Fitting in or standing out from a crowd?

How optimal distinctiveness affects workplace behaviours

By:

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Abstract

Why do people step out of line and do things differently rather than fit in and conform? This PhD investigated the question under which circumstances people are engaging in deviant or norm-congruent behaviours at the workplace. Providing a new theoretical framework, I apply optimal distinctiveness theory (ODT; Brewer, 1991) and argue that, by being comfortably similar and different to others, people can achieve optimal distinctiveness and thus satisfy their needs for uniqueness and belongingness at the workplace. However, what happens when people feel sub-optimally distinct, i.e. not as similar or different as desired? This research is focussing on two specific types of sub-optimal distinctiveness: people feeling too similar or too different. In this thesis, I outline seven potential strategies that employees can then use at the workplace to re-establish a sense of optimal distinctiveness. I tested one particular strategy arguing that employees can behave in certain ways to assimilate (increase similarities) or differentiate (increase differences) themselves. Specifically, I hypothesised that, if people feel too similar to others, they will be motivated to differentiate themselves by engaging in deviant behaviours to satisfy their need for uniqueness. On the other hand, if people feel too different from others, they will be motivated to assimilate themselves by engaging in norm-congruent behaviours to satisfy their need for belongingness. I conducted three experiments and a two-wave online study with working participants with a total sample of N = 657 participants to test my theoretical model. The findings generally did not support my hypotheses, however, the analysis indicated that the need for uniqueness might be an important factor to consider for both employees and organisations. Moreover, this research is one of the first to apply ODT to the workplace and thus advances the theory in several ways. The theoretical and practical implications of the results are discussed.

Keywords:

Deviant behaviour, constructive, destructive, norm-congruent behaviour, optimal distinctiveness theory, uniqueness, belongingness, needs, conformity, organisational citizenship behaviour
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# Table of Contents

1. Thesis Overview / Introduction ................................................................. 9
   1.1. Contributions ....................................................................................... 12
   1.2. Overview of chapters ......................................................................... 15
2. Optimal Distinctiveness Theory as the basis for social behaviour .......... 17
   2.1. What is optimal distinctiveness? ......................................................... 17
   2.2. Three principles of Optimal Distinctiveness ................................... 19
   2.3. Why is optimal distinctiveness important? ....................................... 21
      2.3.1. Sense of identity .......................................................................... 22
      2.3.2. Satisfaction of uniqueness and belongingness needs ................... 22
   2.4. Outcomes of being optimally distinct .............................................. 23
   2.5. How to be optimally distinct at the workplace ................................. 29
      2.5.1. Cognitive strategies of regaining optimal distinctiveness .......... 33
      2.5.2. Behavioural strategies of regaining optimal distinctiveness ..... 37
      2.5.3. Summary of strategies ................................................................. 41
3. Norm-(in)congruent behaviour at the workplace as a strategy to achieve optimal distinctiveness ................................................................. 43
   3.1. What is norm-oriented behaviour? ..................................................... 44
   3.2. Differentiation through deviant behaviour ........................................ 45
   3.3. Assimilation through norm-congruent behaviour ............................... 52
   3.4. Mediating effect of needs ................................................................. 53
      3.4.1. Need for uniqueness and deviant behaviour .............................. 55
      3.4.2. Need to belong and conforming behaviour ................................. 57
   3.5. Moderating effects ............................................................................ 60
      3.5.1. Autonomy .................................................................................. 61
      3.5.2. Organisational Commitment ..................................................... 63
4. Research Design and Methods ................................................................. 67
   4.1. Philosophical Assumptions ................................................................. 67
   4.2. Empirical strategy / Overview of studies .......................................... 68
5. Experiments .............................................................................................. 72
   5.1. Experiment 1 ..................................................................................... 74
      5.1.1. Sample ....................................................................................... 74
      5.1.2. Procedure .................................................................................. 74
      5.1.3. Measures ................................................................................... 78
      5.1.4. Results....................................................................................... 83
5.1.5. Summary / Discussion ............................................................... 87

5.2. Experiment 2 – vignette study .................................................... 89
  5.2.1. Sample .................................................................................. 90
  5.2.2. Procedure ............................................................................ 90
  5.2.3. Measures ............................................................................ 91
  5.2.4. Results ............................................................................... 91
  5.2.4. Summary / Discussion .......................................................... 96

5.3. General Discussion of Experiments ............................................ 98

5.4. Conclusion / Moving forward .................................................... 105

6. Online Survey with Working Participants ..................................... 107
  6.1. Sample ................................................................................... 109
  6.2. Procedure .............................................................................. 111
  6.3. Measures .............................................................................. 112
  6.4. Results ................................................................................. 127
  6.5. Summary / Discussion ............................................................... 152

7. General Discussion ....................................................................... 161
  7.1. Implications ........................................................................... 162
    7.1.1. Optimal Distinctiveness Theory ......................................... 162
    7.1.2. Uniqueness theory ............................................................ 167
    7.1.3. Belongingness theory ....................................................... 169
    7.1.4. Practical Implications ....................................................... 170
  7.2. Limitations ............................................................................ 174
  7.3. Future Research ..................................................................... 178
  7.4. Conclusion ............................................................................ 183

8. References ................................................................................... 185

9. Appendices .................................................................................. 206
  Appendix A: Online-Questionnaire for the first three experiments .... 206
  Appendix B1: Pre-Screening Survey for the Online Study ............. 214
  Appendix B2: Online-Questionnaire for Online Study .................. 216
List of tables

Table 1: Overview of strategies and their sources if taken from previous reviews ........ 32
Table 2: List of items for each of the two components of deviant behaviours (and the
original source of the item) .................................................................................. 80
Table 3: List of items for the shortened scale of conforming behaviour (and the original source of the item) .................................................................................. 82
Table 4: Means (M), standard deviations (SD) and correlations of Experiment 1 (N = 265) .................................................................................. 84
Table 5: Experiment 1. Sample sizes, Means, Standard Deviations of the DV’s depending on the experimental technique and condition ....................................... 87
Table 6: Means, standard deviations and correlations of Experiment 2 (N = 230) .... 94
Table 7: Experiment 2. Means, Standard Deviations and F-Tests for the effect of the uniqueness and belongingness condition on the DV’s as well as the interaction effect (uniqueness*belongingness) ........................................................................... 95
Table 8: Frequencies of Actual Similarity (AcSi) levels over, under, and in-balance with Desired Similarity (DeSi) levels (N = 202) at T1 ...................................... 114
Table 9: Frequencies of Actual Difference (AcDi) levels over, under, and in-balance with Desired Difference (DeDi) levels (N = 202) at T1 ...................................... 114
Table 10: Organisational Destructive Deviance items and its two subscales .............. 118
Table 11: Interpersonal Constructive Deviance items and its two subscales .......... 119
Table 12: Correlation table including the mean and standard deviations (N = 202) ..... 124
Table 13: Correlation table including the mean and standard deviations for the subsample of people feeling too similar (n = 155) ...................................................... 125
Table 14: Correlation table including the mean and standard deviations for the subsample of people feeling too different (n = 149) ...................................................... 126
Table 15: Results of tests for measurement bias (N = 202). Mediating and moderating
variables at T1 and dependent variables at T2 ...................................................... 128
Table 16: Effect of feeling too similar on deviant behaviour and feeling too different on norm-congruent behaviour ................................................................. 132
Table 17: Hierarchical polynomial regression with Actual and Desired Similarity and
deviant behaviour (N = 202) .................................................................................. 137
Table 18: Hierarchical polynomial regression with Actual and Desired Difference and norm-congruent behaviour (N = 202) ................................................................. 138
Table 19: Effect of feeling too similar on the need for uniqueness and feeling too
different on the needs for uniqueness and belongingness .................................... 140
Table 20: Hierarchical polynomial regression with Actual and Desired Similarity and
the need for uniqueness (N = 202) ....................................................................... 141
Table 21: Hierarchical polynomial regression with Actual and Desired Difference and both needs (N = 202) ................................................................. 141
Table 22: Effects of uniqueness on deviant behaviour and belongingness on norm-congruent behaviour WITH respective subsamples ............................................ 145
Table 23: Effects of uniqueness on deviant behaviour and belongingness on norm-congruent behaviour WITH whole sample (N = 202) ...................................................... 147
Table 24: Sample sizes, Means, Standard Deviations and t-tests for the effect of differences in feelings of similarity on the DV’s ...................................................... 151
Table 25: Sample sizes, Means, Standard Deviations and t-tests for the effect of differences in feelings of difference on the DV's .......................................................... 152

List of figures

Figure 1. Conceptual model of this PhD ................................................................. 66
Figure 2. Response Surface for Polynomial Regression of Actual and Desired Similarity onto the need for uniqueness (N = 200) .............................................................................. 143
1. Thesis Overview / Introduction

*Everyone was introducing themselves, stating their names, what they studied and what motivated them to come to the workshop, except Oliver. Oliver did something different. Something that no one else did; he looked around the room and told people about his research and why he thinks everyone should be as excited about it as he is.*

*The other participants were quite baffled to witness Oliver behaving that way and were curious to see the leader’s reaction. They were asking themselves why Oliver had not gone along with what other people did, why did he have to behave so differently?*

The person in the example above did something unexpected, he stood out from the crowd, he deviated. Deviant behaviour can occur in many forms and shapes. It can be negative or positive, destructive or constructive, minor or serious, but in all cases, it has to do with a person not following a social norm (Jetten & Hornsey, 2014). Oliver was deviating from the norm that others adhered to. In my example, the leader of the workshop had asked the participants to briefly introduce themselves with a couple of words and share their educational background but nothing more in order not to spend too much time on the introduction. The norm was thus to follow the leader’s request, however, Oliver decided to go in a different direction and, hence, deviated. This research deals with the question of why people, like Oliver, are motivated to step out of line and do something different compared to the people around them rather than fit in and conform to the majority in the workplace. This PhD tries to discover how the people around Oliver and their behaviour might have influenced his behaviour.

This is an important question to ask for organisations. Companies, on the one hand, are encouraged to capitalise on the unique talents of their employees (Lepak & Snell, 1999), but on the other hand, also want their staff to adhere to organisational norms (Maanen & Schein, 1979). Deviant behaviour, however, can occur in various forms that
can have serious consequences, both positive and negative. Stepping out of line can be
destructive (Robinson & Bennett, 1995) and very costly, encompassing behaviours such
as organisational theft or abusing colleagues at work. These behaviours are considered
detrimental to the organisation itself (Pearson & Porath, 2009) and its employees
(Schilpzand, De Pater, & Erez, 2016). Stepping out of line can also be constructive
(Spreitzer & Sonenshein, 2003, 2004; Warren, 2003) and financially beneficial and thus
contribute to and benefit an organisation. Example behaviours are whistleblowing or
exercising voice. In this case, the deviant behaviours can help discover functional
shortcomings or solve problems through informal shortcuts and creative solutions
(Vadera, Pratt, & Mishra, 2013).

Current research, however, in the organisational literature is not able to explain the
fundamental deviance aspect of behaviour, i.e. as to why people engage in deviant
behaviour rather than norm-conforming behaviour to begin with. Reviews and meta-
analyses on destructive (Berry, Ones, & Sackett, 2007; Dalal, 2005; Hershcovis et al.,
2007; Lau, Au, & Ho, 2003; Nair & Bhatnagar, 2011; Schilpzand et al., 2016) and
constructive deviance (Vadera et al., 2013) or both (Appelbaum, Iaconi, & Matousek,
2007), and norm-congruent behaviour (e.g. Organ, 2018; Organ & Ryan, 1995;
Podsakoff, MacKenzie, Paine, & Bachrach, 2000) have focussed on identifying
antecedents at the individual (e.g. personality, emotions, stress) and situational or
organisational level (e.g. leadership, various kinds of justice). While norm-congruent
and deviant behaviour are commonly understood as antithetical constructs (Bolino &
Klotz, 2015), the reviews investigated deviant or norm-congruent behaviour only in an
isolated fashion, overlooking the respective other side of the medal. Previous research
was trying to explain why people engaged in deviant behaviour in a specific situation or
under specific circumstances, but they neglected to explain why people would not
engage in norm-congruent behaviour under the same circumstances (or vice versa).

