The Influence of Perceived Social Diversity in the Workplace on Employee Performance:  
*An Integrative Model and Research Agenda*

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ABSTRACT

How is a team’s social diversity influencing teamwork and member performance? Extensive research studied impacts of demographic- and personality diversity on teams, recently focusing on team member’s individual diversity perceptions. I propose the utilization of an integrative process model (the Perceived Diversity Model (PDM)) to explain individual team members’ responses to work group- and company diversity. The PDM rejects a direct relationship between objective diversity measures and performance indicators proposing a relationship fully mediated by perceived diversity. At the heart of the PDM lies the variable perceived diversity, depicted in a two-by-two matrix (PADMa), where the amount of perceived diversity level is related to diversity evaluations. The perceived diversity level is a general perception (i.e. a notion that people in the room or organization are different to each other) and can, but does not have to, correlate with specific social categories like gender or creativity. Diversity evaluations place perceived diversity levels somewhere within a positive and negative binary. The complete PDM was derived by combining the results of a systematic literature review on perceived diversity with existing diversity conceptualizations. Propositions on the nature, antecedents and relationship of perceived diversity with other variables are made and research implications are discussed.

Keywords:
perceived diversity, diversity management, diversity in the workplace, diversity in organizations, team diversity, gender diversity, racial diversity, cultural diversity, social diversity, diversity theory, objective diversity
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"Could diversity, much like beauty, lie in the eyes of the beholder?"
(Shrivastava, Gregory, 2009, p. 526)

1. INTRODUCTION

Diversity in western societies is increasing through political and economic developments like emancipation, globalization, and international mobilization with the result that, for example, traditionally male\(^1\) dominated board rooms increasingly include female members. Therefore, work teams and business culture are changing and awareness for diversity is growing (e.g. van Veelens et al. 2013). While the social justice perspective touts increased demographic diversity a success, it represents a challenge to contemporary companies that struggle to “manage diversity” (Tsui, Gutek 1999).

Although the body of research addressing possible impacts of human diversity on teams and the workplace has been growing for more than 50 years, results remain inconclusive, recently causing a new stream of research to propose the concept of *perceived social diversity* (e.g. van Knippenberg, Schippers 2007). This study asks “How is social diversity in the workplace perceived?” and “How do perceptions of social diversity in the workplace influence employee performance?” These questions were approached with the, to the best of my knowledge, first systematic review on perceived diversity.

The results were integrated with related research and summarized in a testable model of diversity perceptions and responses, the *Perceived Diversity Model* (PDM) (figure 1). Importantly, the majority of literature on perceived diversity rejects a direct impact of objective diversity on employee behavior and performance and proposes a relationship fully mediated by perceived diversity. As a central result, perceived diversity is described as a two-dimensional individual-level variable, the *Perceived Affective Diversity Situation Matrix* (PADMa) (figure 2), composed of perceived diversity level\(^2\) and affective evaluation thereof.

The report starts with introducing the theoretical background and methodology (chapters 2 and 3). In the main chapter (chapter 4), the review results and models are discussed in detail, deriving propositions. The paper closes with implications for practice (chapter 5), a discussion of theoretical contributions and possibilities for future research (chapter 6), limitations and a conclusion (chapters 7, 8).

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\(^1\) This paper contains many group descriptions. Groups that are underrepresented in business hierarchies are generally referred to as minorities, even if they account for a global/ societal majority. Gender is referred to as a binary. Caucasians are referred to as Whites in distinction to non-Whites in the context of racial [sic!] diversity. This wording is a representation of the vocabulary in current literature, not personal vocabulary nor perspective. I chose to employ the wording of the literature under review to promote clarity.

\(^2\) As how much the prevalent diversity is perceived
2. **Theoretical Background**

The initial and current predominant approach to the topic of social diversity in the workplace focuses on demographic diversity, with factors like those in anti-discrimination legislation (e.g. gender, age, race), and their relationship to team-level factors (e.g. creativity, communication or knowledge transfer), and company-level performance indicators (e.g. new product development, generated profit or growth rate) considered (Williams, O'Reilly 1998; Chatman et al. 1998; Harrison, Klein 2007; Hart, Van Vugt 2006). These demographic- or surface-level factors are assumed to be indicators for underlying differences in values or working styles, and important social cues for discrimination and prejudice (Jackson et al. 1995; Fiske, Neuberg 1990). In the last three decades, research addressing underlying deep-level personality differences complemented diversity research (Shemla et al. 2014; Harrison et al. 1998; Jackson et al. 1995). Yet, the results remained highly inconclusive. Certain forms of diversity were generally detrimental (e.g. value diversity), others were beneficial (e.g. knowledge diversity), and further types of diversity resulted in the combination of beneficial and detrimental effects (e.g. gender or cultural diversity). Across studied forms of diversity, results were not unanimous, but research indicated benefits of diversity as consistently as it reported detriments and remains unclear as to when and why diversity leads to each response. Despite growing attention for the question, a clear understanding of how diversity impacts groups is still lacking (for reviews see Mannix, Neale 2005; van Knippenberg, Schippers 2007; Williams, O’Reilly 1998).

Subsequently, theory addressing diversity as a social construct developed alongside the growing body of knowledge on objective diversity (diversity measured in absolute numbers, e.g. a percentage of females). Tajfel and Turner (1987) argued that positive or negative effects of diversity may not just result from the variables or contexts examined, but also from the way in which diversity is socially constructed (Mathews 2010; Bunderson, Sutcliffe 2002). Social identity theory and social categorization theory\(^3\) arose as new approaches to diversity constructions until van Knippenberg, De Dreu and Homan (2004) proposed the categorization-elaboration model (CEM) to integrate these approaches.\(^4\) The model has since been established as the most common model to describe diversity conceptualizations (see chapter 4.1. for a comparison of the CEM and PDM).

In the new millennium, a further scholarly conceptualization of diversity has been developing: diversity as a construct in the perceivers’ mind. Based on the constructivist assumption that there is no objective reality, these approaches discuss subjective perceptions of diversity rather than objective measures. Supporting this line of thought, it

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3 For more details on social identity theory see Tajfel, 1982. For more details on social categorization theory, see Turner et al., 1987. For a joint introduction see Tajfel and Turner, 1986. In general, both approaches suggest that individuals classify themselves and others into social groups.

4 For more details about the background of the CEM see van Knippenberg, De Dreu and Homan (2004)
has been shown that "individuals’ perceptions of their social environment have a far greater and more direct impact on behavior than the social environment itself" (Jansen et al. 2016, p. 82; see also Krackhardt, 1990; Eisenberger et al. 1986). Thus, researchers began to discuss how individuals perceive and evaluate diversity, generally focusing on individuals’ awareness of diversity in their surroundings. However, theories of diversity as the subjective interpretation of dissimilarity in a social unit are relatively new and undeveloped (Van der Vegt, Van de Vliert 2005). Generally, two approaches to perceived diversity are emergent; mono-attribute approaches and multiple-attribute approaches (Qin et al. 2014). The single-attribute method, analyzing perceived diversity levels in specific categories, is one commonly used method which refers to specific social categories as diversity (Qin et al. 2014). Among the multiple-attribute approaches, the perception method is most general. Respondents are asked, for example, how similar they think they are to the rest of their work group (Riordan, 2000). The rationale behind the perception method is, that many attributes can be used as to differentiate individuals, but only those most salient in each situation are expected to be important markers of diversity (i.e., attributes that people use to tell themselves that the other person is different (Chatman, O’Reilly 2004; Hobman et al. 2004)). This approach provides insights into individual experiences of being different from other team members and how these experiences affect individual behaviors and attitudes (Hobman, Bordia 2006) and thus, this method seems to most successfully address the question of "how differences make differences" (Qin et al. 2014, p. 146).

However, scholars emphasized the need for a more complex conceptualization of diversity through the act of studying the factors that mediate or moderate effects of workplace diversity (Leveson et al. 2009). A clear model showing the process of individual diversity perception will help to understand when perceptions match the objective situation, and therefore provide a better understanding of when diversity leads to beneficial impacts (Liao et al. 2008; Zellmer-Bruhn et al., 2008; Garcia-Prieto et al. 2003). Beyond that, such a model could add to research on objective diversity and open opportunities for future research. In the light of the above, this study addresses the following research questions:

RQ1: How is social diversity in the workplace perceived?
   SQ1a: How is the variable perceived diversity described in current literature?
   SQ1b: How do diversity perceptions relate to objective diversity?
   SQ1c: Which factors influence the relationship between objective- and perceived diversity?

RQ2: How do perceptions of social diversity in the workplace influence employee performance?
   SQ2: Which are possible outcomes of (different) diversity perceptions?
   SQ2: Which moderating factors influence the relationship between perceived diversity and diversity outcomes?
   SQ2: How do diversity outcomes influence diversity perceptions and performance?

The following chapter elaborates on the methodology behind the PDM, PADMa, and the propositions in detail.
3. METHODOLOGY

Starting from a general notion that diversity perceptions may matter, the overall aim was to synthesize existing literature in a conceptual model, to derive testable propositions. With this model, I condense the scattered body of research on perceived diversity and provide a basis for future research on the emerging topic. To achieve this, I utilize a three-phase process. In the first phase, the scope and terminology of the study were defined, followed by the development of a conceptual model in the second phase, and further followed by refinement and finalization in the third phase. Here, the three main phases are described as the preparatory phase including a mapping review, the main research phase with the systematic literature review, and a concluding integration phase, respectively. The actual research was conducted in iterations over the course of two years to the point of theoretical saturation (e.g. Glaser, Strauss 1967). For the sake of clarity, the process is described as linear.

