative information</td>
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<tr>
<td>Presence of additional negative information</td>
</tr>
</tbody>
</table>

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* Presumably, this relationship is valid for favorably evaluated objects or persons only.

** Presumably, the authors who identified this pattern of relationships used the ingroup condition.

*** Pieces of negative information might be processed like information about outgroup belongingness. Thus, there is no substantial difference between the second and fourth figure from the left side.

*Fig. 5: Overview of results in prior research on the relationship between entitativity and evaluations*

---

with the same set of characteristics. They found no effect of the singularity on likeability ratings.\[8\] Welbourne (1999) replicated this experiment. She found that an individual was evaluated more favorably than a group when information about the intelligence of the person(s) was provided. Susskind et al. (1999) asked a sample of students either to think about a single person or to envision a group of students who might be randomly selected from different dorms at a large state university; the same information that could be used to infer intelligence and sociability was given for the single person and the group of persons. The test participants estimated characteristics such as the intelligence of the person(s). The authors found that the single person was rated higher regarding her/his traits.

Smith et al. (2013, p. 969) investigated the likeability of one child vs. a group of unrelated children and tested the effect of the presence vs. absence of negative information about the child/ren. Contrarily to the studies mentioned above where textual information was given, they compared the response to an image showing a group to an image showing an individual. *Fig. 6* shows how the test stimuli looked. To avoid biases in the one-person-image condition, each person of the group was used to create a version for this condition. The authors found that the evaluation of the group did not depend on the presence of the negative information about the group. When negative information was absent, the perceivers liked the child more than the group. When negative information was present, they provided more favorable ratings for the group.

**Conclusion:** Susskind et al. (1999), Welbourne (1999), and Smith et al. (2013) report a positive effect of singularity, i. e., a single person is evaluated more favorably than a low-entitativity group. Smith et al. (2013) add the finding that this relationship is reversed when negative information is provided. McConnell et al. (1997) found no effect of singularity, which might be due to the fact that the information given by the authors was less diagnostic for the target’s traits (e. g., “collect cans and bottles for recycling”) compared to the information provided in the other studies (e. g., in the study of Susskind et al.: “won a chess tournament against strong competition”).

### 2.3.2. The concept in research on donation behavior

**Presumptions:** In the field of research on donation behavior, Kogut and Ritov published several articles that focused on the effect of singularity in combination with other concepts (especially identifiability and the ingroup/outgroup distinction) on responses to needy persons.

At first, Kogut and Ritov considered the interaction effect between singularity (i. e., whether an individual or a
group is the evaluated target) and identifiability. Identifiability can be defined as the presence or absence of neutral information that describes the target in more detail, that is, target specific, and that therefore influences the impression of a unique person or group. The concept of identifiability has its roots in the discussions of Schelling (1968, pp. 129 and 142) and is extensively discussed in Slovic (2007). Examples of identifying information are the names of the persons and images that portray the persons. The authors argue that identifying information about a target generally increases the perceiver’s willingness to adopt the target’s willingness to adopt the target’s perspective (Kogut and Ritov 2005a, pp. 158 f.). Moreover, they presume that affective reactions to the target are stronger when identifying information is available (Kogut and Ritov 2005b, p. 107). Additionally, they posit that the effects of identifying information (i.e., adopting the other’s perspective, aroused affect) only occur when the target is an individual instead of a low-entitativity group because perceivers are expected to have considerable difficulties in processing any piece of information about the group, including identifying information in order to generate an overall evaluation of the group. As a consequence, responses are expected to be more favorable when an individual for whom identifying information is given is evaluated. For a low-entitativity group, no effect of identifying information is expected to exist. Because Kogut and Ritov investigated responses to donation appeals, they transferred these general thoughts to evaluations of needy persons. In this regard, they argue that identifying information about needy persons generally facilitates the arousal of empathic emotions and feelings of distress for the target. However, according to Kogut and Ritov, these emotions are unlikely to be used to develop an overall impression of a low-entitativity group of needy persons because perceivers have difficulty in integrating impressions about group members’ neediness into an overall evaluation of the group’s neediness in real time. To provide a famous example for the stronger willingness to help an individual in need (also denoted as the single-identified victim effect), this stream of research refers to the case of “Baby Jessica” that occurred in 1987 (e.g., Jenni and Loewenstein 1997; Loewenstein et al. 2006). This 18-month old child fell deep into a narrow well. CNN and other TV channels broadcasted the rescue of Jessica Morales in real time for 58 hours. Likely because of this load of identifying information about the “single victim” provided to the audience, a sum of approximately $700,000 was donated to the girl’s family.[9]

In subsequently published articles, Ritov and Kogut also considered the ingroup/outgroup distinction and posit that there is only one condition in which perceivers evaluate a target more favorably. This condition exists when an individual (instead of a group) is evaluated, when identifying information is present, and when the target belongs to the perceiver’s ingroups. They argue that the belongingness of the target to one’s outgroups also reduces the perceiver’s willingness to adopt the target’s perspective and the development of emotional engagement toward the target (e.g., Kogut and Ritov 2007, p. 151). Transferring these thoughts to consumer responses to donation appeals, they conclude that only one “outstanding” condition exists in which willingness to help is high: the individual is the target, the target has ingroup belongingness, and identifying information about the target is available.