Only few studies (e.g. Dalal, 2005; Fox, Spector, Goh, Bruursema, & Kessler, 2012; Miao, Humphrey, & Qian, 2017) have looked at potentially shared antecedents of norm-congruent and deviant behaviour. Again, however, the reviews on shared antecedents do not offer an explanation as to why people would choose deviant behaviour over norm-conforming behaviour or vice versa in specific situations or under specific circumstances.

In order to fill this gap, I apply Optimal Distinctiveness Theory (ODT, Brewer, 1991) and argue that if people are not feeling optimally distinct (i.e. sub-optimally distinct) they could engage in deviant or norm-conforming behaviour in order to re-establish optimal distinctiveness. ODT proposes that people want to feel comfortably similar and different compared to the people around them. In this research, I focus on two types of sub-optimal distinctiveness: feeling too similar and feeling too different. I argue that if people feel too similar compared to others, they will engage in deviant behaviour to stand out, and if people feel too different, they will engage in norm-congruent behaviours (e.g. organizational citizenship behaviour, OCB) to fit in. In other words, Optimal Distinctiveness Theory (ODT) proposes that people are aware of their distinctiveness and are able to change their distinctiveness and similarity in an agentic way. Thus, using ODT, I address the unanswered question of when will people engage in deviant behaviours and when will they engage in norm-congruent behaviours. Additionally, I investigate whether the effects of ODT might be affected by the job context and personal attitudes. I examine the influence of job autonomy and organisational commitment on the relationships between feeling too similar (or too different) and deviant, and norm-congruent behaviour, respectively.
Using a full-cycle approach to research (Chatman & Flynn, 2005), I conducted three experiments and also collected data via a two-wave online study with a total sample of N = 657. The three experiments showed that feeling more similar or more different does not have an effect on people’s self-reported behaviour, nor does it affect people’s needs for belongingness or uniqueness. The online study went one step further and investigated what happens when people feel too similar or too different compared to their colleagues at the workplace, i.e. sub-optimally distinct. The results indicated that, as a result of feeling too different, people were less likely to engage in OCB directed at the organisation. However, people’s needs and deviant behaviour were not affected. Interestingly though, the online study showed that the need for uniqueness could be a predictor of interpersonal destructive deviant behaviour. In sum, I only found very limited support for my conceptual model. Nonetheless, my PhD makes several contributions.

1.1. Contributions

First, this is the first application of ODT to the workplace in an effort to explain deviant and norm-congruent behaviour. Drawing on an established social psychological framework, I focus on a person’s perception of their standing in relation to others and its effect on their behaviour. This perspective utilises existing theoretical and empirical knowledge in (experimental) social psychology (e.g., Abrams, 1994, 2009) to explain how individual behaviour can result from people comparing themselves to others in their environment. I argue that the concept of optimal distinctiveness can also be applied to the workplace and explain workplace behaviours, such as deviance and OCB. Thus, I contribute to the literature on shared antecedents of OCB and destructive deviant behaviours (Berry et al., 2007; Dalal, 2005; Fox et al., 2012).
Second, I introduce a new way to measure perceived optimal distinctiveness by using questions that elicit both a difference and a congruence score. This enables me to investigate both linear and curvilinear effects. The online study integrates the insights from the organisational fit literature (e.g. Kristof-brown, Zimmerman, & Johnson, 2005) as well as research on congruence (e.g. Edwards & Cable, 2009). Participants were asked how similar (or different) they felt compared to their colleagues as well as how similar (or different) they wished to feel compared to their colleagues. By measuring both actual and desired levels of similarity (or difference), I am able to calculate a difference score (Actual minus desired levels) as well as a congruence score (to what extent the two answers are aligned). This allows me to go beyond previous research and test more complex and curvilinear relationships by using the most recent statistical analyses such as polynomial regression with response surface methodology (Edwards, 2002) or latent congruent modelling (Cheung, 2009).

Third, by applying ODT to explain a workplace phenomenon, I am able to refine the theory by potentially showing its boundaries or limitations (Edwards, 2010) and thereby provide meaningful theory development (Aguinis & Vandenberg, 2014). Thus, I am able to effectively connect social psychological research with the field of organisational behaviour. Given the recent trend according to which the fields of psychology and organisational behaviour seem to be moving away from each other (Aguinis, Bradley, & Brodersen, 2014), it is ever more important to see how social psychological research can inform and shape research in organisational behaviour (Rast, Axtell, & McGlynn, 2016).

Fourth, this PhD provides a review of potential strategies on how employees can balance the needs for uniqueness and belongingness at the workplace that goes beyond previously published reviews (Blanz, Mummendey, Mielke, & Klink, 1998; Hornsey &
Jetten, 2004). I have identified four strategies, which are described in these two social psychological reviews, which can be also applied to a workplace setting. Drawing on empirical research in areas such as organisational behaviour, consumer behaviour and social psychology, I have identified two more strategies that go beyond these previous reviews. This PhD proposes a seventh strategy, namely engaging in either deviant or norm-congruent behaviour to balance the needs for uniqueness and belongingness, and also tries to test this strategy with both experimental and cross-lagged data.

Fifth, this research combines both constructive and destructive deviant behaviour and offers a new perspective, namely, that they might share the same antecedents. In other words, rather than seeing deviance as a problem per se, I understand it as an outlet for uniqueness seeking behaviour. Overall, this PhD is also, as far as I know, the first to introduce the need for uniqueness to the organisational behaviour (OB) literature and provide support for its relationship with deviant behaviour. By investigating the effects of uniqueness seeking on both types of deviance, I also challenge the ‘common good’ perspective (Alves, Koch, & Unkelbach, 2017), which argues that people would predominately engage in negatively valued behaviours (only destructive deviance) when seeking differentiation from others.

Sixth, this PhD is also one of the first attempts, at least to my knowledge, to apply the ODT mechanism to explain behaviours (deviance and norm-congruency) rather than purely cognitive strategies (see Hornsey & Jetten, 2004, for an overview). Research regarding ODT has so far predominately focussed on cognitive “behaviours” that are unobservable by others and take place intrapersonally. For instance, people self-stereotype in order to assimilate or differentiate themselves from others (Pickett, Bonner, & Coleman, 2002) or re-frame their position within a group (Hornsey & Jetten, 2004) or associate themselves with more unique or more similar attributes (Markus &
Kunda, 1986). These strategies are intrapersonal processes and thus are not visible to an observer. In my PhD, however, I argue that the ODT needs can, in fact, elicit observable behaviours, such as deviation or norm-conformity. In sum, ODT has so far been used as an explanatory model to account for unobservable processes and my PhD is the first to explicitly measure outcomes of ODT in the form of deviant or norm-congruent behaviours. Thus, it contributes to the range of antecedents of deviant behaviour that have been found in previous studies (see for reviews: Hershcovis & Reich, 2013; Lau et al., 2003; Nair & Bhatnagar, 2011; Vadera et al., 2013).

Finally, this PhD draws on social psychological need theories and its corresponding literature to argue that uniqueness and belongingness needs might motivate people to engage in deviant or norm-congruent behaviour. Thus, I follow the recommendation of Locke and Latham (2004), who argued that motivation theory should be developed in further areas other than task performance and should consider concepts from other fields than organisational or work psychology.

### 1.2. Overview of chapters

The remainder of this thesis is built up as follows. In chapter 2, I introduce the theoretical background of my PhD: Optimal Distinctiveness Theory and how it affects social behaviour as well as how it relates to positive outcomes. In the same chapter, I also investigate the question of how optimal distinctiveness can be achieved at the workplace and I outline a number of potential strategies based on an extensive literature review. Following that, in chapter 3, I define what deviant and norm-congruent behaviour at the workplace is and how these types of behaviour can be used to re-establish a feeling of optimal distinctiveness. In other words, I explain how Optimal Distinctiveness Theory can be utilised to explain the presence of both norm-congruent and incongruent behaviours at the workplace. Chapter 3 also introduces the theoretical
model of my PhD as well as explains and describes my hypotheses. In the fourth chapter, I elaborate on my research design and why I chose to use both experiments and an online study. Chapter 5 is the first empirical chapter and includes the two experiments I conducted and their findings. This chapter ends by addressing the insights gained from the experiments, the lessons learnt and how the experiments might inform the online study. Chapter 6 describes the online study and its methodology, results and findings. Finally, the last chapter contains the discussion of the results in light of my hypotheses and theoretical backbone. This thesis ends with its conclusions as well as the practical and theoretical implications of my research.
2. Optimal Distinctiveness Theory as the basis for social behaviour

This chapter provides the theoretical background to my research. I first define what optimal distinctiveness means. This includes a brief section on how the theory has been refined over the past years. Next, I outline why optimal distinctiveness is a comfortable state and why people are motivated to maintain a state of feeling optimally distinct. Then, I provide an overview of how employees and their organisations can benefit from optimal distinctiveness. This chapter ends with a literature review of what people can do at the workplace when they do not feel optimally distinct.

2.1. What is optimal distinctiveness?

Optimal Distinctiveness Theory was first introduced by Marilynn Brewer in 1991 and argues that people desire to be optimally distinct compared to the people surrounding them. Brewer (1991, p. 471) argues that optimal distinctiveness “derives from a fundamental tension between human needs for validation and similarity to others (assimilation) and a countervailing need for uniqueness and individuation (differentiation)”. Whereas *assimilation* refers to the feeling of being similar and a sense of belonging and enables a social identity, *differentiation* refers to the feeling of being unique and distinct and enables a personal identity (Brewer & Gardner, 1996; Farmer, Van Dyne, & Kamdar, 2015). Identities refer to self-definitions, i.e. how we typically see ourselves. These self-definitions are not only based on identifying “Who am I?”, but also on understanding “What is my relation to the world?” (Higgins, 1996). By comparing oneself to others, individuals are able to establish how they are similar and different compared to the people surrounding them.

ODT has so far focused on identities in terms of group membership and makes a distinction between in- and out-groups. I go beyond that reasoning and argue that there
needs to be only one group to satisfy both assimilation and differentiation drives. ODT has typically argued that optimal identities “satisfy the need for inclusion within the in-group and simultaneously serve the need for differentiation through distinctions between the in-group and out-group” (Leonardelli, Pickett, & Brewer, 2010, p. 67). That means, people can create a sense of differentiation by identifying how one’s group differs from other groups (e.g. groups of fans supporting different football clubs). Assimilation, on the other hand, can be established by identifying how one is similar to other members in one’s group (e.g. fans supporting the same football club). This idea has found support in numerous studies investigating how people identify with political parties (Abrams, 1994), universities (Pickett, Silver, & Brewer, 2002), sport teams (Andrijiw & Hyatt, 2009), musical preferences (Abrams, 2009) and fandoms (Reysen, Plante, Roberts, & Gerbasi, 2016). In sum, differentiation will be accomplished through intergroup comparisons and assimilation through intragroup comparisons.

However, it has now been argued that both needs could actually be met within the same group. Sheldon and Bettencourt (2002) found support for the idea that people can feel unique within a group and at the same time included to a group. For instance, through wearing the same brand of shoes like everyone else in one’s group, but in a different colour (Chan, Berger, & Van Boven, 2012; Moon & Sung, 2015). One single group can thus enable people to feel optimally distinct. A single group being able to satisfy both the need for inclusion and the need for differentiation simplifies the definition and focuses on how a person compares him or herself with his or her environment, thereby using the group as a social resource (Correll & Park, 2005). In contrast to the original ODT idea, an identity is then optimal when it meets both the needs for assimilation and differentiation (Chen, Boucher, & Tapias, 2006). It is worth mentioning that people compare themselves to significant others, not just anyone.
According to Chen et al. (2006), significant others are “actual (vs. hypothetical) individuals whom one knows (vs. just met), with whom one feels some degree of closeness, and usually with whom one shares a relationship that can be normative (e.g. work colleague) or idiosyncratically labelled (e.g. my closest colleague)” (p.153).