3.1. PREPARATORY PHASE: PREPARATION AND MAPPING REVIEW

The first mapping review was conducted without initial terminology, instead starting from the mere notion that diversity recognitions could be important. With the mapping review, concepts and terminologies were summarized and compared, yielding a network of related keywords and conceptual elements. As a central result of that phase the most generally used term to describe subjective diversity recognition in the workplace was identified: “perceived diversity”. Beyond this terminology, this phase resulted in the research question and search words for the second phase, the systematic literature review. To derive a clear research gap and terminology, a narrative mapping review was conducted (e.g. Haddaway, 2016). Starting from the notion that individual experiences are important in social phenomena and thus to diversity discourse, related concepts and terms were lifted from current literature and it became clear that “perceived diversity” is the most commonly used terminology. The initial sources then consisted of all literature found on the database Web of Science containing the terms "perceived diversity" and "perception of diversity". Depicted over time, the number of publications showed a striking trend with obvious growth in utilization of the terms since 1963 when the oldest found paper was published (see appendix, figure 11). The lack of publications in earlier years might be explained in part by incomplete online representation, yet growth continued in recent years.

The studies found were selected manually by scanning the titles for human diversity and subsequently the abstracts for a workplace setting. Of more than 200 papers, 41 articles addressed human diversity in the workplace. Subsequently, concepts that repeatedly appeared in the papers were mapped and summarized in an initial model and field of interest (see appendix, figure 12). Most importantly, the mapping review confirmed the terminology; to describe what I was looking for, scholars employ the terms ‘perceived diversity’ and ‘diversity perception’. The review further emphasized the relevance of perceived diversity research and a need to gather the fragmented body to grasp under-
lying theories. Beyond that, an initial set of related terms and frequently used keywords narrowed the topic to *perceived social diversity in the workplace* and the main research question and sub questions could be formulated (introduced in chapter 2).

### 3.2. **Main Phase: Systematic Literature Review**

In the systematic literature review, literature was analyzed in depth and the extracted content was mapped into a consistently growing concept matrix, resulting in a loosely structured assembly of concepts related to the term perceived diversity. Subsequently, the resulting variables were analyzed in more detail and examined for relationships and consistency to derive a conceptual model. The systematic literature review consisted of three stages as proposed by Tranfield et. al (2003):

In the *first stage*, the review was planned, resulting in a review protocol where the research goal was clearly formulated: Develop a comprehensive model to integrate the scattered research on social diversity in the workplace and derive testable propositions. Alongside the mapping review (phase one), the scoping review was planned to be based on an initial body of literature directly addressing perceived diversity. Systematically approaching a specific term it is a fitting approach for a single researcher since it may yield concise results with little bias.

The actual review was conducted in the *second stage*. In the first systematic search process, Web of Science was searched for topics including the terms 'perceived diversity' and 'diversity perception', whereby the likelihood of relevant results, where both terms are used in referral to each other, was increased by limiting the search to studies containing both terms in close proximity allowing a two-word distance at most. Languages included English, French, and German. Through inclusion of work from the related fields of psychology and sociology, the concept was analyzed more broadly. New publications were continuously included. Based on which keywords were most common in the mapping review, a selection was made that assured the fit of all material to the research topic (Jesson et al. 2011). After initially broadening the research topic to perceived diversity in general, at this stage, the focus was narrowed to human subjects of diversity perceptions in a workplace by criteria for inclusion and exclusion in the review. Exclusion criteria included firstly 'organizational diversity', generally referring to structural and non-employee related factors, secondly 'non-human subjects of diversity perception' and, finally 'arbitrary and/or accidental use of both terms in high proximity'. They were applied manually by scanning the abstracts and in case an abstract matched one or more of the exclusion criteria, the paper was skimmed to avoid omitting relevant research. In general, those studies were discarded. For a summation of the used criteria, see appendix, table 1. The search produced 80 results which were further assessed for quality and fit. The criteria used for quality assessment were derived from Daft’s (1995) list of common reasons to reject articles by reformulating the reasons as a list of positive criteria. The criteria ‘cutting up the data’ was omitted, since this refers to cases, where authors attempt to publish similar results in different journals and I assume that such cases are remedied in the pre-publication phase. Adding to the list, only
articles from peer-reviewed journals were used, a criterion that automatically came into effect through the choice of search engines. Therefore, in total, eleven criteria were used for quality assessment (see appendix, table 2). After analyzing all studies along the eleven criteria, the initial body was complete (see appendix, list of initial body). The selected 36 papers were those most directly addressing perceived diversity and therefore, above all, the results of this study are based on those papers lying at the heart of perceived diversity research.

In the reporting process (stage three), data were extracted accompanied by a complementary second search (including backward and forward citations) following up on repeatedly mentioned concepts and terms. This process further clarified antecedents of perceived diversity and refined an initial concept matrix (Webster, Watson 2002). To facilitate data synthesis and analysis, the concept matrix was pre-designed to match a broad structure for the final report (see appendix, table 3). Throughout the data extraction process, it evolved as conceptualizations and contributions of each paper added to distinguishable theoretical clusters. In iterations, data extraction, synthesis and analysis were repeated, and new data were compared with all previous data (constant comparison) (e.g. Glaser, Strauss 1967). In completion of stage three, the data was synthesized and analyzed resulting in distinct variables relating to perceived diversity which could be placed in a conceptual model they were related to each other. The results were further compared to other theoretical approaches (esp. the CEM) before finalizing the PDM.

3.3. **CONCLUDING PHASE: DATA INTEGRATION**

In the final phase, the resulting model was refined especially in comparison to the most established model, the CEM (see also introduction and 4.1). This way, the specific contribution of this study became more tangible and clear. Through this comparison it also became apparent that literature frequently assessed perceived diversity levels and evaluation simultaneously. From this notion, the *Perceived Affective Diversity Situation Matrix* (PADMa) was developed as a depiction of the variable perceived diversity.

After data had been analyzed to the exhaustion of new concepts the results were compared to impactful existing research. An obvious first point of reference for my topic was the elaborate review on perceived diversity by Shemla et al. approaching a similar question to mine (2016). After first extracting their findings with the other literature, at this stage, their review was again compared with the interim results. While their research resulted more in a written overview on different types of perceived diversity, this study proposes one clear definition of perceived diversity and introduces a model.

The second and main theoretical scheme the results were compared with, was the influential yet independent categorization-elaboration model (CEM) (see introduction and 4.1), which was repeatedly mentioned in the papers I reviewed but generally played a subordinate role with respect to perceived diversity. In that context I am particularly grateful for academic exchange with professor Homan, one of the authors of the CEM. Scholars generally discussed perceived diversity as a free-floating concept in distinction to objective diversity but less the CEM. As an example, Shemla et al. did not include the
most impactful paper on the CEM in their review, though they cited plenty of the work from both main authors. This may indicate a need to discuss perceived diversity as a stand-alone concept. One possible explanation might be a tendency to take "one step back" and reassess how diversity is conceptualized or, much like this paper, "radically" approach diversity constructions from an individual's perspective. These comparisons with other research finally helped to make the contributions of this paper more tangible and resulting, an implicit part of the preliminary model became explicit: perceived diversity as a two-by-two matrix.

4. The PDM and PADMA

I developed and propose the perceived diversity model (PDM, figure 1), depicting the process of diversity perception and response(s) to that perception. Moderators are included. The most discussed variables in literature were moderators of the relationships between objective- and perceived diversity and the relationship between perceived diversity and diversity outcomes.

Figure 1 The Perceived Diversity Model (PDM), experience loops in green

Relationships in the model resemble processes, assuming a relationship between objective diversity and performance fully mediated by perceived diversity and diversity outcomes in the sense that objective diversity impacts perceived diversity, which in turn leads to diversity outcomes, ultimately impacting performance indicators. The relationship between objective- and perceived diversity in moderated by individual diversity mindsets and business level factors (policies) and that between perceived diversity and outcomes is moderated by team microclimate and task related factors. Finally, diversity outcomes in turn influence team microclimate and individual diversity mindsets (experience loops).
4.1. Distinction to the CEM
The PDM summarizes emerging research on perceived diversity and extends the CEM in several ways: Like the CEM (for a depiction see appendix, figure 13), the PDM addresses a theoretical diversity-performance link. Both models depict a relationship mediated by responses to diversity where in the CEM, these responses are elaboration of task-relevant information (that is "in-depth processing of task-relevant information and perspectives" (van Knippenberg et al. 2004, p. 1008)), while the PDM includes the broader variable diversity outcomes. Further, both models include task-related factors, affective evaluation, and, in different fashions, diversity mindsets. Unlike the CEM, the PDM assumes no direct diversity-outcome link but depicts a relationship fully mediated by perceived diversity. There is further a distinction between objective diversity and perceived diversity within the model, whereas both are somewhat mingled in the CEM's factor diversity with objective diversity not seen as part of the model but somewhere “behind” the diversity variables.

In the CEM, the impact of diversity on outcomes is mediated by elaboration as primary process underlying the effects of diversity. This mediator is replaced by diversity outcomes in the PDM, a variable overlapping with elaboration, but integrating further aspects. Diversity outcomes in the PDM further expand on elaboration insofar as diversity outcomes are also understood as new diversity experiences, thus the PDM includes a feedback loop from these novel diversity experiences to individual diversity mindsets and microclimate. The CEM further includes social categorization as a factor, understood as subgroup splits. In their original paper (van Knippenberg et al. 2004), the authors already hint toward a necessity to research contingencies of categorizations. My model only accounts for perceived overall diversity. There seems to be a theoretical overlap insofar as people will likely perceive diversity if there are also subgroup splits. Yet, they may also perceive diversity without splitting into subgroups and subgroup splits are a team-level phenomenon, while individual diversity perceptions may differ between team members. Finally, perceived diversity levels are further integrated with the CEM's affective/evaluative reactions in the variable perceived diversity, described as a two-by-two matrix, the Perceived Affective Diversity Situation Matrix (PADMa) (figure 2). Diversity perceptions can include high or low perceived diversity and be evaluated as positive or negative, resulting in different response patterns.

![Figure 2 The Perceived Affective Diversity Situation Matrix (PADMa)](image-url)
Finally, the PDM adds business level factors beyond the CEM. The CEM already includes task characteristics as one factor; the PDM also includes *microclimate*, business-level *justice* programs and *diversity emphasis*.