Empirical evidence: Kogut and Ritov (2005a, 2005b) conducted six experiments to compare the responses to one person with the responses to a group of persons when identifying information about these targets was provided or not. In all studies, they investigated the response of Israeli students to textual donation appeals. These appeals asked participants to help either one needy person or a group of seven or eight unrelated needy persons. The latter condition represents the low-entitativity condition. The experiments mainly differ with regard to whether and how many pieces of neutral information were given to describe the needy person(s), i.e., to make him/her/them more or less “identifiable”. For instance, in one of their experiments, the test participants received the information that either one sick child or eight sick children whose life(s) is (are) in danger is (are) treated in a medical center. Moreover, information that with an extremely expensive drug, the disease could be cured was given. To afford the drug, donations were requested. Besides manipulating the number of needy persons (individual or group of eight), the number of pieces of information about the needy person(s) to make her/him/them “identifiable” was varied (none; age; age and name; or age, name, and picture). The authors found that the willingness to donate did not depend on the number of needy persons when identifying information was absent. For the case of one needy person, the willingness to donate increased with the number of pieces of identifying information. However, for the case of a group of needy persons, the willingness to donate did not depend on additionally provided identifying information.

In subsequently published articles, Kogut and Ritov (2007) reported findings from experiments that additionally included the ingroup/outgroup distinction. This means that the singularity factor (one needy person vs. a group of unrelated needy persons) was manipulated in conjunction with the ingroup/outgroup dichotomy and the presence vs. absence of additional identifying information (e.g., the name(s) of the needy person(s) and images of the person(s)). For instance, in one of these studies, students from Israel were asked to donate to rescue victims of the 2004 Tsunami in South-East Asia. In the ingroup condition, the donation appeal indicated that money is needed to save one (or seven) missing Israeli citizen(s) on a certain island. In the outgroup condition, the donation appeal stated that the money will be used to save one (or seven) missing Indian citizen(s) from a certain island. The authors reported that the singularity factor is only relevant when two conditions are met: the needy person belongs to the perceiver’s ingroups and
identifying information about this person is present. This finding was supported in experiments subsequently conducted by the same authors. For instance, Ritov and Kogut (2011, study 3) asked a sample of Israeli students to envision a football fan who was severely injured in a car accident on his way to a football game and who needs to be sent abroad for a highly expensive surgery; the test participants were asked to indicate the amount they would donate to this needy person. The authors created different conditions, of which four are of interest for our context. These conditions resulted from manipulating the victim’s ingroup/outgroup belongingness (“he is a fan of the football team you favor yourself: yes/no”) and from providing or not providing additional identifying information (mentioning the victim’s name: yes/no). The author found that willingness to donate was higher in the ingroup/identifying-information-present condition than in the other three conditions; in the other three conditions, willingness to donate did not differ.

Additional findings: Evidence for the effect of singularity dichotomy when identifying information is present was also reported by Västfjäll et al. (2014, study 3). These researchers investigated the willingness to donate to one needy child vs. two or eight needy children who were each depicted in a separate image and described by their names. They found a higher willingness of the test participants to donate in the one-child condition, indicating a more favorable response to one person compared to a low-entitativity group of persons. Similar results were found by Smith et al. (2013, p. 969, Study 4) when information describing the child(ren)’s plight was given. Kogut (2011, study 2) asked test participants to imagine either a young man or a group of young men suffering from AIDS and asked them to indicate their willingness to donate in order to help him/them. The amount indicated was lower in the one-needy-person condition. The author argues that the test participants probably thought that persons with AIDS are themselves responsible for the infection, which resembles negative information about the person(s), resulting in a more negative evaluation of the individual.

Conclusion: In summation, prior research indicates that individuals are evaluated more positively than a low-entitativity group of persons when the individual belongs to the perceiver’s ingroups, when identifying information is available, and when negative information is absent.

2.3.3. The concept in research on family brands

Gürhan-Canli (2003, study 1) asked test participants either to imagine a real TV set or to envision a family brand that offers a set of electronic products in order to manipulate the singularity factor. Then, the test participants received information about the TV set or the set of electronic products. Additionally, other factors, such as the sequence of this information, were manipulated, which is not of interest in our context. The author did not find a main effect of singularity on the evaluations of the target (TV set or set of products). The problems already mentioned in Section 2.2.5 might be the reason for the missing effect.

2.3.4. Summary of prior research

Fig. 7 summarizes the main findings on the effect of singularity on evaluative responses.

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**Main effect of singularity**

<table>
<thead>
<tr>
<th>Evaluations</th>
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<tbody>
<tr>
<td>Low-entitativity group</td>
<td>Low-entitativity group</td>
</tr>
<tr>
<td>One person</td>
<td>One person</td>
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**Interaction between singularity and identifying information (e.g., image, age, and name)**

<table>
<thead>
<tr>
<th>Evaluations</th>
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<tbody>
<tr>
<td>Presence of identifying information</td>
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<td>Absence of identifying information</td>
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</table>

**Three-way interaction of singularity, the belongingness of the person to one’s ingroups, and identifying information**

<table>
<thead>
<tr>
<th>Evaluations</th>
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<tbody>
<tr>
<td>Ingroup + Inf&lt;sub&gt;present&lt;/sub&gt;</td>
</tr>
<tr>
<td>Outgroup + Inf&lt;sub&gt;absent&lt;/sub&gt;</td>
</tr>
<tr>
<td>Outgroup + Inf&lt;sub&gt;present&lt;/sub&gt;</td>
</tr>
<tr>
<td>Ingroup + Inf&lt;sub&gt;absent&lt;/sub&gt;</td>
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</table>

**Interaction between singularity and the presence of additional negative information**

<table>
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<th>Evaluations</th>
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</thead>
<tbody>
<tr>
<td>Absence of additional negative information</td>
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<td>Presence of additional negative information</td>
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*Likely, this relationship is only valid for the ingroup condition.

*Fig. 7: Overview of results in prior research on the relationship between singularity (one person vs. a group of low-entitativity persons) and evaluations*
As indicated at the beginning of Section 2.3, we add the findings of studies that compared the evaluative responses in conditions (2) and (3) described in Fig. 1. We found only a few studies that have compared these conditions (individual vs. high-entitativity group). Moreover, the findings from these studies are mixed. McConnell et al. (1997), Smith et al. (2013, study 4), and Västfjäll et al. (2014) did not find differences. Susskind et al. (1999) found more positive trait ratings for individuals than for highly entitative groups. Burson et al. (2011) argue that using a family as an example of a highly entitative group could also be interpreted as an example of one unity. However, because of the divergent findings, we do not collapse conditions (2) and (3) and consider them separately in our studies.