In sum, a person’s distinctiveness is the product of comparing oneself to others to determine how similar or different one is. Optimal distinctiveness is achieved when people are as similar and as different as they wish to be. Thus, optimal distinctiveness is an interpersonal characteristic, as people can differ in terms of how similar or how different they want to be compared to others (whereas some like to be similar, others like to be more different). In contrast, sub-optimal distinctiveness is when people are not as similar and as different as they wish to be. Sub-optimal distinctiveness thus represents a state in which people should feel uncomfortable. As a result, people should be motivated to re-establish a feeling of optimal distinctiveness. This research focusses on two types of sub-optimal distinctiveness, specifically, what happens when people feel too similar or feel too different, i.e. more than desired.

2.2. Three principles of Optimal Distinctiveness

While people can generally differ in terms of how much similarity or difference they feel comfortable with, other things, such as the situation or the context can also have an effect on one’s optimal distinctiveness. Leonardelli and colleagues (2010) outlined three different principles, which show that optimal distinctiveness is not a stable construct but rather varies depending on the context, the situation and the individuals.

Firstly, “optimal distinctiveness is context specific” (Leonardelli et al., 2010, p. 68), which means that in different social situations, different social identities and categories are salient. The authors provide the example of being a psychologist at an international psychology conference. Identifying as a psychologist makes you belong and similar to
all the other confederates, however, it does not allow for much uniqueness. If you were
to describe yourself as a work psychologist, you would still belong but have a rather
distinctive characteristic that fewer people have in common with you. By identifying a
specific characteristic about themselves, people will be able to differentiate. That
means, different settings provide different options to identify similarities and
differences.

Secondly, “optimal distinctiveness is a dynamic equilibrium” (Leonardelli et al.,
2010, p. 68), which means that optimality is not always the same but it is subject to
temporal fluctuations and changes over time. For example, a newcomer will be more
inclined to satisfy the belongingness need first and assimilate to his or her colleagues
(Nifadkar & Bauer, 2016), as he or she will be fairly different in the beginning and thus
the need for differentiation would be met (Debrosse, de la Sablonnière, & Rossignac-
Milon, 2015). Over time, however, the newcomer might have assimilated so much that
the need for distinctiveness becomes activated. Thus, depending on the situation,
different needs might be activated. That means as a newcomer people might not feel
optimally distinct, but once they have established enough similarities with their
colleagues, they will.

Thirdly, “identity motives vary across situation, culture, and individuals”
(Leonardelli et al., 2010, p. 69), which means, that how strong the drives for
assimilation or differentiation are, depends on the individual him or herself and his or
her cultural background. Cultural differences might play a role, as the motivation to be
unique or to be similar differs across the world (Eriksson, Becker, & Vignoles, 2010;
Güngör, Karasawa, Boiger, Dinçer, & Mesquita, 2014; Kim & Markus, 1999; Tafarodi,
Marshall, & Katsura, 2004). For instance, people in Western cultures seem to have a
stronger drive for uniqueness and differentiation than in Eastern cultures. Countries can
also differ regarding their tightness and looseness of norms, i.e. how strict social norms have to be followed and the degree to which people are sanctioned for not following them (Gelfand et al., 2011; Gelfand, 2012; Gelfand, Nishii, & Raver, 2006; Harrington & Gelfand, 2014). That means, in ‘tighter’ countries, people are more likely to be sanctioned for stepping out of line to differentiate themselves compared to ‘looser’ countries. On an interpersonal level, people might differ in terms of their self-construal, which refers to “the relationship between self and others and, especially, the degree to which they see themselves as separate from others or as connected with others” (Markus & Kitayama, 1991, p. 224). People can either have a more independent or more interdependent self and that in turn affects how unique they want to be. The independent self has a positive relationship with the need for uniqueness, whereas the interdependent self has a negative relationship with the need for uniqueness (Song & Lee, 2013). That means, some people generally like to be similar to others, whereas other people generally like to be different.

In sum, people will generally strive to feel optimally distinct at the workplace, but how that is reflected in terms of how similar or different they want to be, depends on the context. For instance, newcomers might focus on their similarities rather than their differences. Established employees, however, might focus more on their differences, in a team meeting with their colleagues, for example. Generally speaking, though, feeling optimally distinct is a comfortable state.

2.3. **Why is optimal distinctiveness important?**

ODT argues that individuals are motivated to find an optimal balance between assimilation and differentiation. By establishing to what extent one is similar or different compared to others, optimal distinctiveness serves two distinct purposes. On the one hand, it provides employees with a sense of identity (both personal and social)
and, on the other hand, it also satisfies the essential needs for uniqueness and belongingness.

2.3.1. Sense of identity

People are able to identify their position within a social environment, by comparing themselves to others around them (Higgins, 1996; Tajfel & Turner, 1986). Accordingly, individuals derive their sense of identity from both personal or unique and shared or similar characteristics. This identity not only comprises information of who “we” are as a group, but also of who “I” am, personally (Brewer & Gardner, 1996). The personal self (“who am I?”) represents all those aspects that differentiate an individual from others, e.g. how one occupies a specific role in a team. The collective self (“who are we?”) is a “shift towards the perception of self as an interchangeable exemplar of some social category and away from the perception of self as a unique person” (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987, p. 50). It thus is the representation of all the aspects that an individual has in common with others or specific social groups, e.g. working towards the same goals as a team. People want to feel similar (Ryan & Deci, 2000), but also unique compared to others (Demir, Şimşek, & Procsal, 2013), so the combination of both unique and shared features allows people to identify who they are in comparison to other people and forms the basis for optimal distinctiveness. Optimal distinctiveness at work is then the result of an employee comparing him or herself to other people at work, e.g. his or her colleagues.

2.3.2. Satisfaction of uniqueness and belongingness needs

The state of optimal distinctiveness is desirable because it simultaneously satisfies two fundamental needs: the needs for uniqueness (Snyder & Fromkin, 1980) and belongingness (Baumeister & Leary, 1995). The need for uniqueness argues that people do not want to be too similar, because they could feel “‘swallowed up’ by the group
“(Brewer, 1991)” (as cited in Sheldon & Bettencourt, 2002, p. 34) and run the risk of losing their personal identity. In that case, a person might be less able to identify who one is amongst all the other people, i.e. experience reduced self-awareness or loss of self. In a mixed-method study, Kreiner, Hollensbe and Sheep (2006) found that priests were struggling to find the optimal balance of uniqueness and belongingness needs. Being a priest meant belonging to a group, however, overidentification with the priesthood meant that their personal identity was endangered. Priests were wondering whether there was anything else to their life but being a priest. Being too different, on the other hand, is also not a comfortable state. According to belongingness theory, people could then run the risk of being marginalised, which in the long run can lead to social exclusion (Hohman, Gaffney, & Hogg, 2017; Leary, 1990) and loss of social identity. For instance, someone who is different compared to their colleagues might feel like an outsider and, consequently, might even question his or her membership to the group (Bartel & Dutton, 2001; Clair, Humberd, Caruso, & Roberts, 2012). As a result, people feel uncomfortable when they are either too similar to others (Fromkin, 1970, 1972) or too different from others (Frable, Blackstone, & Scherbaum, 1990). Either extreme is an undesirable state, resembling a “too much of a good thing” effect (Grant & Schwartz, 2011; Pierce & Aguinis, 2011).

In sum, optimal distinctiveness is a comfortable state because it not only provides people with both a social and personal identity but also satisfies the needs for uniqueness and belongingness. Consequently, employees should benefit from feeling optimally distinct in the workplace.

2.4. Outcomes of being optimally distinct

I argue that the state of optimal distinctiveness is comfortable and goes along with benefits for the person and his or her environment. In the following section, I draw on
literature from a number of research areas. I outline research conducted on ODT in the workplace, but also integrate research that has looked at assimilation or differentiation processes, but not used ODT as a theoretical lens. I, however, interpret this research and explain how it can be related to ODT.

The concept of ODT has been applied to the literature of inclusion and identity management and has been used to explain how being optimally distinct comes along with personal benefits. It is worth mentioning, however, that optimal distinctiveness (i.e. how optimally distinct someone feels) was never explicitly measured in the following studies. ODT was rather used as an overarching theoretical framework to allow authors to argue how the drives for being similar and being different can explain certain workplace outcomes, such as inclusion, well-being and workplace attachment. Conceptual research (Shepherd & Haynie, 2009; Shore et al., 2011) only indicates what kind of things might serve as comparison attributes at the workplace and therefore makes rather general predictions on the implications of optimal distinctiveness. Empirical research, however, has used constructs, such as value congruence, demographic (dis)similarity (Gonzalez, 2016) or team-member exchange (Farmer et al., 2015) as sources of uniqueness and belongingness and relates them to outcomes, such as helping behaviour or workplace attachment. Qualitative research also highlights how individuals can balance their drives for assimilation and differentiation during an organisational change (Cuganesan, 2017).

In line with the original idea of ODT to use distinct groups for assimilation and differentiation, Shepherd and Haynie (2009) proposed that entrepreneurs will have better psychological well-being if they not only identify as an entrepreneur (satisfying uniqueness needs) but also identify as something that can satisfy belongingness needs, such as being a family member, or member of a social club. In contrast, utilising the
more recent idea of using only one group for optimal distinctiveness, Shore et al. (2011) proposed that employees will feel included and engaged with work if they are able to satisfy both uniqueness and belongingness needs. In this situation, people will be able to feel part of their working team and be treated like an insider, but at the same time, people will be appreciated for their unique characteristics. In either case, the authors argue that an employee will benefit from feeling optimally distinct.

However, feeling optimally distinct is not only beneficial for the employee itself, but also for the working environment, in general. Optimal distinctiveness has been argued to lead to experiencing more workplace attachment (Shore et al., 2011) and lower turnover intentions (Gonzalez, 2016), as well as more helping behaviours towards others (Farmer et al., 2015). In a quantitative study, Gonzalez (2016) found that employees show higher workplace attachment when they are different regarding their demographics but at the same time share the same values as their colleagues and the organisation. Farmer et al. (2015) showed that employees identify strongly with a team and engage in more helping behaviour towards team-members when they have high relative team-member exchange (TMX) relationships in a high average TMX group. In that case, employees are similar to others in that they also have a high TMX but are unique compared to others because their personal TMX is even higher than the group average. On a side note, this research seems to suggest that it does not matter whether people use only one comparison attribute (e.g. relative position on a particular feature such as TMX) or more than one attribute (e.g. value congruence for similarity and demographics for differences). Having said that, in either case, the organisation and other colleagues benefit from having employees feeling optimally distinct, as long as employees are able to establish how they are both similar and different from their colleagues.
In a qualitative study, Cuganesan (2017) was investigating how police officers would balance their optimal distinctiveness drives during the course of an organisational change. He found that high-status police officers felt more comfortable in their position than low-status police officers. Cuganesan (2017) explained this with the help of optimal distinctiveness theory, by arguing that high-status officers were similar to other officers but also had unique specialisations that would set themselves apart. In that case, the need for belongingness was satisfied by being a part of the police force, whereas the need for uniqueness was satisfied by being a more specialised part of the police force. When faced with a change that involved losing one’s specialisation, high-status police officers “exhibited renewed concerns about a devaluation of their expertise and a threat to valued distinctiveness” (Cuganesan, 2017, p. 502).

To summarise, research employing ODT as a theoretical lens has found that people feeling optimally distinct are more likely to feel included at work, keep their jobs and even provide support to their colleagues. However, there is a number of studies that have looked at assimilation and differentiation processes in the workplace that have not explicitly adopted ODT as a theoretical lens but can be interpreted that way.

Cable, Gino and Staats (2013) investigated how newcomer’s socialisation process affects organisational identification. They found that newcomers identify more strongly with their organisation if their initial socialisation process focused on how they can be unique at the workplace rather than solely adhering to the organisational identity. Participants in a field experiment were divided into two groups, a personal and an organisational identity condition. In the personal identity condition, newcomers joined a session listening about their personal opportunities within the company and received a personalised sweatshirt and name badge, whereas, in the organisational identity condition, newcomers joined a session about the company’s values and achievements.
and received a standardised company sweatshirt and a company name badge. In the personal identity condition, employees were thus belonging to the organisation and at the same time allowed and encouraged to express their uniqueness. In the organisational identity condition, employees were belonging to the organisation but were not provided with an opportunity to be unique. Looking at it from an ODT perspective, it can be interpreted that, employees in the personal identity condition were able to feel optimally distinct and, as a result, identified more strongly with the organisation itself (see also Ashforth & Schinoff, 2016). This is in line with Shore et al.’s (2011) propositions on when people feel included at work, as well as Maanen & Schein's (1979) work on socialisation tactics.