4.2. **Discussing Perceived Diversity as Mediator of the Diversity-Performance Relationship**

This paper discusses the state of research on the construct *perceived diversity*. Focusing on subjective diversity perceptions may add to the discourse also by addressing shortcomings of the dominating objective diversity paradigm, hence most researchers introduce perceived diversity in distinction to objective diversity, which is constructed "as if everyone ought to know it when they see it" (Bauman et al. 2014, p. 1354) and much less as a varying social perception. Generally, diversity can include all aspects in which people differ while categories under study include demographic diversity and deeper level diversity, like knowledge-, experience- or value diversity. One of the central elements distinguishing perceived diversity research from objective diversity research is the assumption that "people react on perceptions of reality rather than reality per se" (Homan et al. 2010). Literature choosing to discuss perceived diversity is predominantly rejecting a direct link between objective diversity measures and performance indicators. One central explanation for this rejection may be that perceived diversity approaches are often rooted in a constructivist paradigm, where there is no objective reality and diversity only occurs when a category is attached that meaning. For example, while demographic differences such as gender and/ or age are routinely considered diversity, other differences, like, for example, in body types, are seldom considered in diversity research and -policies. In that sense, which categories are considered diversity is already a construct rather than an objective reality. That way, the very existence of objective diversity is questioned, thus questioning the relevance of objective measures.

To go into some more detail, the following six main criticisms of research linking objective diversity categories to performance indicators have been found: (1) assume a direct impact of objective diversity on teams, (2) underestimate the relevance of contexts for diversity perceptions, (3) underestimate the subjectivity of diversity perceptions, (4) describe group-wise differences in perceptions, (5) focus on one specific diversity category and (6) fail to account for changes over time. Perceived diversity research is aiming to remedy these shortcomings in the following ways:

**1. Assume a direct impact of objective diversity on teams**

Rooted in a constructivist paradigm, perceived diversity research questions the existence of “automatic” social processes. Scholars repeatedly pointed to inconsistencies in objective diversity research, stressing there is no consensus that objective diversity has a direct impact on teams. Introducing perceived diversity may help to explain contradictory findings like positive and negative effects of the same type of diversity on performance indicators (Ormiston 2016). When assuming that "objective diversity may only matter through the perceptions it instigates" (Homan et al. 2010, p. 488), understanding these perceptions and the factors influencing them can help in explaining diversity
responses and resulting outcomes (see e.g. Van der Vegt, Van de Vliert 2005; Williams et al., 2007; Shrivastava, Gregory 2009). In consequence, one can assume that diversity can only fully be exploited if recognized by team members. Even if they are not consciously aware of their diversity perceptions at all times, it might still be possible to study semi-conscious or unconscious perceptions. In an interview situation, a study participant may name diversity perceptions he or she did not consider before. In some cases, objective diversity measures may thus have really assessed diversity perceptions such that the constructs were used as interchangeable.

(2) Underestimate the relevance of contexts for diversity perceptions

Differing diversity perceptions can be explained by various factors including the given context. “Every individual simultaneously belongs to an indefinite number of social categories and can thus be flexibly categorized in a multitude of ways” (Mussweiler et al. 2000, p. 399). An individual may categorize others and themselves contingent on individual factors like values, needs and experiences or contextual factors, like business-level initiatives, team microclimate, new diversity experiences in the team and task-related factors (Ormiston 2016, p. 227). In that sense, different teams may have such differing organizational cultures and contexts that individual members do not notice a specific type of diversity and therefore what seems like a direct link results from a category being normal to team members.

(3) Underestimate the subjectivity of diversity perceptions

When considering perceived diversity as an individual-level variable, everyone is in a slightly different diversity situation, team leaders and diversity managers need to understand (e.g. Oosterhof et al. 2009; Unzueta, Binning 2012; Hentschel et al. 2013; Bauman et al. 2014). In some studies, there was little or no correlation between objective and perceived diversity (e.g. age, gender, educational level, nationality) but perceived diversity significantly influenced e.g. work atmosphere and team identification (Hentschel et al. 2013; Ormiston 2016). Diversity perceptions are not only subjective in the perceived amount but also in the evaluation of that amount as positive, neutral or negative (for more details, see chapter 4.3). Such examples show, how "Irrespective [sic!] of the real diversity within a workgroup, leaders need to attend to individuals' perceptions of their differences." (Wolff et al. 2010, p. 967). Understanding in which ways people perceive and describe diversity is crucial in researching and managing effects of diversity (Homan et al. 2010) and ideally, theoretical understanding helps to explain how subjective diversity situations are constructed in such clarity and complexity it gives practitioners helpful orientation.

(4) Describe group-wise differences in perceptions

When assessing diversity levels (in general as well as when referring to specific categories) it has been shown that members of different (minority vs. majority) social groups will react differently to diversity and diversity programs. Differences include, for example, degrees of identification with a diverse group, levels of self-esteem and expecta-
tions that diversity is valued (all higher among majority members) (Guillaume et al. 2012; Tropp, Bianchi 2006; Schmader et al. 2001). Beyond that, majority members will generally perceive organizations as more diverse than minority members (Chen, Hamilton 2015). These findings stress how relevant differences in diversity perceptions can be, thus effects of minority and majority group membership will be elaborated in detail in chapters 4.4.1.2. Yet, even if minority or majority group membership can predict individual behavior, individuals belong to both minorities and majorities at the same time and can identify with their group memberships in different ways (e.g. «I've never been discriminated against as a woman»), and therefore describing social settings in simple minority-majority distinctions again falls short of accounting for more complex identity constructions and provides no basis for understanding employee behaviors on an individual- or team level (Qin et al. 2014; Van der Vegt, Van de Vliert 2005).

(5) Narrow focus to one specific diversity category
Most objective diversity research relates specific diversity categories, like gender or time on the job to specific outcomes. Such research is based on the assumption that people respond to diversity in correspondence with objective diversity levels, but researching specific types of diversity can hardly account for social complexity (see e.g. Homan et al. 2007; Polzer et al. 2006; Thatcher et al. 2003; Earley, Mosakowski 2000). The most distinct approach from objective diversity research focuses on general diversity perceptions. Even though the PDM may apply for specific diversity categories, it is more strongly centered on the notion that team diversity is an individual’s overall perception of diversity in a team or organization. Focusing on single objective categories can also lead to ambiguous and even contradictory results, when alternative explanations, like mediating and moderating variables or further diversity categories salient to team members are not considered (Qin et al. 2014). The high relevance of moderating variables (moderators are elaborated in chapters 4.4 and 4.6) has repeatedly been put forward to call for more complex concepts of the diversity-performance relationship.

(6) Fail to account for changes over time.
Finally, diversity conceptualizations have repeatedly been found to change over time. As Ormiston (2016) pointed out, theory in the field “is based on relatively static and observable member characteristics, [and] it is limited in its ability to specify how perceptions of similarity change over time. As such, there remains a clear need for additional theories that account for changing perceptions of diversity in groups.” (p. 230). Thus far, there are few attempts to provide process models for diversity perceptions and there is little longitudinal research on the topic.

Perceived diversity research attempts to remedy these shortcomings and with the PDM all six problems are addressed. There is no direct relationship between objective diversity and performance (1), individual contexts are accounted for in multiple variables (2), diversity perceptions are depicted as subjective (3), individual (4) and general (5) and changes over time are accounted for (6). In conclusion, perceived diversity research sets
itself apart from objective diversity research by differentiating between objective and perceived diversity (proposition 1a) and by rejecting a direct relationship between objective diversity measures and performance indicators (proposition 1b).

**Proposition 1a:** Perceived diversity is theoretically distinct from objective diversity such that diversity perceptions are based on objective diversity.

**Proposition 1b:** Perceived diversity fully mediates the relationship between objective diversity and performance.

### 4.3. The Perceived Affective Diversity Situation Matrix (PADMa)

As has been mentioned, diversity perceptions encompass perceived levels of diversity and the subjective evaluations thereof. At the heart of the PDM lies the variable perceived diversity, depicted as a two-by-two matrix, the *Perceived Affective Diversity Situation Matrix* (PADMa) with the scales *perceived diversity level* and *affective evaluation*. Both factors concur in four types of individual diversity perceptions.

To give an example, an employee will likely explain observed subgroup splits relating to diversity. In other words, he or she may make biased us-vs.-them distinctions explaining the subgroups by describing another subgroup for example as «the men in our group are arrogant, but less competent, they constantly talk about their leisure activities and don't focus on the task at hand». Such a statement contains an entire collection of distinguishing attributes. Yet, the initial category causing the split might have been something entirely different to the mentioned aspects (like time on the job). If a female joined the described group, the employee describing them may shift the description and employ different categories while maintaining the perspective that «they are different». This illustrates that the general amount of diversity perceived may be the most impactful or socially relevant variable. From the example, it can also be seen, how closely affective evaluation and perceived diversity levels are linked. The employee in the example suffers from the subgroup split and is unhappy about the weak shared team identity. This affective evaluation causes her to seek further differences and describe «the men» in various aspects beyond gender. With the PADMa, I assume that perceptions of diversity levels cannot be theoretically separated from diversity evaluations but instead an individual will perceive a general level of diversity in the team and evaluate that amount at the same time. Not only can an observed split precede a diversity perception; attitudes towards specific types of diversity can also be influential. If a person, for example, particularly enjoys or hates age diversity, the person will likely perceive age diversity more strongly than one being indifferent to that category and more interested in, for example, educational diversity. Thus, it is assumed that an individual will more strongly perceive diversity in categories she or he holds relevant and will more strongly perceive diversity if he or she is emotionally involved in the question of diversity.

The PADMa consists of four possible combinations of perceived diversity level (high or low) and affective evaluation (positive or negative), namely *harmony, conflict, deprivation* and *stimulation* (figure 3).
Harmony: Conforming Unanimity

The first diversity perception ensues when the group is perceived as one with low diversity and this is recognized as positive. «We have a lot in common! All of us are young, really passionate about the outdoors and doing their best at work.» This perception might be the most frequent and favored perception. It is based on perceiving similarities and focusing on shared traits rather than differences to build a we-identity. The perception is generally associated with the impression of being in a 'good group'. As the focus lays on shared traits, people may be seeking further similarities and unanimity by conforming which can also lead to conflict avoidance and inhibit creativity, e.g. «I let the idea go, didn't want to risk the good vibes.». The resulting overall sensation is one of harmony.