3. Testing the relationships in the field of fair-trade products

In the next section, we illustrate our conceptual model and formulate hypotheses. Then, we describe the procedures and findings of three studies that we conducted to test the hypotheses.

3.1. Hypotheses

Prior research indicates that evaluative responses of singularity/entitativity depend on the levels of moderating variables (i.e., ingroup/outgroup belongingness when groups are evaluated, group size, amount of identifying information, co-presence of negative information). We transfer all findings from prior research presented in Section 2 to derive hypotheses about the effect of the type of the image of the depicted producer(s) on the evaluations of fair-trade products. We translate the relation found in prior research (see the third picture from the left side in Fig. 8) and test the following hypothesis:

H1: If consumers assign needy producers to their ingroups, depictions of a high-entitativity group of producers result in more (vs. less) favorable evaluations of fair-trade products than depictions of a low-entitativity group of producers (H1a). For outgroups, the reverse relation is valid (H1b).

Second, we transfer results regarding responses to single persons vs. low-entitativity groups to our research. Because the third picture from the left side in Fig. 7 contains the most variables, we propose the following hypothesis:

H2: The depiction of one needy producer results in higher evaluations of fair-trade products than the depiction of a low-entitativity group when two conditions are met: the producer belongs to the consumer’s ingroups and a large amount of identifying information is given (H2a). The depiction of one needy producer results in the same evaluations of fair-trade products as the depiction of a low-entitativity group when the producer belongs to the consumer’s outgroups or when only a small amount of identifying information is provided (H2b).

Third, we examine the effect of the group’s entitativity depending on the group’s size. We translate the relationship found in prior research (see the third picture from the left side in Fig. 8) and propose the following hypothesis:

H3: If a low-entitativity group of needy producers is depicted, evaluations decrease with increasing group size (H3a). If a high-entitativity group of needy producers is depicted, evaluations do not depend on group size (H3b).

3.2. Method

We conducted three studies to test the hypotheses. Tab. 2 shows what experimental factors we manipulated in the studies and which hypotheses we tested. We also intended to check whether the effects exist independently of the used manipulation of entitativity. Thus, the stimulus sets...
change in the studies. We started data collection in winter 2013/14. However in 2014, Västfjall et al. published an article in which the authors suggested an alternative way how to manipulate entitativity. We decided to adopt this proposal. Thus, the sequence of the studies presented below is not chronologically ordered.

3.3. Study 1

In Study 1, we test H1 postulating an effect of entitativity depending on the ingroup/outgroup belongingness of the depicted needy farmers or workers shown in ads created to promote fair-trade products.

Experimental design: We used a 3 (image: low-entitativity group of two persons, high-entitativity group of two persons, one single person) × 2 (belongingness of the depicted persons: ingroup, outgroup) factorial design. Moreover, we considered three products for the ingroup condition (wheat for muesli, oranges for juice, cotton for towels) and three products for the outgroup condition (tea, bananas, vanilla for ice cream). For the one-person condition, two ad versions were created, each showing one of the persons who were depicted in the two-person condition. For all conditions, different sub-samples of test participants provided data.

Test stimuli: We use tea as an example to illustrate the test stimuli (see Fig. 9). The manipulation of entitativity and singularity was adopted from Västfjall et al. (2014, study 3). In the high-entitativity condition, the persons were shown within the same image; in the low-entitativity condition, two separate images were used. Similar stimuli were created for the other five products, resulting in 24 experimental conditions (between-subjects design).

Pretest to check the manipulation of entitativity: In all, 486 students were assigned to the two-person conditions. They saw one ad version and agreed or disagreed with the statements “The depicted persons are very similar” and “I perceive the depicted persons as a unit” on a seven-point scale ($R = .55$). The first item was adopted from the entitativity scale developed by Rydell and McCon nell (2005, p. 108). The perceptions of entitativity were higher when both persons were depicted within one image ($M_{\text{high-entitativity}} = 3.99$, $M_{\text{low-entitativity}} = 3.30$, $F_{1, 484} =$...
24.64, \( p < .001 \), indicating a successful manipulation of entitativity.

**Sample, procedure, and measures:** In total, 756 persons participated in the main part of the experiment (\( M_{\text{age}} = 24.49 \) years, SD = 4.45; 58.5 % females) and were randomly assigned to the experimental conditions. To collect the data in the time span between winter 2015/16 and summer 2016, an online survey was used. The test participants were students or former students who had passed their examinations a few years ago. The test participants watched one advertisement as long as they wanted and then were asked to agree or disagree with the following statements on a seven-point scale (\( \alpha = .74 \)):

- “the product is very attractive”
- “appealing,” “interesting,” and “good.”

**Manipulation check of ingroup/outgroup belongingness:** In theoretical contributions to social-identity theory, researchers refer to the similarity of the “interests, attitudes, and systems of beliefs” of the perceiver and social groups to assign groups to in- and outgroups (Tajfel 1974, p. 69). However, because it is difficult for test participants to infer such commonalities from stimuli such as advertisements, researchers frequently use belongingness to ethnic and cultural groups to separate in- from outgroups (e.g., Cuddy et al. 2007; Garza and Santos 1991; Lewis and Sherman 2003; Qualls and Moore 1990; Stephan 1977). We adopted this approach and asked the test participants of the main study to agree or disagree with the following statements that “There is high similarity between me and the depicted person(s),” “The depicted person(s) have (has) the same cultural background that I have,” “The depicted person(s) might live where I live,” and “The depicted person(s) live(s) in an industrial country” on a seven-point scale (\( \alpha = .92 \)). Agreement with these statements was lower for the outgroup than for the ingroup condition (\( M_{\text{ingroup}} = 5.60, M_{\text{outgroup}} = 1.95, F_{1,754} = 2182.58, p < .001 \)), indicating a successful manipulation.