Chatman, Polzer, Barsade and Neale (1998) used an organisational simulation to investigate the interactive effects of demographic diversity and organisational culture on employee productivity. They summarised their results arguing that demographic diversity has a positive effect on productivity and creativity when the organisational culture emphasises collectivism and shared organisational membership rather than individualism. This indicates that demographic diversity has a stronger effect if organisational collectivism is strong than if it is weak. This effect seems logical from an ODT perspective, as demographic diversity could satisfy the need for uniqueness, and the collectivist organisational culture could satisfy the need for belongingness. Similarly, Polzer, Milton and Swann (2002) found that interpersonal congruence (how similar people are in terms of their abilities and competencies) moderates the relationship between demographic diversity and outcomes such as task performance and creativity. Particularly when interpersonal congruence was high, diversity had a positive effect on employee performance, but not when interpersonal congruence was low. In this case, demographic diversity could satisfy the need for uniqueness, whereas
interpersonal congruence could satisfy the need for belongingness. Through these combinations - diversity and organisational collectivism/interpersonal congruence - employees’ optimal distinctiveness can be facilitated. These studies demonstrate that optimal distinctiveness might be a suitable explanation for the findings of many studies, which did not set out to test the effects of optimal distinctiveness in the first place.

Beyond investigating how people feel in relation to their environment, optimal distinctiveness as a concept has also been successfully applied in marketing research. For example, Alvarez, Mazza, Strandgaard Petersen and Svejenova (2005) found that film directors were successful when they managed to produce films that were both unique and similar at the same time. On the one hand, a film had to be created in a way that it would be appealing to the audience and thus similar to previous movies that have been successful in a particular genre. From a business perspective, film directors want to be associated with a specific category of movies for people to know what they can expect. If a specific type of movie is particularly successful over a period of time, directors would like to jump on the bandwagon and use this mainstream to their own advantage. On the other hand, the film had to have distinct features symbolising the directors’ unique style and approaches. Only then, films in the same genre by different directors are distinguishable. From a more personal perspective, directors want to maintain certain unique attributes that make their movies unconventional to make their work different compared to others. Differentiation could be achieved by specific creative styles or certain techniques, for instance. Not only do individuals benefit from optimal distinctiveness, but also companies themselves. For instance, the idea of making a product similar to its competitors, i.e. placing it in the same category or genre, and making it distinct compared to its competitors, i.e. creating unique features, has been applied in marketing (Keller, Sternthal, & Tybout, 2002), strategic management
corporate social responsibility practices (Zhang, Wang, & Zhou, 2019) and even the organisational change literature (Durand & Calori, 2006).

2.5. How to be optimally distinct at the workplace

Optimal distinctiveness is a comfortable state that goes along with benefits for both the employee and the organisation. This begs the question of what happens when people are feeling sub-optimally distinct. What can people do at the workplace to re-establish a feeling of optimal distinctiveness? How can employees adjust how similar or different they feel compared to their colleagues at the workplace? What kind of behaviours can be expected of a person, who does not feel comfortable about how similar or different he/she is compared to his/her colleagues? The goal of the following section is to provide a literature review on what employees can do when they feel sub-optimally distinct. This section is structured along six different strategies of how employees can balance their needs for uniqueness and belongingness at the workplace. These six strategies are informed by previous research as well as partly based on social psychological reviews using ODT as a theoretical lens. I conclude this section by discussing the limitations of these strategies and propose that engaging in either norm-congruent or deviant behaviours could be a seventh strategy.

Workplaces offer a unique setting to enable but also undermine people’s sense of optimal distinctiveness. Not only do people spend a lot of time at work (Thompson, 2012), but they also want to feel included at work (Kirkpatrick & Ellis, 2001; Leary & Cox, 2008). “Many of the psychological needs that earlier societies met through social structures, such as religious rituals, the expanded family, and the village community, have now been taken over by the institution of paid work” (Gill, 1999, p. 726). Research on unemployment supports this claim. Unemployed people are generally less likely to
benefit from the latent benefits of work and thus report lower levels of well-being (Paul & Batinic, 2010). Thus, it can be argued, that work is a very important aspect of life which also seems to meet basic human needs and has a positive influence on health and well-being. According to Shore et al. (2011), people will feel included at the workplace and engaged with work, if they can satisfy both their needs for belonging and uniqueness (i.e. feel optimally distinct compared to their colleagues).

Hornsey and Jetten (2004) and Blanz et al. (1998) have reviewed the literature and identified and developed strategies on how to balance the ODT needs and how to cope with a negative identity, respectively. Hornsey and Jetten (2004) closely followed the reasoning of optimal distinctiveness theory and identified strategies on how to be both similar and different at the same time, i.e. optimally distinct. These strategies are either focussing on increasing the distinctiveness of one’s group or on increasing the distinctiveness of the individual. Blanz et al.’s (1998) review follows social identity theory and identifies strategies on how people can respond to a negative social identity. I acknowledge that Blanz and colleagues did not use ODT as a theoretical lens, however, their review still offers valuable insights on assimilation and differentiation processes that can be applied to a workplace setting. These strategies are focussing on either the individual itself or on the group the individual belongs to.

My review of strategies addresses a number of shortcomings of both Blanz et al.’s (1998) and Hornsey and Jetten’s (2004) reviews. First, the prior reviews are written from a social psychological perspective without a specific context in mind. The strategies are broadly framed and phrased in a way that they seem applicable to a lot of different contexts and situations. As a consequence, a substantial number of the strategies are less applicable to the workplace, a setting with its own rules and regulations such as health and safety or dress code. For instance, Hornsey and Jetten
(2004) propose that people could identify with different groups, either numerically distinct or one that defines itself strongly against the mainstream (e.g. through behaviour or clothes). People have less chance to identify with groups other than one’s working group in their organisation because the number of employees and diversity of potential subgroups (e.g. size, behaviour, clothes) is limited. One’s life outside of work thus provides significantly more opportunities to identify with other social groups.

Second, the existing reviews underestimate the value of behaviour in defining a specific identity (Macrae & Bodenhausen, 2000). A person’s behaviour is linked to an individual but it also allows for flexibility and versatility (Elsbach, 2004). For instance, impression management assumes that various behaviours can be used by people to influence how other people perceive them, e.g. to seem particularly hard-working (Rosenfeld, Giacalone, & Riordan, 1995). I argue that behaviour can also be used to alter how similar or different one feels compared to one’s colleagues. The only behavioural option that Blanz et al. (1998) propose is changing one’s group, i.e. organisational exit. Hornsey and Jetten’s (2004) review is limited to cognitive strategies, such as self-stereotyping or cognitively re-framing the situation.

Finally, the existing reviews adopted the original ODT idea and based their strategies on both intergroup and intragroup processes and comparisons. My research, on the other hand, goes beyond the in- and out-group reasoning and instead focusses on the individual and what he or she can do to increase his or her similarities or differences compared to work colleagues. I thus assume that merely one group is necessary to achieve optimal distinctiveness if any at all.

Drawing on optimal distinctiveness and social identity literature, I have identified six potential strategies on how people can balance the needs for uniqueness and
belongingness at the workplace. As can be seen in Table 1, the strategies and their respective source are categorised as either behavioural or cognitive. People can either gain optimal distinctiveness by behaving in a certain way or by cognitively re-framing the situation. I have adopted this approach from Blanz, Mummendey, Mielke and Klink's (1998) review. These two types of strategies differ regarding their visibility. Behavioural responses to regain optimal distinctiveness are observable by others, whereas cognitive strategies are unobservable to others. Three of the six strategies are taken from the reviews by Blanz et al. (1998) and Hornsey and Jetten (2004). As I am interested in the optimal distinctiveness of individual employees, in the following, I am merely discussing three strategies by Hornsey and Jetten (2004) and one strategy by Blanz et al. (1998)\(^1\). Since these three strategies are based on predominately social psychological research, I integrated applied research from organisational behaviour to showcase how these strategies are applicable to the workplace. However, I also add three strategies that are shaped by research on optimal distinctiveness in areas such as consumer behaviour, organisational behaviour or social psychology. I conclude the chapter by proposing norm-congruent and incongruent behaviour as a newly developed strategy of regaining optimal distinctiveness at the workplace.

**Table 1**

*Overview of strategies and their source if taken from previous reviews*

<table>
<thead>
<tr>
<th>Cognitive</th>
<th>Behavioural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyal but not conform (Blanz et al., 1998; Hornsey &amp; Jetten, 2004)</td>
<td>Using products</td>
</tr>
<tr>
<td>Change of comparison</td>
<td>Intention to conform/deviate</td>
</tr>
</tbody>
</table>

\(^1\) The “loyal but not conform” strategy is mentioned in both reviews but only reported once in my review.
2.5.1. Cognitive strategies of regaining optimal distinctiveness

*Primus inter pares*

A person could describe him or herself as primus inter pares, which means to be the first among equals, and thus acknowledging everyone being similar but oneself being in a “better” position (Hornsey & Jetten, 2004). As Codol puts it: “There is only one way to present oneself as different from others without infringing on one’s conformity to social norms and that is by *asserting that one is more in conformity with these norms than the others*” (Codol, 1975, p. 484). In other words, belonging to a norm-conforming team, but being the one who is performing better than the others, will satisfy belongingness and uniqueness at the same time. Studies applying the ODT perspective to the workplace that have not been included in Hornsey and Jetten’s (2004) review provide support of that argument. For example, the aforementioned study on police officers could be read that way: High-status officers were in optimal balance because they were similar to other officers (all being police officers), however, they considered their specialisations as positive distinctiveness (Cuganesan, 2017). Moreover, using ODT as an explanatory framework, two studies suggest that optimal distinctiveness can be achieved when an individual is not only part of a successful and efficient working group (in terms of TMX or LMX), but also performs better than the others and thus stands out positively (Farmer et al., 2015; Gonzalez, 2016). Thus, at the workplace, people can be primus inter pares by identifying how one is positively unique by performing better than others. Using a comparison attribute, such as TMX, LMX or performance, employees can establish to what extent they are excelling their colleagues. The goal is not to denigrate other people’s performance, but rather see oneself as standing out positively of a well-oiled machine. Generally speaking, people prefer a positive self-image, that is using positive uniqueness to stick out rather than negative things (Blanton & Christie, 2003).
Loyalty without conforming

Both reviews by Blanz et al. (1998) and Hornsey and Jetten (2004) propose the idea of loyalty without conforming, where people perceive themselves as being loyal to a group but not dependent on it. Across two studies, Hornsey and Jetten (2005) found that people who identified strongly with a certain group would describe themselves as very loyal but, at the same time, also very independent from that group. In that way, people would belong to a group but establish distinctiveness by underestimating the influence the group has on their personal behaviour and attitudes. Thus, people could also identify themselves as marginal members of a group (Ellemers & Jetten, 2013), thereby being able to regulate how much control a group has over them and resist pressures to engage in undesired behaviours, such as self-sacrificing (e.g. Swann, Gómez, Dovidio, Hart, & Jetten, 2010; Swann, Gómez, Seyle, Morales, & Huici, 2009). Generally speaking, people seem to have the tendency to underestimate the impact of social influence on their behaviour compared to others, describing themselves as less susceptible to conformity pressures (Pronin, Berger, & Molouki, 2007). Blanz et al. (1998) called this strategy individualisation and argued that by decreasing the potential influence of a group, people can avoid a potential negative group image.