Conflict: Disharmonious segregation

The opposite, second perception ensues, when a group is perceived as high in diversity and this is evaluated negative, e.g. «Everyone is following their own interests. I'm afraid we will not get far.». When perceiving such a diversity situation, people can get an impression of segregation and have trouble relating to the team and developing a we-identity. Instead, the team can split into subgroups, conflicts on a personal level can ensue, resulting in bad communication, little knowledge transfer and an overall sensation of conflict. As response, people may be seeking more similarities and unanimity by conforming, not identifying with the team, inner resignation or leaving the group. This (perceived) diversity situation is unstable and might be the least frequent perception, since the situation is generally avoided even at high costs (like unproductiveness). Avoidance mechanisms may be striving for harmony or reframing the prevalent diversity as inspirational.

Stimulation: Inspirational synergies

While the first two diversity perceptions are generally associated with negative diversity beliefs («Good that we have low diversity and harmony»/ «Bad that we have high diversity and conflicts»), the third and fourth perceptions hint to more positive diversity beliefs. When people recognize diversity in a group as something positive, they will evaluate high diversity as positive and get an impression of synergies, where people can add their individual strengths to the team; «It’s awesome. We have such a broad variety of...»
experiences, we're learning from one another and everyone really adds to the team.» Thus, the overall sensation is one of stimulation. Ideally, such a team identity can result in high commitment and idiosyncratic contributions to the team. If this evaluation is part of a team’s culture, it can also be part of a strong we-identity; «We always try to hire people with complementary skills.» On an individual level, the perception may also arise from a need to differentiate, if such a need is not met, the individual may perceive the team as redundant and monotonous.

Deprivation: Monotonous redundancy

When team members evaluate low diversity negatively, they may again have trouble identifying with the team they perceive as monotonous. «In my team, I’m just another tech geek. Sometimes I wonder if they need me specifically. And if we’re to make a nice slide set, no one has the skills.» They may seek more diversity by shifting their identity «maybe my international experience adds something to the team.» or calling for more diversity «We should hire people with a business background.». Yet, generally, the team composition cannot be influenced by team members. On an individual level, the sensation may also result from a feeling of being distinct from everybody else in the group «I’m the only business professional in the group, everyone else has a tech background. They are so like-minded and I’m always unsure, if they really understand me.» and lead to (inner) resignation. The overall sensation associated with working in such a team is one of deprivation «It’s boring, I miss inspiration».

A fifth perception? Normality

One explanation for previous observations of a direct link may be that the studied category was normal to team members. If they do not evaluate their team’s diversity as positive or negative, high or low, diversity perceptions have no salient impact. Instead of a direct relationship, in such a case the PDM would suggest a mediating effect of zero because diversity is normalized for the study participants. In that sense, different teams under study may have such differing organizational cultures and contexts that individual members do not notice a specific type of diversity. This reasoning would suggest a fifth perception or general sensation; that of normality. There is neither a high nor a low perceived diversity level or affective valuation thereof. Such a neutral observation is unlikely to result in any impactful response affecting an organization and more likely to be unconscious. Diversity goes unnoticed, is only mentioned, when asked for and therefore is not described as one of the four perceptions.

In summary, perceived diversity is understood as a composite measure for individual diversity perceptions including perceived diversity levels and diversity evaluation (proposition 1c).

Proposition 1c: Perceived diversity as a variable is a multidimensional measure composed of perceived diversity level and diversity evaluation.

With the PADMa, it becomes tangible how members of the same team can perceive diversity differently. While the perceptions harmony and conflict are generally accom-
panied by negative diversity beliefs, the perceptions stimulation and deprivation stem from positive diversity beliefs. As an example, a person with high diversity beliefs may experience the group as monotonous while others perceive harmony. An individual not always holds either positive or negative diversity beliefs, but one can have either, none or both, depending on the situational context. Diversity beliefs are one important moderator of the relationship between objective and perceived diversity and influence which diversity is perceived how.

4.4. M od er at or s of the R ela tionship between Objective and Per ceived Diversity (A ntece den ts of Per ceived D iversity)

This section elaborates on the variables moderating the relationship between objective and perceived diversity and summarizes them in two composite variables *individual diversity mindsets* (consisting of normative diversity levels and diversity attitudes, see chapter 4.4), and *business-level policies* (elaborated in chapter 4.5).

4.4.1. Individual Diversity Mindsets

The individual capacity to perceive diversity and the propensity to evaluate it as positive or negative is influenced by a variety of internal- and external factors. Individual diversity mindsets result from individual experiences, social group memberships, personality and beliefs, all shaping normative diversity levels (how much diversity a person sees as normal) and diversity beliefs (if one experiences diversity as positive or negative). Most generally, individual background and experiences with diversity contribute to one's diversity mindset (chapter 4.4.1.1). More specifically, minority and majority membership are predictive factors for such experiences, as they determine how individuals experience social privileges (chapter 4.4.1.2). Independent of external influences, like experiences, individual personalities differ and contribute to diversity mindsets (chapter 4.4.1.3) and beliefs that diversity is beneficial (chapter 4.4.1.4).

4.4.1.1. Previous Experiences with Diversity

Like all factors contributing to individual diversity mindsets, previous diversity experiences can influence how much diversity individuals notice and if they tend to evaluate diversity as beneficial or detrimental. *Previous experiences with diversity* include individually being challenged by encountering dissimilar others as well as being discriminated against as different. Awareness for these experiences is raised in diversity trainings, making experiences more tangible.

**Diversity experience 1: Previous experience with diversity**

Shrivastava and Gregory (2009) found diversity experience to influence perceived diversity such that higher diversity experience will result in lower perceived diversity: «we are not that different». Beyond that, people with more diversity experience are more willing to include and exploit diverse traits in teamwork to foster creativity, which is why Shrivastava and Gregory propose to evaluate hard facts like countries visited and countries lived in when recruiting employees (Shrivastava, Gregory 2009). Further research will need to examine, if such hard facts can accurately account for diversity experience
since it may be possible to live in many countries without being strongly influenced by intercultural experiences especially for privileged groups (e.g. White western males) that might make less confrontational experiences. Furthermore, the same study found a (non-linear) correlation between diversity experiences and propensity to stereotype, possibly due to a paradoxical effect: "As people gain experience in dealing with diverse others, they could, armed with sufficient knowledge, become more confident about speedily applying stereotypic beliefs." (Shrivastava, Gregory 2009, p. 536). Diversity experiences ideally challenge reservations against diversity and increase openness to dissimilar others while being discriminated against as the other can further have detrimental effects:

**Diversity experience 2: Discrimination experience**

Each person belongs to countless categories, all allowing for distinction and discrimination (Ormiston 2016). In how far one identifies with a specific category not only depends on the social relevance of the category but also on former discriminatory experiences and personal identification with the category (Strauss 2007; Bauman et al. 2014). Since minority members (e.g. women, people of color) more frequently experience discrimination they generally are more positively inclined toward dissimilar others and diversity (Chen, Hamilton 2015; Bauman et al. 2014; Strauss 2007), more fond of equal opportunity strategies (Avery et al. 2007), and perceive the category they experienced as discriminatory as more salient (Shrivastava, Gregory 2009; Bauman et al. 2014).

**Diversity experience 3: Training**

Diversity training and education aim at influencing diversity perceptions and beliefs. Paradoxically, some research found diversity training to increase negative diversity beliefs and perceived levels of diversity possibly due to identity threat in high identifiers when confronted with stereotypes (Ehrke et al. 2014) and othering processes («Let's make one womens-group and one mens-group and each group then discusses their contributions to the big group.») (e.g. Bezrukova et al., 2012). Furthermore, diversity training is predominantly offered by majority members and there is little quality control on diversity trainer education (Bezrukova et al., 2012). On the other hand, beneficial effects of diversity training include that it can increase perceived superordinate group diversity, thereby increasing perceived inclusion (Ehrke et al. 2014). Beyond that, training may increase sensitivity for (own) discriminatory practices and increase the likelihood of an inclusive culture, both especially relevant for leaders.

In conclusion, diversity experiences, discrimination experiences, and diversity training all can have contradictory effects: Experiencing diverse others and diversity training both can raise the openness for diversity but also the propensity to stereotype. Individuals may then perceive diversity more or less strongly and evaluate it as more or less beneficial. Having experienced group-wise discrimination generally raises normative

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5 Constructing differences between social groups
level of diversity, positive diversity beliefs and sensitivity for discrimination and therefore differences in diversity perceptions between (racial) minority and majority group members are well researched:

4.4.1.2. Minority and majority membership
As has been mentioned, people's perceptions of diversity correlate with perceiver's group memberships (e.g. Bauman et al. 2014; van Veelen et al. 2013) and thus contribute to individual diversity mindsets. When referring to minority and majority members in this respect, most included papers are US-based and address racial diversity. Two main observations on diversity perceptions for minority and majority group members are that perceived levels of diversity differ and, secondly, evaluations of pro-diversity signals differ.