**Results:** The findings for product evaluations are summarized in **Tab. 3.** For the ingroup condition, they show that an image of a low-entitativity group of needy producers results in less favorable product evaluations than an image of a high-entitativity group, as predicted in H1a. For the outgroup condition, they show that an image of a low-entitativity group results in more favorable product evaluations than an image of a high-entitativity group, as predicted in H1b; however, the latter finding is significant only when we collapsed the data across the products. Thus, the findings mostly support H1. We add the finding that evaluations in the single-person condition tend to be even more extreme.

**Interpretation:** In summation, the findings are in line with prior research suggesting a polarization of evaluations with increasing entitativity depending on the in-group/outgroup dichotomy. Although not included in H1, we also considered the single-person condition in this study. Our data indicate that the polarization effect is even stronger for this condition compared to the low-entitativity condition and the condition of a high-entitativity group. Obviously, it is even easier to process information in the single-person condition than in the high-entitativity condition.

### 3.4. Study 2

In this study, we used a different manipulation of singularity and entitativity by showing low-entitativity groups of persons within the same picture and test H1 and H2.

**Experimental design:** We used a 3 (type of image: low-entitativity group, high-entitativity group, one single person) \( \times 2 \) (amount of identifying information: low, high) \( \times 2 \) (belongingness of the depicted person(s): ingroup, outgroup) factorial design. For the ingroup-condition, we created advertisements that promoted either wine or muesli, and for the outgroup condition, we used advertisements promoting either bananas or cacao for chocolate.

**Test stimuli:** Fig. 10 shows the manipulation of the images for bananas. In the group conditions, eight people that differ with respect to whether the impression of a close group (e.g., a family) or the impression of a group of less connected workers is created were depicted. The amount of identifying information was manipulated by

<table>
<thead>
<tr>
<th>Group belongingness</th>
<th>Product</th>
<th>( N )</th>
<th>Low-entitativity group</th>
<th>High-entitativity group</th>
<th>Single person</th>
<th>Effect size (( \eta^2 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingroup</td>
<td>Wheat for muesli</td>
<td>132</td>
<td>2.94 (1.00) ( a )</td>
<td>3.96 (1.42) ( b )</td>
<td>4.19 (1.28) ( b )</td>
<td>.156</td>
</tr>
<tr>
<td>Oranges for juice</td>
<td>133</td>
<td>3.09 (1.19) ( a )</td>
<td>3.64 (1.48) ( b )</td>
<td>4.15 (1.37) ( b )</td>
<td>.098</td>
<td></td>
</tr>
<tr>
<td>Cotton for towels</td>
<td>132</td>
<td>3.33 (1.21) ( a )</td>
<td>3.95 (1.38) ( b )</td>
<td>4.25 (1.31) ( b )</td>
<td>.077</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>397</td>
<td>3.11 (1.14) ( a )</td>
<td>3.84 (1.42) ( b )</td>
<td>4.20 (1.31) ( b )</td>
<td>.107</td>
<td></td>
</tr>
<tr>
<td>Outgroup</td>
<td>Tea</td>
<td>120</td>
<td>4.11 (1.02) ( a )</td>
<td>3.83 (1.28) ( b )</td>
<td>3.48 (1.40) ( b )</td>
<td>.042</td>
</tr>
<tr>
<td>Bananas</td>
<td>119</td>
<td>4.58 (.95) ( a )</td>
<td>4.15 (1.22) ( b )</td>
<td>3.80 (0.94) ( b )</td>
<td>.091</td>
<td></td>
</tr>
<tr>
<td>Vanilla for ice cream</td>
<td>120</td>
<td>4.14 (.91) ( a )</td>
<td>3.78 (1.08) ( b )</td>
<td>3.54 (1.10) ( b )</td>
<td>.053</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>359</td>
<td>4.28 (.98) ( a )</td>
<td>3.92 (1.19) ( b )</td>
<td>3.60 (1.17) ( b )</td>
<td>.057</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Scale ranges from 1 = negative product evaluation to 7 = positive product evaluation. Standard deviation in parentheses. Means in the same row with different subscripts are different at the \( p < .05 \) level (one-tailed test).

**Tab. 3: Results of Study 1**
the content of the text that was inserted into the ads below the images of the person(s). We again use the ads created to promote bananas to describe this textual manipulation. In the little-amount-of-identifying-information condition, the text (translated from the German to the English language) stated: “By purchasing this fair-trade product, you can help to improve the living conditions of farmers and workers in Africa and prevent their exploitation. Good quality at fair prices is the motto here.” In the high-amount-of-identifying-information condition, the following text was inserted: “In large parts of Africa, the exploitation of banana farmers is still a major problem. So far, farmers and workers [additionally inserted in the single-person condition: such as Malik, additionally inserted in the high-entitativity group condition: such as the family Okoye] receive only extremely poor prices and starvation wages and thus are living under unworthy and unacceptable conditions. By purchasing this fair-trade product, you can help to improve their living conditions and prevent their exploitation. Good quality at fair prices is the motto here.” The basic idea of including information about the farmer’s plight to manipulate the amount of identifying information was adopted from Smith et al. (2013, studies 2 and 4). Thus, for the ads promoting bananas, there were six versions differing with regard to the image (three levels, see Fig. 10) and the text version (two levels). Similarly, six ad versions for each of the other products (wine, muesli, and chocolate) were created.