In order to cognitively assimilate or differentiate oneself with a group, people could use self-stereotyping behaviour (Pickett, Bonner, et al., 2002). That means people could make themselves seem more prototypical compared to their in-group by ascribing in-group traits to themselves, or less prototypical by refraining from ascribing in-group traits to themselves. Experiments have shown that, when people were told they are different compared to other people in their in-group, then people were more likely to describe stereotypical attributes of their group as their own personal attributes (Markus & Kunda, 1986; Pickett, Bonner, et al., 2002). Thus, participants with an increased need
to assimilate were more likely to seem very prototypical of the group they were told they were different from. If people wanted to differentiate themselves, however, then they were quick to remember traits or characteristics about themselves, which were dissimilar to their in-group (Leyens, Yzerbyt, & Rogier, 1997; Markus & Kunda, 1986).

In sum, people are able to cognitively adjust how close they feel to a specific group, by using tools such as self-stereotyping or regulating their loyalty. At the workplace, people could adopt so-called facades of conformity (Hewlin, 2003), that is, suppressing unique and personal characteristics and pretending to embrace organisational norms. For instance, employees could present themselves as prototypical hard-working workers in order to be considered for promotion or organisational rewards. Another example that Hewlin (2003) provides, is minority status. People might be inclined to seemingly adopt organisational values and try to fit in when they think that they, having minority status, might not receive the benefits of majority members. Employees are maintaining these facades even though that goes along with negative consequences, such as emotional exhaustion (Hewlin, 2009).

**Change of comparison**

According to Blanz et al. (1998), people can adjust their similarities or differences by either changing the comparison attribute or the subject of comparison. This refers to the attributes individuals use to establish differences or similarities and who they compare themselves to. Performing worse than a comparison group, for example, makes people look for things that differentiate them from the comparison group in order to attenuate the negative effects of the comparably bad performance (Mussweiler, Gabriel, & Bodenhausen, 2000). The idea of shifting the subject of comparison can also be applied to the concept of optimal distinctiveness.
People can freely choose their comparison attributes, which means people can be similar to others according to one attribute and differentiate themselves with another attribute. For example, a social psychology study has shown that people prefer to have their opinions aligned with the majority, but have their tastes differ from others (Spears, Ellemers, & Doosje, 2009), so with opinions, one could assimilate and with tastes, one could differentiate. That means, people can be of the same opinion as the people around them and, at the same time, they can have a unique attribute as well, such as their personal taste. In team meetings, employees could generally agree with others on how things are done (e.g. how to write and structure a specific report), but disagree on some technicalities (e.g. the formatting or how many paragraphs).

At the workplace, people could also make use of naturally occurring individual differences, such as age or gender to identify similarities and differences. The diversity literature generally differentiates between surface-level diversity and deep-level diversity (Harrison, Price, Gavin, & Florey, 2002). Whereas surface-level diversity is observable by others and encompasses demographic differences, such as age, gender and ethnicity, deep-level diversity refers to psychological characteristics, such as personality and attitudes that are only observable through interaction with other people. Depending on whether individuals want to assimilate or differentiate, they can change the subject of comparison from what they have in common with their colleagues (‘we are all young PhD students’) to something that differentiates them (‘I am the most extrovert in our group’) or vice versa. Ormiston (2015) proposed that uniqueness and belongingness needs can have an effect on how diverse people perceive their group to be. Depending on which need is activated, one’s group might seem more or less diverse. A person high on need for belongingness will perceive his or her group as less diverse, whereas a person high on need for uniqueness will perceive his or her group as more
diverse. Research has also shown that, in times when assimilation needs are strong, such as when teams are formed (Nifadkar & Bauer, 2016), people tend to overestimate how similar people in their group are (Zellmer-Bruhn, Maloney, Bhappu, & Salvador, 2008).

Alternatively, a person could also make use of, what Clair, Beatty and MacLean (2005) refer to as invisible social identities. These generally include characteristics of a person that are not necessarily visible to one’s colleagues, such as religion, national origin, illness and sexual orientation (Clair et al., 2005). Depending on the circumstance people can decide on how to use their invisible identities; assimilation through hiding what could potentially set themselves apart or differentiation through revealing one’s invisible identities.

2.5.2. Behavioural strategies of regaining optimal distinctiveness

**Role/Task differentiation**

Hornsey and Jetten (2004) propose that people could differentiate themselves from other people within their group through the unique roles they occupy. The authors provide the example, that an employee could be unique in his or her workgroup by being assigned the role of “the computer person”. This suggests that people could also take on specific tasks in order to differentiate themselves. The role or the specific task can then provide distinctiveness while at the same time maintaining belongingness with the group (Bettencourt & Sheldon, 2001). Vignoles, Chryssochoou and Breakwell (2000) argued that people could increase their distinctiveness in three ways: difference, separateness and position. While **difference** relates to individual differences regarding personality, physical characteristics or attitudes, **separateness** reflects how psychologically distant people would feel to others. **Position** refers to “distinctiveness in one’s place within social relationships, including kinship ties, friendships, roles and social status” (Vignoles, Chryssochoou, & Breakwell, 2002, p. 763). Vignoles,
Chryssochoou and Breakwell (2002) tested their argument using a sample of Anglican parish priests. They argued that priests, in particular, might be more connected to their colleagues through their shared beliefs and values and thus be more collectivistic and have a more interdependent self-construal. Consequently, priests would be more likely to use position as their way of differentiating themselves from their colleagues. Consistent with their argument, Vignoles et al. (2002) found that the element of position (i.e. role differentiation) contributed the most to an overall feeling of distinctiveness in priests.

When occupying specific roles, some organisations might also require their employees to dress accordingly, which adds another layer or element of differentiation. Research in organisational behaviour has found that, for instance, clothes are representative of roles and identities showcasing the differences between medical (Pratt & Rafaeli, 1997) and administrative staff (Rafaeli, Dutton, Harquail, & Mackie-Lewis, 1997). This leads to the question, whether clothes or specific products, in general, could also help differentiate people from others.

**Using products**

Research in consumer behaviour suggests that product consumption could be a strategy to achieve optimal distinctiveness (Chan et al., 2012; Timmor & Katz-Navon, 2008). When people are high on need for assimilation, then they are more willing to purchase a product that a lot of other people have purchased in order to be similar to them. On the other hand, when people are high on need for distinctiveness, then they are more willing to purchase a product that only a few other people have purchased, in order to be distinct and unique (Timmor & Katz-Navon, 2008). Further support comes from research in consumer behaviour which has shown that purchasing minority products, as a way of not conforming to the majority, is a means to satisfy the need for
uniqueness (Simonson & Nowlis, 2000). Moreover, the attributes of the product itself could satisfy the needs as well, as people will assimilate to their group by purchasing the same brand of products, but then differentiate on the colours of the product in order to satisfy the uniqueness need (Chan et al., 2012). Hence, assimilation and differentiation can be achieved on different levels within a group. Studies have also shown that individuals can express their uniqueness through specific clothes (Eriksson et al., 2010; Snyder & Fromkin, 1980; Tian, Bearden, & Hunter, 2001) or tattoos (Tiggemann & Golder, 2006), however many organisations make use of regulations, such as dress codes, or tattoo covering clothes (Easterling, Leslie, & Jones, 1992). This, in turn, severely reduces the use of unique clothing to items that are not organisationally regulated, such as shoes (Bellezza, Gino, & Keinan, 2014), for example.

At the workplace, employees can make themselves similar or different compared to their colleagues by how they decorate their office or desk. While research on office décor has not specifically investigated assimilation and differentiation drives or used ODT as a concept, this research can still provide valuable insights on how employees can create a personal or social identity at the workplace. Thus, the argument of using specific products to achieve optimal distinctiveness still seems sound. Elsbach (2004) distinguishes between physical and behavioural markers that allow people to be similar and different compared to others. Physical markers are independent of a person and relatively permanent. Office décor, for example, is visible without the employee being at his or her desk and generally installed for a longer period. The personalisation of one’s workspace, however, could play an important role in terms of need satisfaction. Qualitative studies have shown that decorating one’s desk is not only a way to establish and create a distinct identity (Elsbach, 2004) but also offers the opportunity to display items that signal assimilation and belonging, such as pictures of family and friends or
sports teams one is affiliated with (Wells, 2000). Wells reported that the majority of employees in her study (68%) displayed pictures of either their family or friends on their desk. Thus it could be argued that displaying family pictures can be used to make oneself more similar to others, whereas not displaying family pictures can be used to make oneself more different. By displaying personal items on their desk at work, individuals can thus signal how similar or different they are compared to their colleagues.

**Intention to conform/deviate**

The idea that being similar to other people can have both negative and positive effects in terms of satisfying belongingness but also dissatisfying uniqueness finds support in the study by Kim and Park (2011). They found that a uniform virtual appearance on an online platform led to both higher group identification and higher perceived deindividuation, which in turn had different effects on conformity intention. Being similar and identifying with a group leads to more conformity intention, whereas feeling too similar to others (deindividuated) leads to less conformity intention. That is, people who want to assimilate show more willingness to conform, whereas people who want to differentiate (feeling too similar) show less willingness to conform. What Kim and Park (2011) did not investigate, however, is whether people who want to differentiate are then more willing to engage in deviant behaviour as opposed to conforming behaviour. This research is aiming to fill that gap by proposing that people who want to differentiate will be more likely to engage in deviant behaviour. On the other hand, I argue that people who want to assimilate will be more likely to engage in norm-congruent behaviour.
2.5.3. Summary of strategies

In this review, I have identified six potential strategies on how to be optimally distinct at the workplace. Three strategies were cognitive and the other three were behavioural. What becomes clear, though, from this overview of the literature is that research on achieving optimal distinctiveness has predominately focussed on cognitive strategies instead of behaviours that can actually be observed. Despite the fact that ODT has been applied to a range of fields other than experimental social psychology, such as including identity work in police officers (Cuganesan, 2017), priests (Kreiner et al., 2006), filmmakers (Alvarez et al., 2005) and entrepreneurs (Shepherd & Haynie, 2009), marketing (Zhu & Argo, 2013), human computer interaction (Kim & Park, 2011), political identification (Abrams, 1994), creativity (Janssen & Huang, 2008), helping behaviour (Farmer et al., 2015), and diversity (Jansen, Otten, van der Zee, & Jans, 2014; Ormiston, 2016; Shore et al., 2011), only a few studies measured the intention to behave in a certain way (Chan et al., 2012; Kim & Park, 2011; Timmor & Katz-Navon, 2008) and even fewer measured actual observable behaviour, such as OCB (Farmer et al., 2015) or creative behaviour (Janssen & Huang, 2008). And even if they did measure behaviour, they did not measure optimal distinctiveness explicitly, but rather applied it as an explanatory framework.

Nonetheless, the abovementioned strategies all share the idea that people will focus on similarities when in need of assimilation and focus on differences when in need for distinctiveness. Kreiner et al. (2006) summarised their findings as follows; if situations or the occupation demand a very collective behaviour (i.e. blending in), the arising imbalance begs for uniqueness seeking behaviour. In contrast, if situations or the occupation demand a very individual behaviour (i.e. standing out), the arising imbalance begs for belongingness seeking behaviour. Ormiston (2015) supports that
argument by proposing that if people want to be more unique they will engage in behaviour to make themselves more dissimilar, and if people want to belong more, they will engage in behaviour to make themselves more similar. Therefore, I propose that actual behaviour, which focuses on similarities and differences, could function as a source or consequence of ODT needs. I argue that, at the workplace, deviant behaviour can be used to establish differences and norm-congruent behaviour can be used to establish similarities.
3. Norm-(in)congruent behaviour at the workplace as a strategy to achieve optimal distinctiveness

Engaging in norm-oriented behaviour at the workplace is a strategy for employees to achieve feelings of optimal distinctiveness. I argue that employees engage in deviant behaviour when they feel too similar and want to satisfy their need for uniqueness. On the other hand, people engage in norm-congruent behaviour when they feel too different and want to satisfy their need for belongingness. The goal of this chapter is to present the conceptual model of this research and its hypotheses. First, I outline my approach to normative behaviour and discuss what I mean by norms and norm-oriented behaviour. Next, I describe how people can differentiate themselves from others at the workplace by engaging in deviant behaviour, and, on the other hand, how people can assimilate by engaging in norm-congruent behaviour. Then, I introduce the needs for uniqueness and belongingness as mediators of these relationships. The chapter ends with job autonomy and organisational commitment as moderators of these relationships.