Observation one: perceived levels of diversity differ
Minority- and majority members perceive different levels of diversity, often assessed by perceived representation, which minority members and majority members tend to evaluate by different criteria (e.g. Chen, Hamilton 2015). Majority members (and, interestingly, most of the academic literature addressing objective diversity) mostly refer to numeric representation, which is the percentage of minority members in a business unit or organization (Chen, Hamilton 2015). Minority members, on the other hand, also assess for hierarchical representation (that is, where in the organization's hierarchy minorities are present. (see e.g. Cox, 1993 or Krieger, 2007)) and perceived social acceptance of the racial in-group and therefore, the same organization will generally be described as more diverse by majority- than minority members. Minority members further focus on distinct minority groups where majority members tend to group minorities to an overall group e.g. «the minorities». For example, women may assess for female representation in the company's board and cultural minorities for representation of their cultural group, while white men may see a company as diverse, if it employs females or cultural minority members anywhere in the hierarchy («Why, we even have female employees at the entrance, right? They are the first you see!»). Put differently, perceivers interpret representation to best serve their in-group (Unzueta, Binning 2012). Beyond that, perceived diversity relates discriminatory experiences such that for example the "type of discrimination African Americans experience will prompt them to be more concerned about in-group representation in groups than Asian Americans." (Bauman et al. 2014, p. 1356). Diversity attitudes and assessments also have an individual component, where, for example, women who perceive themselves to be part of a minority construe organizational diversity more critical than those who do not (Strauss, 2007). These factors for different perceived diversity levels in mind, it does not surprise that another main difference between minority and majority group members lies in their response to pro-diversity signals.
Observation two: evaluations of pro-diversity signals differ

Ideally, diversity management achieves a culture that employees experience as fair irrespective of group membership (Ashikali, Groeneveld 2015) and generally, majority (white, male, etc.) group members support the ideas of diversity and equal opportunities (e.g. van Veelen et al. 2013; Avery et al. 2007). Nevertheless, perceptions of the value of diversity differ between majority and minority members, and minorities respond more positively to diversity signals (Tropp, Bianchi 2006; Madera et al. 2016). White men, even if indicating positive diversity beliefs, were shown to experience threat when applying for a pro-diversity company, they "displayed a cardiovascular profile characteristic of threat, made marginally poorer impressions during the interview, were more worried about personally experiencing discrimination, expected more discrimination against Whites, and expected less discrimination against minorities compared to those interviewing for a company that did not mention diversity." (Dover et al. 2016, p. 65). In that sense, diversity messages signaling minorities will be treated well in an organization may at the same time signal to majority employees that they will be treated more poorly (Dover et al. 2016; Kaiser et al. 2013), and accordingly, Whites show less support for further diversification (Binning, Unzueta 2013). Mollica (2003) could even show that in a layoff scenario in an active-diversity context, Whites would generally see a layoff as less fair to their group whereas non-Whites only perceived the layoff as fairer to their group, if white men were laid of disproportionately (Mollica 2003).

Minority members routinely experience discrimination, denial of privileges and exclusion in their work lives (Guerrero et al. 2013; Avery et al. 2007; Tropp, Bianchi 2006). As a result, they are

"much less optimistic about race relations than are Whites (USA Today/Gallup, 2008); they believe racism is more widespread, and these beliefs affect interracial encounters. For example, many racial minority group members are concerned about being treated disrespectfully and unjustly when interacting with Whites (Bergsieker, Shelton, & Richeson, 2010; Shelton & Richeson, 2006). These concerns, however, are mitigated by diversity. Higher levels of diversity are associated with more trust (Purdie-Vaughns et al., 2008), increased feelings of safety and social satisfaction (Juvonen, Nishina, & Graham, 2006), and heightened expectations that people can expect to be treated fairly and have the same opportunities as others in the organization (Colquitt, Noe, & Jackson, 2002). In sum, racial minority group members associate diversity with comfort and opportunity to succeed." (Bauman et al. 2014, p. 1355)

As a result, when perceiving the organizational climate as fair, non-white employees will have lower turnover intentions and higher organizational commitment (Guerrero et al. 2013; Buttner et al. 2010). Perceived fairness is then linked to diversity expectations as part of a psychological contract entered at employment (Avery et al. 2007; Buttner et al. 2010). In a different vein, Kaiser et. al (2013) recently showed that diversity structures can create an illusion of fairness, an interesting phenomenon that may further explain differences in minority and majority diversity perceptions. When diversity structures

6 Policies aimed at acknowledging and utilizing diversity in companies
were present in an organization, white men assumed women were treated more fairly despite concrete evidence they were discriminated against. If the company had a diversity training program, this would result in men expressing less support towards women and they would view minorities’ cases as less valid, giving the company the benefit of the doubt. "this [sic!] illusory sense of fairness derived from the mere presence of diversity structures causes high-status group members to legitimize the status quo by becoming less sensitive to discrimination" (Kaiser et al. 2013, pp. 504–505).

In summary, even though both minority and majority members generally value diversity, they respond differently to pro-diversity signals. This can partly be explained by a shared view that diversity management will change the status quo in favor of minorities. Even if minorities continue to be discriminated against, knowing about pro-diversity initiatives may foster an illusion of fairness and influence perceived justice.

4.4.1.3. Individual Characteristics/ Personality

Independent of context and experiences, a final individual factor contributing to individual diversity mindsets encompasses idiosyncratic aspects, like personality, belonging and distinctiveness motives, and values.

Personality

Traits theory assumes that people have a set personality with constant levels of the five personality factors openness to experience, conscientiousness, agreeableness, neuroticism, and extraversion, some of which correlate with diversity perceptions. Foremost, openness to experience strongly correlates with diversity beliefs (Homan et al. 2010). Additionally, high dissimilarity openness, a variable overlapping with openness to experience, causes people to perceive less diversity (Shrivastava, Gregory 2009). Finally, agreeableness mitigates conflicts which can result from diversity and therefore influence diversity experiences and beliefs (see also experience loops in chapter 4.7).

Belonging and distinctiveness motives, propensity to stereotype

Individual identity motives further influence diversity perceptions and attitudes. Propensity to stereotype, for example, has been shown to increase perceived diversity levels, since humans generally seek to group with similar others (homophilic tendencies) (Shrivastava, Gregory 2009). In a thorough paper, Ormiston discusses the identity motive need for belonging as opposed to a need for distinctiveness and argues that the intensity in which individuals feel each need drives their group behavior and diversity conceptualizations:

"individual differences in the degree to which members’ chronically need distinctiveness and belonging affect the point at which they feel optimally distinct in their group (point of equilibrium). When this equilibrium is not reached, members will alter how they perceive differences within the group to satisfy these motives. These perceptions of differences may or may not align with objective differences within the group; the alignment will depend on whether objective differences satisfy a member’s identity motives. As such, not only is the group’s composition subjectively experienced rather than objectively accounted for, but also members’ “accuracy” varies according to the extent to which their needs are met and balanced." (Ormiston 2016, p. 223)
This implies that different group members will perceive the same group differently depending on their needs. Another interesting implication is that diverse groups may perform worse because members’ need for belonging leads them to highlight commonalities instead of capitalizing on differences (i.e. striving for harmony as a perceived diversity situation). In a similar vein, if the dividing lines splitting a group in one or more subgroups (faultlines) were more pronounced, this was found to be more satisfying because individuals seek within-subgroup similarities and between-subgroup distinctions (Ormiston 2016; Lau, Murnighan 1998).

4.4.1.4. Diversity Beliefs

From the above it can be seen that some individuals find diversity more satisfying than others, holding different diversity beliefs (Ormiston 2016), and that these beliefs can vary between members of different social groups (Tropp, Bianchi 2006) and with different personalities (e.g. Homan et al. 2010). Diversity beliefs have repeatedly been pointed to as a moderator of the relationship between objective- and perceived diversity (e.g., Ely, Thomas 2001; Homan et al., 2007, 2008, 2010; McKay et al. 2008; van Knippenberg et al., 2007; Van Oudenhoven-van der Zee et al., 2008). A general definition of diversity beliefs was given by Homan et al. (2007, 2010): "Diversity beliefs can be defined as beliefs about the value of diversity for group functioning—the more people believe in the positive value of diversity, the more favourably they respond to their group’s diversity." (Homan et al. 2010, p. 478) This definition is also employed by later scholars (e.g. Hentschel et al. 2013; Ellwart et al. 2013), whereas Hentschel et. al further give an elegant distinction of diversity beliefs from related constructs like diversity perspectives and openness to diversity (for details see Hentschel et al. 2013). In their 2010 paper, Homan et al. further proposed operationalizing diversity beliefs in terms of the personality trait openness to experience (see also chapter 4.4.1.4 for personality factors, and Homan et al. 2010) but the literature included in this review did not yet include follow-up research on that operationalization.

Diversity beliefs were found to moderate the relationship between objective- and perceived diversity (Homan et al. 2010), the direct effect of objective diversity on team outcomes (Ellwart et al. 2013), and the effect of perceived diversity on various team outcomes, including team functioning, relationship conflict (Hentschel et al. 2013), and team identification (Hentschel et al. 2013; Ellwart et al. 2013). This may seem different to the position in the PDM (moderator between perceived diversity and outcomes and not between objective and perceived diversity). However, perceived diversity in the Homan paper only refers to perceived levels of diversity and not affective evaluation and I would argue with the PDM that diversity beliefs influence affective evaluations of perceived diversity which can look like a moderating effect on the relationship between diversity levels and outcomes but just accounts for affective evaluations.

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7 “the degree to which there is a dividing line that splits a group into subgroups based on one or more attributes” (Lau, Murnighan 1998, p. 328)
Considering the interaction of diversity beliefs and normative levels of diversity in organizations, it has been found that if e.g. recruiters believe in a low 'normal' level of diversity in their organization, they will assume minority candidates increase workgroup diversity and therefore, depending on their diversity beliefs, assume, that employing minority candidates will impede or benefit team functioning (Hofhuis et al. 2016).

In this chapter, the influences of experiences, group membership, personality and beliefs on individual diversity perceptions were discussed. In the PDM, all these factors are condensed in the variable individual diversity mindsets. Behind this lies the assumption that all factors together result in diversity attitudes and normative diversity levels. The resulting individual diversity mindsets are conceptualized as the level of diversity (in a specific category) assumed to be good for an organization or team. They give the mental framework for assessing diversity observations and in that sense, perceived diversity may be seen as a result of a person comparing perceived diversity mindsets. In concrete, if a person notices more diversity than he or she finds normal (normative diversity level), he or she will perceive a high diversity level (proposition 2a). Consequently, if the person holds a positive attitude towards higher diversity, he or she will evaluate the perceived diversity level as positive (proposition 2b).

Proposition 2: Individual diversity mindsets moderate the relationship between objective diversity and perceived diversity such that:

Proposition 2a: Objective diversity may result in higher perceived diversity when normative diversity levels are low and in lower perceived diversity when normative diversity levels are high.

Proposition 2b: High perceived diversity may result in positive evaluations when diversity attitudes are positive and in negative evaluations when diversity attitudes are negative.

4.4.2. Business-Level Policies

After elaborating on individual-level factors found to be contributing to diversity mindsets, this chapter will focus on contextual, business-level factors, and with that the second main moderator of the relationship between objective and perceived diversity. Two main fields of action in businesses that are influential for individual diversity perceptions are, firstly, the messages companies send to their employees in communicating a positive diversity climate, signaling openness to diversity and underscoring representation of minorities and, secondly, justice programs, including procedural (formal systems) and interactional justice (interpersonal behaviors).