Pretests: A sample of 258 students, assigned to eight conditions (four products × two group images), assessed the degree of entitativity. We used the same procedure and measures as in the pretest of Study 1 (R = .61). Perceptions of entitativity were higher for the images showing a high-entitativity group (Mhigh-entitativity = 5.82, Mlow-entitativity = 3.50, F1, 256 = 212.93, p < .001). Another sample of 374 students, assigned to twelve conditions (four products × three images) judged the belongingness of the depicted person(s) to their in- or outgroups. The statements were adopted from Study 1 (α = .90). Again, agreement with these statements was lower for the outgroup condition than for the ingroup condition (Mingroup = 5.06, Moutgroup = 2.08, F1, 372 = 711.81, p < .001).

Sample, procedure, and measures: Overall, 845 students and former students (Mage = 23.68 years, SD = 5.42, 52.2% females) participated in the main part in this experiment. The procedure and the measures to assess product evaluations (α = .837) were adopted from Study 1. Data were collected between winter 2013/14 and summer 2015. We collected data for two products (wine and bananas) at the beginning of this period and for the other two products (wheat and cacao) at the end of this period. For each product, we collected the data within the same time period. Thus, the samples were randomly assigned to the experimental conditions of each product.

Results: Tab. 4 shows the evaluations of the fair-trade products depending on the image (low-entitativity group, high-entitativity group, single person), the ingroup/outgroup belongingness of the depicted person(s), and the amount of identifying information. First, we test H1. This hypothesis states that for ingroups, evaluations are higher in the high-entitativity than in the low-entitativity condition (H1a) and that for outgroups, the reverse scheme is valid (H1b). For the small-amount-of-identifying-information condition, the results conform to the findings in Study 1 in which identifying information (except the image) was entirely absent. For the high-amount-of-identifying information condition, we have to reject both H1a and H1b. H2 was derived from the findings of the studies of Kogut and Ritov; it predicts that the single-person-condition results in more favorable evaluations than the low-entitativity condition when two prerequisites are met: ingroup belongingness and a large amount of identifying information (H2a). When at least one of these prerequisites is not met, evaluations are not expected to depend on the depiction of one single person vs. a low-entitativity group of persons (H2b). Our data confirm H2a but contradict H2b. There is a positive difference in the ingroup/large-amount-of-identifying-information condition, but there are also effects in two of the three remaining conditions (Tab. 5).

Interpretation: This study also indicates that entitativity makes evaluations more extreme, i. e., evaluations improve in the ingroup condition and deteriorate in the outgroup condition. However, our data contradict the postu-

![Fig. 10: Example of the images included in the test stimuli used in Study 2](https://doi.org/10.15358/0344-1369-2017-2-3)
H2b

<table>
<thead>
<tr>
<th>Group belongingness</th>
<th>Product</th>
<th>N</th>
<th>Small amount of identifying information</th>
<th>Large amount of identifying information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low-entitativity group</td>
<td>High-entitativity group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single person</td>
<td>Single person</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low-entitativity group</td>
<td>High-entitativity group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single person</td>
<td>Single person</td>
</tr>
<tr>
<td>Ingroup</td>
<td>Wine</td>
<td>215</td>
<td>3.10 (1.16)</td>
<td>3.76 (1.16)</td>
</tr>
<tr>
<td></td>
<td>Wheat</td>
<td>210</td>
<td>3.48 (1.06)</td>
<td>4.08 (1.34)</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>425</td>
<td>3.28 (1.12)</td>
<td>3.91 (1.25)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.41 (1.31)</td>
<td>4.94 (1.04)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.90 (1.12)</td>
<td>4.10 (1.53)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.01 (1.13)</td>
<td>4.35 (1.50)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.14 (1.23)</td>
<td>3.79 (1.12)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.22 (1.51)</td>
<td>4.92 (1.35)</td>
</tr>
<tr>
<td>Outgroup</td>
<td>Bananas</td>
<td>210</td>
<td>4.13 (1.20)</td>
<td>3.70 (0.83)</td>
</tr>
<tr>
<td></td>
<td>Cacao</td>
<td>210</td>
<td>4.22 (1.32)</td>
<td>3.79 (1.03)</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>420</td>
<td>4.17 (1.25)</td>
<td>3.75 (0.93)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.79 (0.74)</td>
<td>4.00 (1.22)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.77 (1.31)</td>
<td>3.94 (1.21)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.81 (1.51)</td>
<td>3.95 (1.42)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.13 (1.52)</td>
<td>3.79 (1.40)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.95 (1.31)</td>
<td>4.03 (1.57)</td>
</tr>
</tbody>
</table>

Notes: Scale ranges from 1 = negative product evaluation to 7 = positive product evaluation. Standard deviation in parentheses. Means in the same row with different subscripts are different at the p < .05 level (one-tailed test); these comparisons are made separately for the conditions of small vs. large amount of information, i.e., subscripts cannot be compared across the amount-of-identifying-information conditions.

Tab. 4: Results of Study 2

<table>
<thead>
<tr>
<th>Group belongingness</th>
<th>Amount of identifying information</th>
<th>Image of the needy producers</th>
<th>Expected (according to Kogut and Ritov)</th>
<th>Observed (at the .05 level)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low entitativity</td>
<td>Single person</td>
<td>Positive difference (H2a)</td>
<td>Positive difference</td>
</tr>
<tr>
<td>Ingroup</td>
<td>large</td>
<td>3.96</td>
<td>4.92</td>
<td>Positive difference</td>
</tr>
<tr>
<td></td>
<td>small</td>
<td>3.28</td>
<td>4.66</td>
<td>No difference (H2b)</td>
</tr>
<tr>
<td>Outgroup</td>
<td>large</td>
<td>3.79</td>
<td>4.03</td>
<td>No difference (H2b)</td>
</tr>
<tr>
<td></td>
<td>small</td>
<td>4.17</td>
<td>3.00</td>
<td>No difference (H2b)</td>
</tr>
</tbody>
</table>

Notes: Scale ranges from 1 = negative product evaluation to 7 = positive product evaluation.