By using Optimal Distinctiveness Theory to explain why people engage in norm-congruent or deviant behaviour, I advance previous research and apply a broader focus on norm-oriented behaviour. This research provides an overarching framework that could explain both constructive and destructive deviance as well as norm-congruent behaviour and thereby not only contributes to each of the literature streams separately but also starts a shared, integrated literature stream. Each of the three constructs has so far been investigated separately in terms of causes and consequences. Reviews and meta-analyses on destructive (Berry et al., 2007; Dalal, 2005; Henschcovis et al., 2007; Lau et al., 2003; Nair & Bhatnagar, 2011; Schilpzand et al., 2016) and constructive deviance (Vadera et al., 2013) or both (Appelbaum et al., 2007), and norm-congruent behaviour (e.g. Organ, 2018; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, &
Bachrach, 2000) have focussed on identifying antecedents at the individual (e.g. personality, emotions, stress) and situational or organisational level (e.g. leadership, various kinds of justice). Even though norm-congruent and deviant behaviour are commonly understood as antithetical constructs (Bolino & Klotz, 2015), the reviews investigated deviant or norm-congruent behaviour only in an isolated fashion, overlooking the respective other side of the medal. However, there is an increasing interest in potentially shared antecedents of destructive deviance and norm-congruent behaviour (e.g. Dalal, 2005; Fox, Spector, Goh, Bruursema, & Kessler, 2012; Miao, Humphrey, & Qian, 2017).

3.1. **What is norm-oriented behaviour?**

To properly define what norm-congruent or deviant behaviour is, one has to establish what norms are. Since there is a variety of ways of looking at norms and norm-congruent behaviour, the approach depends on the researcher’s area and empirical background. This research adopts the normative approach to norms, which looks at how socially approved and accepted a particular behaviour is considered to be. A norm thus consists of the range of behaviours that a particular reference group generally agrees upon as socially approved and accepted. Hence, deviation means to engage in behaviour that is not socially accepted by the particular reference group. In the literature, this has been labelled as injunctive norm (Jacobson, Jacobson, & Hood, 2015) and normative deviance (Spreitzer & Sonenshein, 2004).

According to social identity theory (Tajfel & Turner, 1986) and self-categorization theory (Turner et al., 1987), group norms serve as guidelines for what kind of behaviour is considered acceptable or unacceptable. This claim has found support in a number of studies in organisational behaviour. Christensen et al. (2004) showed that people evaluate how socially acceptable a person’s behaviour is when they want to understand
whether a person is violating or conforming to norms. On the other hand, people who want to improve their standing in a group and increase their belongingness, follow behaviour that is the norm in the target group (Jacobson et al., 2015), even if that means engaging in destructive deviant behaviour (O’Fallon & Butterfield, 2011; Reynolds, Shoss, & Jundt, 2015). Following an injunctive norm might also enhance group cohesion (Ferguson & Barry, 2011) and group trust (Schabram, Robinson, & Cruz, 2018), irrespective of whether the injunctive norm prescribes destructive deviant behaviour or not (Correll & Park, 2005; Lickel et al., 2000).

Accordingly, deviant or norm-incongruent behaviour has been defined as “behavioral departures from norms of a reference group” (Warren, 2003, p. 622). This definition does not assign a value to the deviating behaviour per se, which is why both positive and negative deviation is possible. Hence, Warren (2003) distinguishes between two kinds of deviant behaviour: constructive (positively valued) and destructive (negatively valued). To differentiate one from the other, it is important to not only see the intention behind the behaviour, but also the outcome. For example, neglecting to follow instructions from a supervisor might be considered destructive deviance at first; however, if the employee is performing more efficiently or improving work procedures as a result, it would be considered constructive deviance. In my case, however, I am focussing on the intention behind the deviant behaviour. That means, are the intentions behind the deviant behaviour constructive or destructive? Norm-congruent behaviour, on the other hand, would be to just follow the instructions from a supervisor.

3.2. Differentiation through deviant behaviour

According to Optimal Distinctiveness Theory, people will be motivated to increase their differences if they feel too similar to others. Stepping out of line, i.e. deviant
behaviour at the workplace, could increase differences between oneself and others and thus be a strategy to re-establish optimal distinctiveness. When employees feel too similar to their colleagues, they can engage in behaviour that is not commonly accepted by the group and that other colleagues do not engage in, i.e. deviant behaviour. By not following the rules, regulations and norms that are generally adhered to in one’s group, i.e. doing what others do not do, people can make themselves more different.

Initial support comes from Kim and Park (2011), who found that people, who were made to be very similar to others on an online platform reported higher perceived deindividuation, which in turn led to less intentions to conform to group norms. What Kim and Park (2011) did not investigate is whether people who are very similar would also actually deviate rather than only show the intention to not conform to group norms. Imhoff and Erb (2008), however, found in a series of experiments that people will deviate from a norm and intentionally engage in behaviour that is opposed to a majority if they feel too similar. In the field of consumer behaviour, research has found that people will be more likely to purchase unique products that are not in line with the majority opinion if they are high in need for uniqueness (Song & Lee, 2013). People will, therefore, engage in deviant behaviour rather than acting according to group norms in order to make themselves more dissimilar (Jetten & Hornsey, 2014). On the basis of this experimental research, I argue that employees can engage in deviant behaviour at the workplace in order to increase their differences compared to their colleagues. In contrast to most prior research, I propose that deviant behaviour not only benefits or harms the individual or the organisation as the primary purpose but also serves a secondary, less obvious, purpose, in that it enables a person to feel optimally distinct. While research generally makes a distinction between constructive and destructive types of deviance (Warren, 2003), I argue that any deviant behaviour can be a way of
distinguishing oneself from others. Deviating from a norm means to do what people commonly do not do, irrespective of constructive or destructive deviance. That means, even if the intentions might differ (positive vs. negative), the initial behaviour can still be seen as norm-incongruent. In the following paragraphs, I briefly introduce the concepts of both destructive and constructive deviance and how they harm and benefit the organisation before I summarise the research findings and describe my hypothesis.

Destructive deviance has been defined as “behaviour that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both” (Robinson & Bennett, 1995, p. 556). That means there are various kinds of behaviours that are more or less severe and harmful to others and either target co-workers or the organisation (Bennett & Robinson, 2000). It can range from condescending and mean comments to others at the workplace to bullying and physically abusing others. The target, in this case, would be a co-worker or just any other person at one’s organisation. This is referred to as destructive interpersonal deviance. On the other hand, the organisation itself can also be a target of deviant behaviour. Here, behaviour can include, for instance, taking longer breaks than necessary, intentionally calling in sick even though one is not feeling poorly, or even stealing property. This kind of behaviour is then referred to as destructive organisational deviance. Destructive deviance has also been called counterproductive work behaviours (CWB) (e.g. Fox, Spector, & Miles, 2001), and might nowadays even include things, such as counterproductive sustainability behaviours (Dilchert, 2018). There is also a considerable overlap with concepts labelled as workplace incivility (Schilpzand et al., 2016) or workplace aggression (Heschcovis et al., 2007).

There is a significant amount of research collating the potentially detrimental consequences of destructive deviance not only for the individual but also for the
organisation itself. Almost every employee has either witnessed or was a target of workplace incivility, i.e. condescending and mean comments about a person or themselves (Porath & Pearson, 2013). This might lead to higher levels of stress and job turnover intentions, and lower levels of job performance and well-being (Schilpzand et al., 2016), even if incivility is only witnessed as a bystander (Miner-Rubino & Cortina, 2004; Totterdell, Henschcovis, Niven, Reich, & Stride, 2012). Destructive deviant behaviour also comes at a price for organisations, as the costs for one employee experiencing destructive interpersonal deviance are estimated to be as high as $14000 per annum because of issues like project delays and lowered job performance (Pearson & Porath, 2009). In fact, research shows that destructive deviant behaviour is related to worse business unit performance. Not only do supervisors report worse performance, but also even customer service times can be unnecessarily prolonged, as one study on a fast-food chain showed (Dunlop & Lee, 2004). Moreover, the overall costs for destructive deviance in organisations per annum are estimated to range between 6 and 200 billion dollars (Appelbaum et al., 2007; Bennett & Robinson, 2003; Henle, Giacalone, & Jurkiewicz, 2005).

As reviews show, the reasons as to why people engage in destructive deviant behaviour can be broadly grouped into two categories; individual and situational factors (Berry et al., 2007; Henschcovis et al., 2007; Nair & Bhatnagar, 2011). On the one hand, research has looked at the individual factors, such as personality (Berry et al., 2007; Colbert, Mount, Harter, Witt, & Barrick, 2004; Helle et al., 2018; Miller, 2015; Scherer, Baysinger, Zolynsky, & LeBreton, 2013), cognitive abilities (Dilchert, Ones, Davis, & Rostow, 2007) or moral disengagement (Christian & Ellis, 2013; Fida et al., 2015; Huang, Wellman, Ashford, Lee, & Wang, 2017; Moore, Detert, Treviño, Baker, & Mayer, 2012; Samnani, Salamon, & Singh, 2014; Welsh, Ordóñez, Snyder, & Christian,
that could influence why some people show deviant behaviour while others do not. On the other hand, there are situational or environmental influences, such as types of leadership (Mayer, Thau, Workman, Dijke, & Cremer, 2012; Schyns & Schilling, 2013), ostracism (Hitlan & Noel, 2009; Kouchaki & Wareham, 2015; Robinson, O’Reilly, & Wang, 2013) or various kinds of justice (Aquino, Lewis, & Bradfield, 1999) that either support or inhibit workplace deviance. The optimal distinctiveness approach offers a combination of these factors. It argues that deviance could be driven by the individual’s perceived similarity/difference with others in their environment.

Constructive deviance, on the other hand, has been defined as “behaviour that violates significant organisational norms and in doing so contributes to the well-being of an organization, its members, or both” (Galperin, 2003, p. 156) and thus very closely follows the definition of destructive deviance. Contrary to destructive deviance, the focus here is on eventually helping one’s organisation and supporting one’s colleagues, instead of harming them, i.e. departing from a norm is done in an honourable way (Spreitzer & Sonenshein, 2004). While my research focusses on the intention behind the behaviour (as what makes the deviant behaviour constructive or destructive), the definition also suggests that the outcome of the deviant behaviour could be beneficial or harmful. This is also reflected in the public perception, as people who engage in creative unethical behaviour are seen as more likeable as people who engage in destructive unethical behaviour (Wiltermuth, Vincent, & Gino, 2017). Again, there are various kinds of behaviours that can be considered constructive deviance as Vadera et al. (2013) and Warren (2003) show in their reviews. These include whistle-blowing, expressing voice, counter-role and extra-role behaviour, taking charge and creative performance. What these behaviours have in common, according to Vadera et al. (2013), is that they meet the requirements of being considered as constructive deviance;
deviating from reference group norms, being of good intentions and being beneficial for the reference group. Closely related to constructive deviance is the concept of pro-social rule-breaking, although it describes behaviour that goes against formal rules or policies rather than a norm (Gino & Pierce, 2010; Morrison, 2006) and unethical pro-organizational behaviour (Umphress, Bingham, & Mitchell, 2010).

As opposed to destructive deviant behaviour, the idea of constructive deviance is fairly new (Spreitzer & Sonenshein, 2003; Warren, 2003), and consequently, there is a significantly lower amount of research on its consequences and antecedents (Vadera et al., 2013). Having said that, Spreitzer and Sonenshein (2003) argue that people who engage in positive deviance are likely to have better well-being and more high-quality relationships because of helping others with their actions. In one experiment, using a vignette, Whiting, Podsakoff and Pierce (2008) showed that engaging in voice behaviour had a positive effect on performance appraisal. It might also bring benefits to others when unfair treatment or ineffective work practises are made transparent and are changed as a result (Morrison, 2011).