4.4.2.1. Perception of Diversity Climate and Signaling

When assessing an organization's value in diversity, employees generally evaluate the firm's perceived diversity climate, generally understood as "openness and attitudes towards the group's internal diversity." (Lauring, Selmer 2011). Employee perceptions of an organization's fairness and social integration of underrepresented groups (Chen, Hamilton 2015; Mckay et al. 2009), include, in concrete, "perceptions of an organization’s diversity related policies, practices, and procedures" (Pugh et al., 2008, p. 1422; see also Guchait et al. 2016). A positive diversity climate is widely associated with
goodwill and organizational support (Avery et al. 2007), where all members are treated with respect and dignity and equal opportunities are provided (Guchait et al. 2016; Ashikali, Groeneveld 2015). Since both minority and majority members "associate diversity with an inclusive group environment" (Chen, Hamilton 2015, p. 591), valuing diversity can contribute to a supportive climate (Avery et al. 2007), raise awareness for diversity, reduce turnover intentions, and increase performance (Mckay et al. 2009).

The most general form of valuing diversity in organizations is by positive diversity messages. Such diversity emphasis is communicated in marketing and recruitment as part of a corporate identity: "Organizational diversity messages [...] are often designed to be non-controversial, positive, vague, and inclusive" (Dover et al. 2016, p. 58). In addition to mere text-messages, organizations can signal diversity by highlighting minority representation, for example through images on posters or by promoting programs supporting minorities and minority representation. In their diversity messages, companies are signaling a move away from homogeneity, promoting a business case for diversity (Edgley et al. 2016). Such messages signal fairness, respect and freedom from biases (Guchait et al. 2016), overall indicating that employees work for a good organization (Guerrero et al. 2013), and, correspondingly, a positive diversity climate has been found to strongly relate to employee commitment (Hicks-Clarke, Iles 2000; Hopkins et. al 2001; McKay et al., 2007, 2009).

More critical assessments of pro-diversity signals showed that such signals may face backlash when they threaten majority employees (Guerrero et al. 2013), and warned companies to be careful in exploiting benefits of mere signals and "put their money where their mouth is" instead (Jansen et al. 2016, p. 90). One paper even concluded that, rather than actually shifting opportunities, "diversity has been institutionalized through its attachment to traditional, commercial, professional discourses and motifs. These discourses do little to indicate a rupture in the power of firm hegemony." (Edgley et al. 2016). Instead, diversity is in some cases understood so broadly that it deems any organization diverse, paradoxically supporting existing structures by supporting dominant norms, values, and understandings of hierarchical and organizational fit with drawbacks for underprivileged groups (Edgley et al. 2016). Such fairness evaluations are the basis for organizational justice programs.

4.4.2.2. Justice

Diversity perception has repeatedly been linked to perceptions of justice. Thus, perceptions of justice are the second main antecedent of perceptions of business-level diversity policies. Organizational justice generally encompasses procedural justice, "the general fairness of organizational policies, practices, and reward and evaluation systems" (Buttnet et al. 2010, pp. 240–241), and interactional justice, "the interpersonal treatment of others" (Buttnet et al. 2010, pp. 240–241). Justice, therefore, indicates not only the extent to which employees feel treated fairly by the organization they work in, but also structural and integrative dimensions (Guerrero et al. 2013; Buttnet et al. 2010). Fairness perceptions influence job satisfaction (e.g. Madera et al. 2016), perceived or-
ganizational support (Leveson et al. 2009; Ashikali, Groeneveld 2015), affective commitment (e.g. Ashikali, Groeneveld 2015; Buttner et al. 2010), and organizational citizenship behavior (e.g. Mollica 2003). As discussed above, individuals bring different experiences to the organization, respectively holding different expectations of fairness. In an ideal case, all employees would feel treated with dignity, equally and fairly (Buttner et al. 2010; Guchait et al. 2016). Due to diverging understandings of fairness, achieving such a situation remains challenging.

**Procedural justice: Possible approaches/ representation**

As mentioned above (chapter 4.4.1.2), in-group representation throughout the organization is one main indicator for organizational justice perceptions. In diversity management, there are two main approaches with respect to equal opportunities; the *colorblind* approach and the *multicultural* approach. Both aim at ensuring (demographically) just recruitment and promotions. Such approaches already give a frame of reference to employees to assess organizational justice, organizational support and the extent to which their groups are included (Leveson et al. 2009; Jansen et al. 2016). In a colorblind approach "people should be treated equally as individuals and group differences should be ignored when making decisions such as hiring new employees or promoting sitting organizational members." (Jansen et al. 2016, p. 83). In practice, this can for example mean that neither names nor pictures are allowed on job applications. The approach bears the risk of ignoring exclusive organizational norms and values which make majority members more apt to the organization (Jansen et al. 2016). In a multicultural approach, on the other hand, "the benefits of diversity are emphasized and [...] differences between cultural groups are seen as a source of strength to the organization" (Jansen et al. 2016, p.83, see also Guerrero et al. 2013). While this approach is favored by minority members, majority members can perceive it as for minorities only (Jansen et al. 2016), it is hence important for pro-diversity approaches to ensure representation in a way that can be perceived as fair by minority- as well as majority employees and where all employees feel valued in their unique contributions. Such validation can be communicated by competent supervisors, whose sociodemographic situation can further influence employees' perception of representation (Hentschel et al. 2013).

**Interactional justice: Supervision**

Interactional justice refers to employees' perceptions of how they are treated by their organization as represented by their supervisors in day-to-day work life (Buttner et al. 2010). Not surprisingly, given the above elaborations on representation, demographically similar supervisors are perceived as more supportive, while dissimilar bosses are associated with less support (Avery et al. 2007). Indeed, "having a demographically similar supervisor corresponds to subordinates receiving more favorable responses and treatment [e.g., Tsui &O’Reilly, 1989; Wesolowski & Mossholder, 1997]. More pertinently, same-race supervisors often provide more support to their subordinates (Foley, Linnehan, Greenhaus, & Weer, 2006; Jeanquart-Barone, 1996; Winfield & Rushing,
2005)” (Avery et al. 2007, pp. 879–880). Additionally, perceived attitudinal supervisor-subordinate similarity has been found to relate to employee satisfaction, performance and pay ratings (Hentschel et al. 2013). Furthermore, with respect to the broader organizational setting, minority employees could feel represented in their interests at higher levels by minority leaders. One risk associated with such expectations is that of elevated vulnerability to disappointment, such that negative evaluations of similar supervisors and other detrimental responses (like absenteeism) will be exaggerated (Avery et al. 2007).

In summary, signaling efforts in companies and as well as procedural and interactional justice programs contribute to the diversity context employees experience and that are influential for employee diversity perceptions such that employees will perceive diversity more favorably in a fair pro-diversity climate (proposition 3).

**Proposition 3: Business-level diversity policies moderate the relationship between objective and perceived diversity such that objective diversity is perceived more positively in a positive and fair diversity culture.**

### 4.5. Diversity Outcomes (Team Level and Individual Level)

Most of the explanatory effort made in perceived diversity literature seems to center around establishing perceived diversity as a mediating variable and discussing how it is distinct from objective diversity and which are moderating factors influencing the relationship between objective and perceived diversity. Once the concept is established, the outcome side seems straightforward. Impacts discussed in perceived diversity literature are similar to those in classic diversity literature and will be briefly introduced in this section. Most perceived diversity literature focuses on diversity outcomes as performance indicators on a team-level, while on a company level, perceived diversity seems to impact business performance through diversity outcomes. In the PDM, the way individual team members respond to their diversity perceptions is summarized as diversity outcomes, which then influence performance. Diversity outcomes include **conflict and communication, learning and creativity and job satisfaction and commitment**:

#### 4.5.1. Conflict and Communication

Generally, perceived similarity leads to cohesion and social attraction (Hentschel et al. 2013), and increased perceived diversity is associated with tensions, cognitive conflicts and relationship conflicts (Çelik et al. 2016; Hentschel et al. 2013):

“Growing diversity within workgroups may result in conflict. Recently, Huttermann et al. (2015) found that informational and value diversity were positively related to cognitive conflict and that informational, social and value diversity were all related to affective conflict. Similarly, Jehn et al. (1999) found that perceived diversity was positively correlated with cognitive conflict (Jehn and Mannix, 2001). Likewise, in a recent study by Hentschel et al. (2013), perceived team diversity and affective conflict are positively related” (Medina 2016)

While cognitive conflict is found to raise team satisfaction as it can help challenge routines and boost creative thinking and complex solutions, affective conflict is detrimental (Çelik et al. 2016; Medina 2016) but can be ameliorated by open communication, em-
employees' positive diversity beliefs and a positive diversity climate where knowledge exchange is encouraged (Ellwart et al. 2013; Hofhuis et al. 2016; Leveson et al. 2009).

4.5.2. Learning and Creativity
As discussed in the preceding section, perceived team diversity can inhibit knowledge exchange and thereby team learning through reduced identification and more affective conflicts. On the other hand, challenging established concepts can unleash creative learning potential (Çelik et al. 2016; Hofhuis et al. 2016), and enable cognitive growth by furthering fluency and uniqueness of ideas (Çelik et al. 2016). This may help explaining findings linking diversity to enhanced creativity (Jansen et al. 2016); if “creativity [sic!] is defined as the ability to usefully connect distant and seemingly unrelated and incompatible concepts” (Çelik et al. 2016), it becomes intuitive how enhanced experience in cognitive conflict furthers employee creativity. In addition to the learning benefits of being challenged by team diversity (Çelik et al. 2016), diversity adds task-relevant resources, like unique skills and experiences (Hofhuis et al. 2016; Hentschel et al. 2013) and, as a result, a positive diversity climate has been found to enhance innovation (Luijters et al. 2008; Guchait et al. 2016), taking a decisive role in firm's competitiveness (Hofhuis et al. 2016).