Tab. 5: Comparisons necessary to test H2

ations of Kogut and Ritov. We surmise that a polarization effect also exists when the single-person condition is compared to the low-entitativity group (similar effects have been observed in Study 1). This might be due to the fact that images of single persons lead to elaboration processes similar to those for high-entitativity groups of persons. Moreover, we utilized pictures to show the person, whereas Kogut and Ritov (2007) and Ritov and Kogut (2011) relied on verbal manipulations of singularity. We surmise that visual stimuli have a different effect, i.e., exert a stronger effect.

3.5. Study 3

In this study, we manipulated singularity and entitativity as in Study 2. Moreover, we manipulated the number of the depicted persons and the amount of identifying information. In contrast to Study 1 and Study 2, we focused on the outgroup condition only. We use the data to test H1b, H2b, and H3.

Experimental design: The experiment was based on a 3 (type of image: low-entitativity group, high-entitativity group, one single person) × 2 (amount of identifying information: low, high) × 2 (number of the depicted persons in the group condition: three or five) factorial between-subjects design. Obviously, the latter factor did not vary for the single-person condition. Thus, we considered ten experimental conditions. We used cotton for towels as test object and depicted producers looking like people living in developing countries.

Test stimuli: The images contained in the advertisement versions are shown in Fig. 11. Below the picture of the workers and between the image of the towels and the fair-trade logo, information was inserted to manipulate the amount-of-identifying-information factor. The test versions were similar to the versions used in Study 2 and stated that the cotton was produced in Uzbekistan.

Pretest: A sample of 828 persons, assigned to four conditions (low- or high-entitativity group × three or five persons depicted in the image), judged entitativity. We used the same procedure and measures as in the pretest of Study 1 (R = .63). Perceptions of entitativity were higher for the images showing a high-entitativity group (M_{high-entitativity} = 4.96, M_{low-entitativity} = 3.69, F_{1, 826} = 155.67, p < .001). To collect the data used in this pretest, the stimulus material was included in surveys that also aimed to analyze different issues that are not relevant in this context.

Sample, procedure, and measures: Overall, 1789 students and former students (M_{age} = 24.28 years, SD = 4.19, 56.7 % females) participated in the main part of the experiment. We eliminated 35 test participants due to missing data resulting in a sample size of 1754. The procedure and the measures to assess product evaluations (α = .914) were adopted from Study 1. Data collection started in winter 2013 and was finished in spring 2016.
Manipulation check of ingroup/outgroup belongingness:
We used the same items as in Study 1 to assess the ingroup/outgroup belongingness of the depicted persons (α = .93) and found that the test participants tended to assign the depicted persons to their outgroups (M = 2.75 on a scale ranging from 1 (ingroup) to 7 (oungroup)).

Check of time invariance: As indicated above, we collected data over a long period of time (winter 2013 to spring 2016). Data was not collected subsequently for each of the ten experimental conditions. For all conditions, data was collected permanently to ensure that the sample was assigned randomly to each condition. However, one might suspect that time is a factor that influences the evaluations of fair-trade products (probably, this kind of goods becomes more popular) and that an interaction effect between the experimental conditions and time exists (e.g., due to changing attitudes toward outgroup individuals resulting from discussions about refugees in the public). We split the data according to the time (median-split) and conducted a two-way ANOVA.

Results: Table 6 shows how the test participants evaluated the towels depending on the image of the cotton producers, the number of depicted producers, and the amount of identifying information about the producers. First, we...
use the data to test whether the evaluations are less favorable in the high- compared to the low-entitativity out-group condition, as predicted in H1b. Our data support this presumption for the low-amount-of-identifying-information condition; this finding conforms to the results of Study 1 and Study 2. Second, we examine the validity of H2b. This hypothesis predicts that the evaluations do not depend on the fact whether a low-entitativity out-group or a single person belonging to the consumer’s outgroups is depicted. Our data provide support for this presumption for the large-amount-of-identifying-information condition; however, they do not conform to this hypothesis when the amount of identifying information was small. Third, we test H3; here, we expected lower evaluations in the five- compared to the three-person condition when group entitativity is low (H3a). The data do not support to this hypothesis. For the high-entitativity condition, we expected no difference between the three- and five-person conditions (H3b) and actually we did not find a significant difference.

**Interpretation:** The main focus of this study was to examine the effect of group entitativity depending on group size for an outgroup condition. We did not find evidence for this interaction effect. Likely, the difference between a three-person and a five-person group was too small to produce an effect.

**4. Conclusions**

**4.1. Insights from prior research**

What do researchers understand about entitativity and singularity? Basically, collections of elements can be described by their size (number of elements), by the favorability of their characteristics (valence), and by the variability of these characteristics. The term entitativity (or synonymously “unity” in Gestalt theory) is used to describe the “imagination of a whole” of the elements or the elements’ degree of having the “nature of an entity.” There is consensus that entitativity is a perceptual construct. For instance, in Gestalt theory, Bell et al. (1991) varied the variance of the style of different living-room furnishing items to manipulate perceptions of the variability of the room’s furnishing. Veryzer and Hutchinson (1998) manipulated the variability of the shape of product components. Smith et al. (2013) manipulated the variance of the spatial distances of butterflies to create perceptions of a more or less entitative swarm of butterflies. In the field of social psychology, Dasgupta et al. (1999) varied the variance of the complexion of faces. Smith et al. (2013) displayed a group of children and manipulated perceptions of internal similarity by providing or not providing information that the children belong to the same family. In the field of social-identity theory, variance was manipulated by using the same color or different colors when humanoid creatures or countries were depicted. Variability of family brands was manipulated by providing information that the products’ quality is the same or differs across the products. In summation, perceptions of the variability of the elements’ characteristics or perceptions of the elements’ disorder comes very close to the essence of what is meant by (low) entitativity. Singularity describes a characteristic of the group size (one element vs. a collection of elements).[11]

Under which conditions and how do entitativity and singularity affect evaluations? Prior research shows that visual stimuli showing groups of persons or collections of objects that differ with regard to entitativity particularly affect immediate evaluations. Researchers who manipulated entitativity solely by means of verbal descriptions, particularly when they used abstract items or short descriptions, hardly found effects on evaluations. Likely, perceptions of variability and disorder can be elicited more easily when visual stimuli are utilized. When effects were found, the sign of the effect depended on additional variables, such as (1) the group’s valence (for instance, the ingroup/outgroup belongingness discussed in social-identity theory), (2) the group’s size, and (3) the amount of identifying information given (pieces of neutral information that describe the target in more detail). We illustrated the findings reported by previous authors in Fig. 5 and Fig. 7.