Vadera and colleagues (2013) reviewed the literature and identified three reasons why people engage in constructive deviance. First, employees might be intrinsically motivated (Spreitzer & Sonenshein, 2003) because of their creative cognitive styles and be encouraged through transformational leadership. That means people might differ in their natural tendency towards innovative and out of the box thinking and thus some might be more willing to engage in constructive deviant behaviour than others. Second, employees might also feel obligated to reciprocate. When employees perceive their environment as friendly, their supervisors as supportive and generally feel very good about their organisation, they might be inclined to give something back to the organisation, i.e. reciprocate through constructive deviance that is supposed to be
beneficial. Finally, employees might feel psychologically empowered (Spreitzer, 1995) which means that the combination of particular situational variables such as transformational leadership (Spreitzer & Sonenshein, 2003) and individual variables such as having a proactive personality and showing more risk-taking behaviour might make people feel secure enough and empowered to raise their voice and challenge organisational norms.

To summarise, workplace deviance, in general, is a behaviour that departs from the organisational norm and its outcomes can be destructive or constructive. Also, the specific definitions for both, destructive and constructive deviance, are very close. In both cases the behaviour is voluntary and “violates significant organizational norms”, however constructive deviance has good intentions and contributes to the well-being of the organisation (Galperin, 2003) and destructive deviance has bad intentions and threatens the well-being of the organisation (Robinson & Bennett, 1995). I go beyond most prior research and propose that deviant behaviour not only benefits or harms the individual or the organisation as the primary purpose but also serves the secondary purpose of enabling a person feeling optimally distinct. In any case, all of the cited research investigated why and under which circumstances people are likely to engage in destructive or constructive deviant behaviour that others do commonly not engage in. Going beyond that, I argue that people who feel too similar can engage in behaviour that is incongruent with the norms at the workplace in order to differentiate themselves from others. Thus, I hypothesise that feeling too similar is positively related to deviant behaviour:

**Hypothesis 1.** Feeling too similar (compared to others in the workplace) is positively related to deviant behaviour, i.e. the more people feel too similar, the more likely they are to engage in deviant behaviour (both destructive and constructive).
3.3. Assimilation through norm-congruent behaviour

According to Optimal Distinctiveness Theory, people will be motivated to increase their similarities if they feel too different compared to others. I argue that, at the workplace, norm-congruent behaviour is used to establish similarities. When employees feel too different compared to their colleagues, they can engage in behaviour that is accepted by the group and that other colleagues commonly engage in, i.e. norm-congruent behaviour. By following the rules, regulations and norms that are generally adhered to in one’s group, i.e. doing what others do, people can make themselves more similar.

In line with Shore et al. (2011), I argue that when people feel dissimilar or are in a minority position, they tend to adjust their behaviour to that of other peoples in order to fit in. This claim has found support in a number of studies. When people feel too different, not only are they then motivated to describe or self-stereotype themselves as similar compared to others (Markus & Kunda, 1986; Pickett, Bonner, et al., 2002), but they could also change their actual behaviour. Most obviously, during organisational socialisation, newcomers are inclined to engage in behaviours to increase their belongingness (Kammeyer-Mueller, Wanberg, Rubenstein, & Song, 2013; Nifadkar & Bauer, 2016). Ely (1995), for example, found that female attorneys in a male-oriented work environment – thus being in a minority situation – were adopting more masculine behaviours to match the stereotype of a successful attorney. Being in a perceived minority position even makes people adopt so-called facades of conformity (Hewlin, 2003), that is, suppressing unique and personal characteristics and pretending to embrace organisational norms, even though maintaining these facades goes along with negative consequences, such as emotional exhaustion (Hewlin, 2009). Put together, I
argue that feeling dissimilar can lead to behaviour that is congruent with the norms in
the workplace.

Norm-congruent behaviour, in contrast to constructive and destructive deviance,
means compliance with standards, rules and norms that one’s reference group
demonstrates. Norm-congruent behaviour could thus be either harmful or beneficial,
depending on what kind of behaviour one’s reference group promotes (Steinel et al.,
2010). However, in this research, it means to follow rather than to deviate from
injunctive norms, i.e. engage in socially approved behaviours. Here, no judgment is
made to what extent the behaviour threatens or contributes to the well-being of the
individual or the organisation. Norm-congruent behaviour has been operationalised in
different ways, using constructs like Organizational Citizenship Behaviour (OCB;
Smith, Organ, & Near, 1983) or conformity (Miron, Erez, & Naveh, 2004).

Put together, I argue that the feeling of being very dissimilar to others would be
responded to by showing behaviour that is congruent with the norms at the workplace. I
hypothesise that feeling too different is positively related to norm-congruent behaviour:

**Hypothesis 2.** Feeling too different compared to others in the workplace is
positively related to norm-congruent behaviour, i.e. the more people feel too
different, the more likely they are to engage in norm-congruent behaviour

3.4. **Mediating effect of needs**

Optimal Distinctiveness is a desirable state because it satisfies the essential needs
for uniqueness and belongingness. When people feel optimally distinct, i.e. neither too
similar nor too different, both needs are satisfied. In that case, people are comfortable
with both their level of uniqueness and belongingness. In the case of sub-optimal
distinctiveness, however, one or both of the needs might be dissatisfied and, as a result,
people would be motivated to act upon their needs. According to uniqueness theory
(Snyder & Fromkin, 1980), people strive to maintain a certain amount of uniqueness. That means, if people feel too similar to others, their need for uniqueness will be stronger and they will be motivated to differentiate themselves from others. As a result, employees can engage in deviant behaviour in order to differentiate themselves and to satisfy their need for uniqueness.

On the other hand, belongingness theory (Baumeister & Leary, 1995) argues that people do not want to be too different compared to others. That means, if people feel too different compared to others, their need for belongingness will be stronger and they will be motivated to assimilate themselves. Thus, employees can engage in norm-congruent behaviour to assimilate themselves and satisfy their need for belongingness.

Needs are considered powerful motivators (Ryan & Deci, 2000) when they are dissatisfied. Thus, these dissatisfied needs will, in turn, motivate people to engage in behaviour that satisfies the needs, i.e. deviant and norm-congruent behaviour, respectively. Hence, I also propose two mediating pathways. I argue that the needs for uniqueness and belongingness are stronger when people do not feel optimally distinct (too similar, or too different) and, consequently, mediate the relationship between feeling sub-optimally distinct and deviant and norm-congruent behaviour.

Both the needs for uniqueness and belongingness are essential as they have been associated with positive outcomes. The satisfied needs for uniqueness and belongingness have been positively related to positive affect (Gere & MacDonald, 2010; Sheldon & Bettencourt, 2002) and well-being (Rego & Pina e Cunha, 2012; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Seppala, Rossomando, & Doty, 2013), particularly because they are important for self-enhancement (Rios Morrison & Wheeler, 2010; Vignoles et al., 2000), irrespective of age, gender and culture (Becker et
al., 2012; Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006). The feeling of belongingness to a group has also been associated with fewer depressive symptoms (Cockshaw, Shochet, & Obst, 2013), fewer burnout symptoms (Fernet, Gagne, & Austin, 2010) and higher job satisfaction (Skaalvik & Skaalvik, 2011). Figure 1 shows the theoretical model of my research. I next describe how the need for uniqueness mediates the relationship between feeling too similar and deviant behaviour and how the need for belongingness mediates the relationship between feeling too different and norm-congruent behaviour.

3.4.1. Need for uniqueness and deviant behaviour

People are motivated to differentiate themselves from others in order to satisfy their need for uniqueness. Snyder and Fromkin (1980) argued that people generally strive to be distinct and different from others to a certain extent. The authors further propose that to satisfy the need for uniqueness, people want to be neither overly similar nor overly different from others, which is why a moderate level of uniqueness is generally valued and accepted the most. According to ODT (Brewer, 1991; Leonardelli et al., 2010) and the need for uniqueness (Snyder & Fromkin, 1980), feeling too similar to others should be an uncomfortable state, in that people think that there are barely any unique characteristics about themselves that could distinguish them from others. As a result, people’s need for uniqueness should be stronger and thus they are motivated to differentiate themselves from others. Hence, I hypothesise that feeling too similar is positively related to the need for uniqueness.

Hypothesis 3a. Feeling too similar is positively related to the need for uniqueness, i.e. the more people feel too similar, the stronger is their need for uniqueness.
According to Snyder and Fromkin (1980), people can satisfy their need for uniqueness with behaviour that distinguishes them from others. I argue that people can engage in deviant behaviours to satisfy their need for uniqueness, i.e. not following organisational norms and rules. In contrast to previous experimental research, I investigate how the need for uniqueness relates to deviant behaviour at the workplace. To the best of my knowledge, there is no research as of yet that has applied the need for uniqueness to the workplace. Lab studies, however, provide initial support that deviance can be a consequence of a strong need for uniqueness. When made to feel too similar to other people (feeling de-individuated), people try to focus on their individuality by adhering to minority opinions (Zhu & Argo, 2013) and intentionally rejecting a majority opinion (Imhoff & Erb, 2008) or, at least, intend to disagree with other group members (Kim & Park, 2011). People can also signal their uniqueness with the purchase of unique products, different in colour or other features, that are not in line with the majority opinion (Chan et al., 2012; Song & Lee, 2013; Tian et al., 2001). Put together, experimental studies have shown that the need for uniqueness can be a predictor of deviant behaviour (Jetten & Hornsey, 2014). That also implies that people can engage in deviant behaviour at the workplace in order to satisfy their need for uniqueness.

However, uniqueness does not always mean that people automatically have to engage in counterproductive behaviour. Studies in organisational behaviour indicate that people could also engage in creative and innovative behaviours in order to differentiate themselves from others (Burns, 2007; Dollinger, 2003; Goncalo & Staw, 2006; Janssen & Huang, 2008). That means, both destructive and constructive deviance could be a way of employees to satisfy their need for uniqueness. To sum up, I hypothesise that feeling too similar will positively affect the need for uniqueness,
which, in turn, will have a positive effect on deviant behaviours (both constructive and destructive):

**Hypothesis 3b.** The need for uniqueness is positively related to deviant behaviour.

**Hypothesis 3c.** The positive relationship between feeling too similar and deviant behaviour is mediated by the need for uniqueness.

### 3.4.2. Need to belong and conforming behaviour

People are also motivated to assimilate themselves to others in order to satisfy their need for belongingness. The need to belong proposes that people have the need to form strong and stable relationships with others (Baumeister & Leary, 1995). This need is so strong that people even accept a personal disadvantage to remain a member of a valued group (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Mead, Baumeister, Stillman, Rawn, & Vohs, 2011; Thau, Derfler-Rozin, Pitesa, Mitchell, & Pillutla, 2015). These relationships with others are generally supposed to be free from conflict and negative affect but shaped by mutual “affective concern” for each other (Baumeister & Leary, 1995, p. 500). While the original theory claims that a sense of belonging is generally yielded by friends, family and close relationships, current research shows that even minimal social interaction with a stranger can meet this need (Sandstrom & Dunn, 2014b, 2014a). This implies that co-workers who are not necessarily friends, but more than a stranger, could also elicit a feeling of belonging for each other. Indeed, research shows that co-workers can satisfy the need to belong and ultimately contribute to subjective well-being and job satisfaction (Reis et al., 2000). Further support comes from the idea of latent benefits at work (Jahoda, 1981, 1982; Warr, 1987) which holds that social interactions at the workplace are an important factor in terms of happiness and well-being.
Being similar to each other is a key contributor to feeling belongingness and I argue that, if people feel too different, they feel like they belong less. Belongingness theory argues that “some degree of similarity seems to be essential” for affiliation and belonging (Murray, 2007, p. 175). Individuals can build connections to others by identifying what they have in common with others, e.g. shared interests and common goals (Bartel & Dutton, 2001). Through these connections and similarities, people are more likely to interact with each other than people who are dissimilar (Easterbrook & Vignoles, 2013; McPherson, Smith-Lovin, & Cook, 2001) and they communicate more effectively (Greenaway, Wright, Willingham, Reynolds, & Haslam, 2015). Support comes from Hehman, Flake, & Freeman's (2018) study showing that the faces of group members share physical resemblance and another study that has shown that people like to sit next to people who are similar to them (Mackinnon, Jordan, & Wilson, 2011).