4.5.3. Job Satisfaction and Commitment
Job satisfaction closely relates to employee commitment and turnover intentions, all of which can be advanced by a favorable diversity climate (Leveson et al. 2009; Guchait et al. 2016; Madera et al. 2016; Lauring, Selmer 2011). Job satisfaction is raised by perceived inclusion and identification with the team (Jansen et al. 2016; Hentschel et al. 2013; Luijters et al. 2008), as well as low affective conflict (Medina 2016), and high perceived attitudinal similarity (Hentschel et al. 2013). Especially concerning perceived similarity and diversity, different individual concepts of diversity can lead to harmful employee responses and impede commitment (Chen, Hamilton 2015). Employee commitment can be supported by diversity management (Ashikali, Groeneveld 2015; Leveson et al. 2009), and perceived fairness (Mollica 2003).

In summary, perceived diversity can influence conflict and communication, learning and creativity and job satisfaction and commitment, with positive diversity perceptions generally leading to beneficial outcomes and negative diversity perceptions leading to detrimental outcomes. This relationship is moderated by external factors as will be elaborated in the following chapter.

4.6. MODERATORS OF THE RELATIONSHIP BETWEEN PERCEIVED DIVERSITY AND DIVERSITY OUTCOMES
Since the concept of perceived diversity is still emerging, there is little consistent research on factors moderating the relationship between perceived diversity and diversity outcomes. Most prominently, the moderators team microclimate and task related factors are introduced in the following as influential on the relationship between perceived diversity and diversity outcomes.
4.6.1. Microclimate

One relatively well researched moderator of the relationship between perceived diversity and diversity outcomes is team microclimate (Garcia 2016). A positive team climate can extenuate stereotypes (Garcia 2016) and leverage inclusion and support (Lauring, Selmer 2011). Team design and affect as well as perceived isolation and identification are antecedents of a diversity-positive microclimate.

Team design and affect

Team design aspects were found to affect the extent to which team members focus on differences and identify with the team. For example, pro-diversity practices have been found to enhance perceived insider status (Guerrero et al. 2013). Encouraging open communication and cooperation supports team spirit and inclusion (Ormiston 2016), and lessens subgroup perceptions (Hentschel et al. 2013), which have been linked to negative diversity perceptions (van Veelen et al. 2013). Pro-diversity practices were found most influential in teams with a good relationship to the supervisor, such that the relationship with the leader moderates the relationship between pro diversity practices and perceived insider status (Guerrero et al. 2013). This poses important skill requirements for leaders, including to "lead, intervene and shape the formation of social identities in a workgroup" (Wolff et al. 2010, p. 967). One important factor for diversity microclimate is group affective tone. Teams with positive affect have been found to be more inclusive with less conflicts (Hentschel et al. 2013).

Isolation and identification

Nominal inclusion does not necessitate perceived insider status (Guerrero et al. 2013), thus other factors influence in how far team members feel integrated. A major influence on integration, team climate and satisfaction, is identification with the team (Hentschel et al. 2013), boosted by shared characteristics and perceived similarities. Recent findings indicate, however, that a shared characteristic can also be diversity (Rink, 2005; Van Knippenberg, Haslam 2003; Waldzus et al. 2003, Luijters et al. 2008). Identification levels are higher, when diversity is perceived as a group norm (Luijters et al. 2008). Accordingly, it has been suggested, that teams valuing diversity could capitalize on their diversity better, because they understood it more in terms of individual differences than in terms of subgroups (Homan et al. 2010; Lauring, Selmer 2011; van Veelen et al. 2013).

In conclusion, team design and affect and team identification predict team microclimate. In a positive microclimate, more positive outcomes of perceived diversity are likely (proposition 4):

Proposition 4: Team microclimate moderates the relationship between perceived diversity and diversity outcomes such that perceived diversity results in beneficial diversity outcomes in a pro-diversity climate.
4.6.2. Task related Factors

Task related factors are the second most salient moderator of the relationship between diversity perceptions and outcomes. In the CEM, they include task requirements, task motivation and task ability. In the PDM and the literature under review in this paper, they include task-relevant resources, task complexity and required collaboration. Diversity can lead to a greater pool of task-relevant resources especially for intellectual group tasks and therefore may boost creativity and problem solving, all of which can be supported by positive diversity beliefs (Ellwart et al. 2013; Homan et al. 2010). Scholars repeatedly pointed to task requirements as an influential factor for diversity outcomes as especially in highly interdependent groups, where collaboration is required, team members may capitalize on their differences (e.g. Hentschel et al. 2013; Ellwart et al. 2013; Homan et al. 2010). Homan (2010) concluded that

"Diversity [sic!] has been proposed to be more valuable for more complex, knowledge-intensive tasks than for simpler, more routine tasks (van Knippenberg & Schippers, 2007). [...] Our findings support this reasoning by showing that diversity beliefs have a lesser impact on perceptions of subgroups versus individual differences during physical tasks than during intellectual tasks" (Homan 2010, pp. 477-489).

As mentioned in the foregoing section, cognitive conflicts were generally found to be satisfying, resulting in beneficial outcomes. This also and especially includes task-related conflicts which were experienced as satisfying, inspiring and enriching (Medina 2016; Ellwart et al. 2013). In conclusion, diversity can be especially beneficial when it can be translated into knowledge diversity and exploited through collaboration, both being more relevant in knowledge-intensive, complex tasks (proposition 5):

*Proposition 5: Task related factors moderate the relationship between perceived diversity and diversity outcomes such that perceived diversity may result in beneficial diversity outcomes when task complexity and collaboration are high.*

Concluding, two main moderators were found to influence the impact of diversity perceptions on team-level outcomes. These outcomes can further be influential for individual diversity mindsets and team microclimate as will be shown next.

4.7. Effects of Diversity Perceptions over Time: Experience Loops

Time as a factor for diversity perceptions has repeatedly been called for for future research (Ormiston 2016). Thus far for example, Harrison et. al (2002) found individual diversity perceptions to change over time, so that surface-level diversity factors fade, and deep-level factors gain salience (see also Homan et al. 2010). In the PDM, the timeliness of diversity perceptions is accounted for in two important ways: firstly, the relationships in the PDM are all process relationships, such that objective diversity results in diversity perceptions, which in turn results in diversity outcomes, leading to performance effects. Secondly, timeliness is accounted for by the assumed experience loops. As elaborated in the relating chapters, individual factors and team microclimate both are also based on previous experiences. In the PDM, diversity outcomes are understood as such an experience and thus influence microclimate and individual factors. Since
both variables are mediating central relationships in the PDM, this leads to experience loops. In practice, for example, an individual may be suspicious of working in a diverse group and retreat at first but then make such good experiences, that he or she starts appreciating the diversity in the team and identifies more strongly with the work (propositions 6 and 7).

**Proposition 6:** *Diversity experiences in the workplace influence team microclimate such that more positive diversity experiences result in a more beneficial diversity climate.*

**Proposition 7:** *Diversity experiences in the workplace influence individual diversity mindsets such that more positive diversity experiences result in higher normative diversity levels and more positive diversity attitudes.*

With these experience loops, most of the model was introduced, all relevant theory has been discussed and all that remains to illuminate is the role of performance indicators:

### 4.8. Performance

Research measuring objective diversity seems to more often discuss company-level performance indicators, for example new product development, generated profit or growth rate (Williams, O'Reilly 1998; see also e.g. Chatman et al. 1998; Hart, Van Vugt 2006 or Harrison, Klein 2007), while perceived diversity research seems to focus more on team- and individual level outcomes, like conflict and communication, learning and creativity and job satisfaction and commitment (chapter 4.5, see also Hentschel et al. 2013; Ellwart et al. 2013) only referring to a company-level diversity-performance link when discussing objective diversity. Scholars then hint to the impact of team- and individual level outcomes on company performance, sometimes even without further defining performance, as can be seen in the following three quotes: “Identification has been described as a key factor for a team’s success (van der Vegt, van de Vliert, & Oosterhof, 2003) and has been associated with greater work motivation and better performance (van Knippenberg, 2000).” (Hentschel et al. 2013, p. 36), “previous research found evidence that in teams consisting of team members who report high diversity beliefs, objective diversity positively influences team processes like information exchange and team performance outcomes (Homan et al., 2007a; van Dick et al., 2008).” (Ellwart et al., p. 953), “In another study, employee perceptions of diversity at the senior management and nonmanager levels were strongly related to overall performance (Allen, Dawson, Wheatley, & White, 2008).” (Hentschel et al. 2013, p. 35). In conclusion, most perceived diversity research does not define performance well, and it may be an important task in future research to specify the types of performance scholars refer to in passages like the ones that have been quoted above. What also becomes clear is scholars consistently describe performance impacts as a result of diversity outcomes and therefore, in the PDM, diversity outcomes are construed as a mediator between perceived diversity and performance (proposition 8):

**Proposition 8:** *Diversity outcomes fully mediate the relationship between perceived diversity and performance.*
5. IMPLICATIONS FOR PRACTICE: POINTS OF ATTACK FOR DIVERSITY MANAGEMENT

As diversity increases, companies are struggling to manage diversity. This study holds implications for practice that may support employees and managers in facing (growing) demographic- and deep-level diversity. Overall, the PDM may help in explaining diversity responses and pinpoint what causes an effect. More specifically, a first major proposition is that perceived diversity more accurately accounts for diversity impacts than objective diversity. Understanding the subjectivity of diversity situations may protect practitioners from normative assumptions on ideal diversity levels and help understand that such assumptions vary among employees. Team members may perceive an entirely different diversity situation to team leaders and respond differently on an emotional level. Knowing the PDM may raise awareness for contingent factors for diversity perceptions outside the influence of team members or leaders, like individual diversity mindsets and business level factors. To understand the perceived (affective) diversity situation of each team member can be crucial in managing a team, retaining employees and supporting optimal diversity outcomes, which can be further supported by fostering a pro-diversity inclusive team microclimate and being sensitive to the complexity and amount of collaboration required for a task. Finally, the PDM shows that the entire process of diversity perception and impact can be influenced through experience loops by supporting positive new diversity experiences. This way, team leaders and company policies may result in an upward spiral of positive diversity experiences, more positive outcomes, and higher identification and commitment.