Are the effects of entitativity and singularity generalizable? In our overview of the literature, we specified the origins of the concepts and showed how they spread from one field to other fields of research (Fig. 12). The researchers themselves state that they transferred insights to novel fields and mostly report that the transfer was successful.

The entitativity × valence interaction: If we focus on persons as target of evaluations and look at the interaction effect of entitativity and group valence, researchers report a polarization effect: high-entitativity groups of persons are liked to a greater extent than low-entitativity groups when these persons belong to one’s ingroups, whereas low-entitativity groups of persons are liked to a greater extent than high-entitativity groups when these persons belong to one’s outgroups. Research in the field of Gestalt theory reported a positive effect of entitativity (e. g., for a swarm of butterflies) and a null effect for brand families. Nevertheless, in these fields of research, group valence could be manipulated as well (e. g., depicting a swarm of beautiful butterflies vs. a crowd of awful, fear-arousing spiders; depicting the products of a highly favorable vs. unfavorable brand). Presumably, the polarization effect will emerge as well.

The entitativity × group size interaction: This interaction effect was rarely investigated thus far. Västfjäll et al. (2014) investigated willingness to donate to needy persons and found that the responses to low-entitativity groups deteriorate with greater group size. Likely, these authors considered a group of needy persons that is evaluated favorably per se. This interaction might at least depend on group valence.
The entitativity/singularity × amount of identifying information interaction: The studies of Kogut and Ritov provided evidence of the existence of the so-called single-identified-victim effect. Responses are highly favorable when a single person instead of a group is evaluated, when this person belongs to one’s ingroups, and when additional information makes the person identifiable.

4.2. Contributions of our research
Our studies used fair-trade products as test objects and manipulated group entitativity/singularity in combination with the ingroup/outgroup belongingness and the amount of identifying information that was provided to describe the needy producers. Our main results summarized in Fig. 13 conform to prior research.

Contribution to theory: When we use our empirical findings as the starting point, we provide additional insights into the conditions under which the polarization effect (i. e., the interaction effect of the valence and the singularity/entitativity on evaluations) exists. We found that this effect depends on the amount of identifying information. If no or only a little amount of identifying information is available, the polarization effect appears (see the left side of Fig. 13). If a large amount of identifying information is available, the single-identified-victim effect exists in the ingroup condition; in the outgroup condition, the effect of the singularity/entitativity factor disappears (see the right side of Fig. 13). The latter effect can be used to explain why people living in the US responded favorably to “Baby Jessica” (an ingroup member), while citizens living in Europe did not respond strongly to the image of the refugee child Alan Kurdi (an outgroup member) who was found dead on the beach after his family tried to flee from Turkey to an island of Greece in a small boat although public media provided identifying information about Alan Kurdi as well. Moreover, the question about whether these relationships are also valid in other fields of application (e. g., images considered in Gestalt theory, family brands) can be answered only after conducting similar studies in these fields.

When we use the overview of prior research as the starting point, the studies conducted by other authors and our experiments shed light on a generally valid polarization effect. The easiest operationalization of singularity/entitativity
Itativity is the manipulation the variance of one characteristic of units (e.g., persons or objects). For instance, Dasgupta et al. (1999) used the complexity of faces of people as the characteristic, manipulated the variability of this characteristic in a group of persons, and denoted it as manipulation of “entitativity” of that group. In this sense, the famous study of Daniel Kahneman and Amos Tversky (1979) can be interpreted as an additional contribution to this stream of research.[12] In the terms of the research presented in this manuscript, Kahneman and Tversky investigated the polarization effect (interaction effect between valence and singularity/entitativity on evaluations); they denoted it as the “reflection effect”. The singularity/entitativity approach presented in our manuscript also predicts the polarization effect; the effect was confirmed in the study conducted by the Kahneman and Tversky. Kahneman was awarded with the Nobel Prize in 2002 in the field of economics “for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty” (nobelprize.org) which directly refers to the title of the publication of this experiment. The findings of the study conducted by Kahneman and Tversky provide additional evidence for the phenomena that people like high entitativity or singularity (low variance, high homogeneity, high groupness, high degree of unity, etc.) when they evaluate or respond to generally favorable units (e.g., ingroup persons, beautiful animals, games promising gains only) and that they like low entitativity (high variability, low degree of groupness, etc.) when they evaluate generally unfavorable units (e.g., outgroup persons, games promising losses only). Admittedly, Kahneman and Tversky suggested an alternative explanation of this effect: the value function of the prospect theory. However, because the valence-singularity/entitativity interaction effect on evaluations can be observed in manifold areas — this paper provided an overview and the reflection effect (Kahneman and Tversky 1979) conforms to this research —, one might speculate on the existence of a more general rule individuals use to deal with variability.

Contribution to the practice of creating ads for fair-trade products: We can derive recommendations from our findings to create advertisements that effectively promote fair-trade products. These recommendations are important because practice does not follow such suggestions until now:

- When the producers of fair-trade products belong to the consumers’ ingroups, advertisements should depict one needy person and add a large amount of information that makes this person identifiable.