6. IMPLICATIONS FOR THEORY AND AGENDA FOR FUTURE RESEARCH

This study makes several theoretical contributions. It is, to the best of my knowledge, the first rigorous systematic review of the emerging concept perceived diversity, thus yielding slightly different results to existing, more narrative approaches. Beyond that, the PDM is the first attempt at deriving a testable, conceptual multilevel model for the process of social diversity perception and response in the workplace. Therein, the PDM is, to the best of my knowledge, the first to integrate idiosyncratic information like mindsets, need for belonging and temporal dynamics and, on the other hand, business level factors like microclimate and justice programs. Finally, the theoretical main part of this paper integrates the emerging construct perceived diversity with existing theory.

The first main contribution of this research is that it helps clarify the relationship between objective and perceived diversity (Propositions 1 and 2). Proposition 1a concludes there is a relationship between objective and perceived diversity, where diversity perceptions are based on objective diversity and proposition 1b further specifies the role of perceived diversity as a mediator of objective diversity and performance indicators. Even though these propositions are most basic, and strongly backed up by literature, future discourse and hypothesis testing will need to show if they can be confirmed. Especially the fairly radical full mediation should be critically tested. If proposi-
tions 1a and b can be confirmed, this basic structure of the model lays the ground for explaining the impact of social diversity from a perceived diversity perspective.

**Proposition 1a:** Perceived diversity is theoretically distinct from objective diversity such that diversity perceptions are based on objective diversity.

**Proposition 1b:** Perceived diversity fully mediates the relationship between objective diversity and performance.

The second main contribution of this paper is to make perceived diversity tangible as an individual-level variable. It was shown that diversity perceptions are not neutral and not necessarily bound to a specific category but instead, perceived diversity is composed of perceived diversity level and affective diversity evaluation (proposition 1c). Quantitatively testing the theoretical fit of this concept of perceived diversity, for example with a factor analysis, is possible after fully operationalizing the measures.

**Proposition 1c:** Perceived diversity as a variable is a multidimensional measure composed of perceived diversity level and diversity evaluation.

The relationship between objective and perceived diversity is moderated by individual diversity mindsets (propositions 2, 2a and 2b) and business level policies (proposition 3). Individual diversity mindsets as a variable were derived from discussing several individual factors influencing diversity perceptions. They are conceptualized as a combination of normative diversity levels and attitudes towards (higher) diversity levels (propositions 2, 2a, b and figures 4, 5):

**Proposition 2:** Individual diversity mindsets moderate the relationship between objective diversity and perceived diversity such that:

**Proposition 2a:** Objective diversity may result in higher perceived diversity when normative diversity levels are low and in lower perceived diversity when normative diversity levels are high.

![Figure 4](image_url)  
Figure 4 Relationship between objective diversity and perceived diversity levels moderated by normative diversity levels moderate perceived diversity levels (proposition 2a)

**Proposition 2a:** Objective diversity may result in higher perceived diversity when normative diversity levels are low and in lower perceived diversity when normative diversity levels are high.
Proposition 2b: High perceived diversity may result in positive evaluations when diversity attitudes are positive and in negative evaluations when diversity attitudes are negative.

More research is needed to operationalize individual diversity mindsets. Especially the interaction between normative diversity levels and diversity attitudes will need further evaluation. Qualitative approaches, for example with narrative interviews, may help to reassess the interactions of different influential factors in mindset generation and, where appropriate, develop the model further. Normative diversity levels can be assessed by asking employees to judge the diversity levels in their organization as high or low and comparing results to numeric measures. Using questionnaires for hypothesis testing may yield interesting results supporting or rejecting propositions 2, 2a and 2b.

A strength of the PDM is that it includes business-level factors beyond those in other models (like the CEM). Propositions 3, 4 and 5 address the three business-level moderators included in the model. Studies comparing teams within a company and across companies may help test these propositions (figures 6, 7, 8).

**Figure 5** Relationship between objective diversity and diversity evaluations moderated by normative diversity levels (proposition 2b)

**Proposition 3:** Business-level diversity policies moderate the relationship between objective and perceived diversity such that objective diversity is perceived more positively in a positive and fair diversity culture.
Proposition 4: Team microclimate moderates the relationship between perceived diversity and diversity outcomes such that perceived diversity results in beneficial diversity outcomes in a pro-diversity climate.

Proposition 5: Task related factors moderate the relationship between perceived diversity and diversity outcomes such that perceived diversity may result in beneficial diversity outcomes when task complexity and collaboration are high.

A third main contribution of the PDM is that it addresses the gap in explaining the timeliness of diversity perceptions (e.g. Ormiston 2016). Timeliness is accounted for firstly by designing a process model and, more importantly, by introducing experience loops (propositions 6, 7 and figures 9, 10). Besides the practical implications of feedback loops discussed above, they give the theoretical model its high adaptability and situational fit, both highly relevant in rapidly changing societies and markets. The PDM can ideally account for shifting and changing diversity situations. Longitudinal research will help to test long-term effects on diversity perceptions and experiments may help to test short-term influences. Further qualitative research (e.g. a grounded theory approach) may help to gain in-depth information on the evolution of diversity mindsets and quantitative research may help to test the model's theoretical fit. Longitudinal mixed method research designs may finally allow for a deep-dive into the effects of time on diversity.
Proposition 6: Diversity experiences in the workplace influence team microclimate such that more positive diversity experiences result in a more beneficial diversity climate.

Proposition 7: Diversity experiences in the workplace influence individual diversity mindsets such that more positive diversity experiences result in higher normative diversity levels and more positive diversity attitudes.

Finally, the impacts of perceived diversity were discussed. Perceived diversity leads to diversity outcomes which in turn influence performance indicators (proposition 8). As mentioned in chapter 4.8, future research will need to specify which performance indicators can be included in perceived diversity models.

Proposition 8: Diversity outcomes fully mediate the relationship between perceived diversity and performance.

7. LIMITATIONS

As with every study, this paper has limitations. The biggest limitation may be single source bias. A team may have had more resources to critically assess the theory. This bias was mitigated as much as possible by adhering to a strictly systematic methodology and engaging in punctual academic exchange. Publication bias may have resulted in skewed results as bigger and more positive results and studies are more likely to be published. This may be especially harmful in an emerging body of research. Further research will need to test the proposed weighing of the variables and relationships. Finally, the PDM is an abstraction and mostly following abstractions, generalizations and the operationalizations in the studies under review. Some of those generalizations may be
misleading or insufficiently tested. This limitation seems inherent to studying an emerging concept. Again, further research is necessary to test the concepts and implications. Finally, narrowing the topic down to a central body of literature utilizing a specific terminology may have led to omitting relevant research. Yet, high quality (A-level) authors were trusted to sufficiently place the term in context.

8. CONCLUSION

This study aimed at grasping the state of the art of the emerging concept perceived diversity. Research on the topic, related theory and antecedents of perceived diversity were aggregated in one conceptual model and eight propositions. The research consisted of three phases, one preparatory mapping phase, one systematic review phase and one final integration and discussion phase. All phases contributed to developing the PDM, PADMa, propositions and opportunities for future research. The result is a comprehensive discussion on the current concept of perceived diversity and concepts relating to perceived diversity.
9. REFERENCES


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10. APPENDIX

10.1. TABLES

Table 1 Selection criteria

<table>
<thead>
<tr>
<th>Inclusion criteria:</th>
<th>Exclusion criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language:</strong> English, German or French</td>
<td><strong>Contains:</strong> organizational diversity, non-human subject of diversity perception (e.g. biological diversity)</td>
</tr>
<tr>
<td><strong>Proximity:</strong> Maximum of 2 words between perceived/perception and diversity</td>
<td><strong>Use of the terms:</strong> arbitrary/accidental use of both terms in high proximity</td>
</tr>
<tr>
<td><strong>Areas of research:</strong> business, economics, management, psychology, sociology</td>
<td></td>
</tr>
<tr>
<td><strong>Contains:</strong> diversity in the workplace OR diversity in organizations AND diversity management OR team diversity AND gender diversity OR racial diversity OR cultural diversity OR social diversity AND diversity theory OR objective diversity</td>
<td></td>
</tr>
<tr>
<td><strong>Use of terms:</strong> the use of ‘perceived’ or ‘perception’ refers to diversity (as opposed to arbitrary/accidental use)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 Quality assessment criteria

| 1. Peer reviewed journals (1/0 – criterion) | 6. Macrostructure style and tone |
| 2. Theory present | 7. Professional tone |
| 3. Concept and operationalization in alignment | 8. Adequate research design |
| 4. Sufficient definition – theory | 9. Relevant to the field |
| 5. Sufficient rationale – design | 10. Methodology as a means to an end |
| 11. Conclusions in alignment | |

Table 3 Concept matrix

<table>
<thead>
<tr>
<th>Conceptual antecedents/emergence</th>
<th>Concept/ Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antecedents of perceived diversity</strong></td>
<td>“What is perceived diversity?”</td>
</tr>
<tr>
<td><strong>Referrals between literature, i.e. how is literature building on each other?</strong></td>
<td><strong>Characteristics of perception/diversity</strong></td>
</tr>
<tr>
<td><strong>Determinants and Coherent/disparate understandings</strong></td>
<td><strong>Results</strong></td>
</tr>
<tr>
<td><strong>What are core findings/contributions?”</strong></td>
<td><strong>Which are advantages and shortcomings of the concept?”</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition/relevance</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relation to other (diversity) constructs</strong></td>
<td>“Which are core findings/contributions?”</td>
</tr>
<tr>
<td><strong>Motivation/legitimation for use</strong></td>
<td>Discussion</td>
</tr>
<tr>
<td><strong>Motivation/legitimation for use</strong></td>
<td>“Which are advantages and shortcomings of the concept?”</td>
</tr>
</tbody>
</table>

10.2. FIGURES

8 Boolean operators
**Figure 11** Number of publications since 1963 (September 2016)

**Figure 12** Preliminary mapping of diversity-performance link

**Figure 13** The CEM (Van Knippenberg et al. 2004)
10.3. List of Initial Body


29 Ormiston, M. E. (2016). Explaining the link between objective and perceived differences in groups: The role of the belonging and distinctiveness motives. *Journal of applied psychology, 101*(2), 222.