- When the producers of fair-trade products belong to the consumers’ outgroups, advertisements either should depict a low-entitativity group of needy persons without providing much additional information about this person or should provide a large amount of information that makes the depicted persons identifiable.

4.3. Limitations

It is evident that our empirical research suffers from numerous weaknesses. Limitations result from applying a special procedure, using special test subjects and test objects, and using special test stimuli. With respect to the procedure, we assessed evaluations at the time of the exposure to the advertisements; likely, these immediate evaluations are less effective when products are purchased in the future. Moreover, we assessed the likelihood of products; at the point-of-purchase, people have to decide among products, and choice data could thus provide additional insights. With respect to the use of students as test subjects, this special group might have attitudes toward purchasing such products that differ from the attitudes of other consumer segments because most students have lower income and may not be able to afford fair-trade products. We used test objects that are associated with production in developed or developing countries. Workers and farmers from developing countries indeed count as the test subjects’ outgroups; however, empathic concern and thus the willingness to help such people might be generally higher compared to the willingness to help needy local workers or farmers. We used images in advertisements to manipulate entitativity/singularity. Movie pictures in commercials containing a narrative about the needy producer would offer more identifying information and thus might have different and likely stronger effects.

Notes

[1] The term “family brand” does not mean that the products are displayed as a family (e.g., father, mother, and children in terms of anthropomorphism); rather, there is a high amount of similarities among the products.

[2] We collected images of needy producers of fair-trade products and workers that are used in advertisements and on websites and are shown on the packaging of fair-trade products. We found that each type of image (one person, high-entitativity group, and low-entitativity group) is used in practice.

[3] The manipulation of entitativity used by Dasgupta et al. (1999, study 1) in the field of social psychology is most similar to the manipulations of unity used by authors in the field of Gestalt theory. They presented a series of 50 images showing human faces in random order, including 25 images of faces with a bright complexion (additionally described by the letter X) and 25 images of faces with a dark complexion (additionally described by the letter Y). In the high- (vs. low-) entitativity condition, the skin color of the set of faces with a dark complexion had a low (vs. high) variance, while the mean color was held constant. However, even this manipulation technique is based on the use of a set of different stimuli. Moreover, Dasgupta et al. (1999, study 1) did not assess evaluative responses toward group Y.

[4] For instance, prior research has found that the willingness to help needy ingroup members is stronger than that to help outgroup members in need. Winterich et al. (2009) report that American citizens on average donated more money to help victims of Hurricane Katrina in the region of New Orleans than to help victims of the Indian Ocean Tsunami in Indonesia. Cuddy et al. (2007) used race to separate ingroups from outgroups and showed that white people donated more money to help white victims and that black people donated a higher amount to help black victims of Hurricane Katrina.
An experiment that has some commonalities with these studies was conducted by Lewis and Sherman (2010). These authors did not investigate evaluations of a group but examined evaluations of the performance of a single group’s member depending on whether this group was an ingroup or outgroup of the perceiver and whether this group was low or high in entitativity. One could assume that the group member’s evaluations are strongly related to the group’s evaluation. For particular conditions, the researchers report that whether the group member belonged to the in- or outgroup of the perceiver did not affect evaluations in the low-entitativity condition. In the ingroup condition, entitativity had a positive effect, and in the outgroup condition, it had a negative effect on evaluations. This finding is consistent with the results of other authors presented in this section.

The author also manipulated the sequence of the information (e.g., positive first) and assessed recall values; these results are not of interest in our research because we consider immediate evaluations.

Additional research exists for the relevancy of moderating variables. Hogg et al. (2007) found that especially people with low self-certainty evaluate high-entitativity ingroups more positively than low-entitativity ingroups and argue that for these people, it is easier to categorize themselves in that type of group.

Strictly speaking, McConnell et al. (1997) compared responses to an individual for whom identifying information (his name) is given with responses to a group of unidentified persons; the aspect of identifiability will be discussed in Section 2.3.2.

The concept of personification, which is used in news-value theory, has commonalities with the concept of singularity. News-value theory considers factors such as personification, which editors of newspapers and TV channels expect to enhance the interest of their audience for news (Eilders 2006). The case of “Baby Jessica” is an example of the personification of a needy person.

The original image was bought from a photo agency (dreamstime.com) and manipulated to create the four different image versions ([https://de.dreamstime.com/stockfotos-frauen-tee-pflcker-sri-lanka-image45371013](https://de.dreamstime.com/stockfotos-frauen-tee-pflcker-sri-lanka-image45371013)). Similarly, we bought the rights for using other images when possible.

Some authors also consider the condition in which a single individual is highly inconsistent in her/his behavioral characteristics and traits. In this condition, entitativity describes the degree of the internal inconsistencies of the behaviors and traits of one person. We refrained from including this special condition in our overview because “perceivers typically expect unity and coherence in the traits of individuals” (e.g., McConnell et al. 1997, p. 750).

In the mostly cited experiment of Kahneham and Tversky (1979), these authors asked a sample of 95 Israeli students to imagine themselves in a positive-valence condition (gain condition) and subsequently in a negative-valence condition (loss condition) and to decide in each condition among a singularity option (certain outcome) and an entitativity option (outcomes associated with statistical variance). First in the gain condition, the test persons had to imagine that they could choose among a certain gain of 3000 New Israeli Shekel (NIS) and an gain associated with variability (gain of 4000 NIS with a probability of 80 % and 0 NIS with a probability of 20 %); 76 of the 95 persons preferred the singularity option. In the loss condition, the test participant had to envision that they were able to choose among a certain loss of 3000 NIS and a loss associated with variability (loss of 4000 NIS with a probability of 80 % and 0 NIS with a probability of 20 %); only 8 of the 95 persons indicated preference for the singularity option.

References
Steinhart/Gierl, Who Would Like to be Treated Fairly?


Keywords
Singularity, Entitativity, Fair-trade products, Advertising.