That means, feeling similar to others should satisfy the need for belongingness, whereas when people feel too different compared to others, their need for belongingness should be stronger. Initial support comes from a study that showed that people who are different are more likely to feel less belongingness and attachment to a group (Kim, Ormiston, Easterbrook, & Vignoles, 2017). Being reminded of how different one is, is likely to lead to a feeling of non-acceptance and non-belonging (Clair, Humberd, Caruso, & Roberts, 2012). As a result, people who feel very different have a stronger need for belongingness (Hohman et al., 2017). In sum, I argue that people who feel too different have a stronger need to belong. Hence, I hypothesise that feeling too different is positively related to the need for belongingness.

**Hypothesis 4a.** Feeling too different is positively related to the need for belongingness, i.e. the more people feel too different, the stronger is their need for belongingness.
To satisfy the need to belong, people will engage in norm-congruent behaviour. Norm-congruent behaviour means to do things according to the organisational rules and norms, i.e. to do what people would commonly do. By behaving in line with others, people can improve how they fit with the group and thus increase their belongingness to a group. Doing things in a similar fashion to others makes one more of a prototypical group member. As a result, people are then less distinguishable from other members of the group. Support for this idea comes mostly from experimental studies. Two old experiments show that conformity leads to belonging (Deutsch & Gerard, 1955; Dittes & Kelley, 1956). More recent research suggests that people will act in a norm-congruent manner if they want to restore belongingness and are interested in re-inclusion (Gerber & Wheeler, 2009; Robinson, O’Reilly, & Wang, 2013). In these situations, conforming behaviour is expressed in order to re-establish a link to a specific group so that people can get accepted again and thus feel increased belongingness to that very group (Derfler-Rozin, Pillutla, & Thau, 2010; Feinberg, Willer, & Schultz, 2014; Maner, DeWall, Baumeister, & Schaller, 2007; Williams, Cheung, & Choi, 2000). People even show mimicking behaviour as an automatic response because that makes them feel closer to another person (Lakin & Chartrand, 2003; Lakin, Chartrand, & Arkin, 2008) and show increased compliance (Carter-Sowell, Chen, & Williams, 2008).

There is also initial support that, in the workplace, the need to belong seems to be positively related to norm-congruent behaviour such as organisational citizenship behaviour. Jacobson, Jacobson and Hood (2015) showed that employees high on the need to belong are more likely to adhere particularly to injunctive norms and engage in OCB. However, Jacobson et al (2015) base their conclusion on cross-sectional data only, so they cannot make any causal inferences. In sum, I hypothesise that feeling too
different will positively affect the need for belonging, which, in turn, will have a positive effect on norm-congruent behaviour.

**Hypothesis 4b.** The need for belongingness is positively related to norm-congruent behaviour.

**Hypothesis 4c.** The positive relationship between feeling too different and norm-congruent behaviour is mediated by the need for belongingness.

### 3.5. Moderating effects

I argue that optimal distinctiveness theory can help explain why people engage in either norm-congruent or deviant behaviour at the workplace. When people feel too similar, they can engage in deviant behaviour in order to satisfy their need for uniqueness. On the other hand, when people feel too different, they can engage in norm-congruent behaviour in order to satisfy their need for belongingness. Utilising ODT, this research is thus applying a social psychological mechanism to explain a workplace phenomenon. It is worth noting, however, that theories designed by means of laboratory experiments might lack external validity, and thereby are limited in terms of how much variance they can explain or predict in a real-world scenario. Optimal distinctiveness theory constitutes no exemption. Thus, I include contextual factors on an interpersonal and a job level, which could influence the relationship between how similar/different people feel compared to their colleagues and the norm-(in)congruent behaviour they engage in. On an interpersonal level, I propose that people will be more likely to engage in norm-congruent behaviour as a result of feeling too different (or a strong need for belongingness) when they show high levels of organisational commitment. On a job level, I propose that people will be more likely to engage in deviant behaviour as a result of feeling too similar (or a strong need for uniqueness) when they perceive either high or low levels of job autonomy. In sum, I propose that organisational commitment
on an interpersonal level and job autonomy on a job level will moderate the relationships between how people feel, their needs and norm-(in)congruent behaviour. In the following, I define the contextual variables one after the other and outline the proposed moderating effects. The conceptual model of this research can be found in Figure 1.

### 3.5.1. Autonomy

Job autonomy has been generally defined as “discretion over how the job is performed” (Thompson & Prottas, 2005, p. 115) and is related to positive outcomes such as higher job satisfaction, less turnover intentions, less stress (Thompson & Prottas, 2005), greater well-being and higher work engagement (Baard, Deci, & Ryan, 2004). Generally speaking, job autonomy includes the freedom to schedule one’s work, make decisions relevant to one’s job and also decide on the methods to use for one’s work (Morgeson & Humphrey, 2006). Given these aspects, job autonomy as a concept can be considered part of the situational strength framework (Meyer, Dalal, & Hermida, 2010), which argues that one’s environment can give “implicit or explicit cues” on the “desirability of potential behaviors” (p. 122). Meyer and colleagues (2010) further argue that when either of the three components of autonomy is reduced, it implies that external forces are limiting one’s freedom to make decisions and act. The concept of job autonomy then also includes how constrained people are in doing their job, i.e. to what extent external forces influence one’s behavioural options (Meyer et al., 2014).

A strong need for uniqueness will motivate individuals to engage in deviant behaviour. However, when their jobs allow them a moderate amount of autonomy, this should be sufficient to give people the opportunity to express their individuality through their working styles without resorting to deviant behaviours. Moderate job autonomy may mean that there is sufficient scope for self-expression while some restrictions on
what constitutes expected behaviour might still be in place. Thus, moderate job autonomy weakens the effect of the need for uniqueness on deviant behaviour. On the other hand, high and low job autonomy will amplify the effect of the need for uniqueness on deviant behaviour. High job autonomy makes opportunities for deviant behaviour particularly available, as there are less formal restrictions in terms of expected behaviour in place. As a result, this encourages individuals with a strong need for uniqueness to engage in deviant behaviour as a way of establishing differences.

There is research suggesting that high job autonomy provides opportunities for employees to engage in deviant behaviour (Spreitzer, 1995) or break organisational rules (Vardaman, Gondo, & Allen, 2014). Previous research also demonstrates that high job autonomy could not only facilitate destructive but also constructive deviance (Harold & Holtz, 2015; Lu, Brockner, Vardi, & Weitz, 2017; Morrison, 2006) as a way of satisfying one’s need for uniqueness or feeling too similar. Low job autonomy, on the other hand, might frustrate people with a strong need for uniqueness due to the lack of opportunities for self-expression. As a result, this will increase deviant behaviour. That means low autonomy will also strengthen the relationship between the need for uniqueness and deviant behaviour. Lawrence and Robinson (2007) stipulated that deviant behaviour as a response to low autonomy could be considered a form of resistance. By showing deviance, employees have the chance to re-establish a feeling of control and autonomy in their daily work, which could also help them to establish differentiation. Research suggests, that in environments with high organisational constraints (i.e. low autonomy), people are more likely to engage in destructive deviant behaviour (Ambrose, Seabright, & Schminke, 2002; Clark & Walsh, 2016; O’Connor, Stone, Walker, & Jackson, 2017).
The same reasoning also applies to the relationship between feeling too similar and deviant behaviour. When employees perceive high levels of job autonomy, they have more opportunities for self-expression and fewer restrictions that constrain one’s way of working. Thus, people who feel too similar are more likely to engage in deviant behaviour to establish a feeling of optimal distinctiveness. Low job autonomy, however, restricts people in their opportunities for self-expression when they feel too similar. As a result, they will be more likely to engage in deviant behaviour, maybe even as a form of resistance. Thus, I hypothesise that when employees perceive high or low job autonomy, there is a stronger relationship between feeling too similar and deviant behaviour as well as between the need for uniqueness and deviant behaviour.

**Hypothesis 5a:** The positive relationship between need for uniqueness and deviant behaviour will be moderated by job autonomy in such way that the relationship will be stronger if employees perceive they have low or high job autonomy and that the relationship will be weaker if employees perceive they have moderate job autonomy.

**Hypothesis 5b:** The positive relationship between feeling too similar and deviant behaviour will be moderated by job autonomy in such way that the relationship will be stronger if employees perceive they have low or high job autonomy and that the relationship will be weaker if employees perceive they have moderate job autonomy.

### 3.5.2. Organisational Commitment

Meyer and Allen (1991) introduced organisational commitment as a concept that encompasses three components: affective, normative and continuance commitment. Affective commitment describes how involved and emotionally attached employees feel to their organisation. Normative commitment refers to the obligation of continuing work in order to reciprocate and give something back in return. Continuance commitment refers to how much employees feel they need to stay within the organisation because
“of the costs that they feel are associated with leaving (e.g. investments and/or lack of attractive alternatives)” (Meyer & Allen, 1984, p. 375).

On an interpersonal level, I propose that an employee’s level of organisational commitment has a positive effect on the relationship between feeling too different and norm-congruent behaviour. When people feel too different compared to their colleagues, they will be motivated to engage in norm-congruent behaviours in order to establish more similarities. People, who are strongly committed to their organisations highly value their employer and have the organisations’ best interests at heart. This could be the case because they are either emotionally attached to their organisation (affective commitment) or of how much they want to stay with their organisation (continuance commitment). As a result, strongly committed people are particularly interested in following the norms and rules of their organisations in order to not hurt or upset the organisation. Thus strong organisational commitment will strengthen the relationship between feeling too different and norm-congruent behaviour. On the other hand, when people show low levels of organisational commitment, they are less emotionally invested and attached to their organisation. As a result, they are less interested in following the norms and rules of their organisation. Thus weak organisational commitment will weaken the relationship between feeling too similar and norm-congruent behaviour.

Alternatively, if people have a high need for belonging, norm-congruent behaviour could be a way of re-connecting with the organisation, particularly when the employee is emotionally attached to the organisation. In a theoretical paper, Robinson et al. (2013) argue that, as a result of feeling ostracised at work (a situation in which the need for belongingness is activated), people will be more inclined to react in a pro-social manner (norm-congruent) when they feel highly attached to their team and/or organisation. In
sum, I argue that both affective and continuance commitment will moderate the relationships between the need for belongingness and norm-congruent behaviour and between feeling too different and norm-congruent behaviour. I hypothesise that when employees are highly committed to their organisation, there is a stronger relationship between feeling too different and norm-congruent behaviour as well as between the need for belongingness and norm-congruent behaviour.

**Hypothesis 6a**: The positive relationship between the need for belongingness and norm-congruent behaviour will be moderated by organisational commitment (affective and continuance) in such way that the relationship will be stronger if employees are strongly committed to their organisation and that the relationship will be weaker if employees are weakly committed to their organisation.

**Hypothesis 6b**: The positive relationship between feeling too different and norm-congruent behaviour will be moderated by organisational commitment (affective and continuance) in such way that the relationship will be stronger if employees are strongly committed to their organisation and that the relationship will be weaker if employees are weakly committed to their organisation.
Figure 1. Conceptual model of this PhD
4. Research Design and Methods

4.1. Philosophical Assumptions

This research is informed by post-positivism. Post-positivism is based on the notion that theory can only be falsified but never be empirically verified (Popper, 1963) and thus represents the subsequent development of the positivist idea (Bem & Looren de Jong, 2006).

In terms of its epistemological position, post-positivism takes a rationalist view, which means that knowledge is gained through three different ways: a) it is innate, b) it is acquired through thinking and c) it is shaped by experience. As a consequence, a deductive approach, i.e. theory-driven, is to be taken. This implies that a theoretical background is crucial in order to not only identify gaps in the literature but also to derive hypothesis based on what the theory would predict. Empirical research shapes knowledge through thinking about theories and their implications as well as predictions for certain phenomena (hypotheses) and eventually testing these hypotheses and thus gaining experience. In terms of my ontological positions, I take a pragmatist realist stance, which means that there is an objective truth, but the way that the truth is measured depends on the tools we use. Scientific knowledge, i.e. past research, however, will help me to find the appropriate measures and justify its usage (Bem & Looren de Jong, 2006).

As for this PhD, this means that previous experimental social psychological research has established a link between the needs for uniqueness and belongingness and norm-(in)congruent behaviour. This idea has not yet been applied to an organisational environment which illustrates a gap in the literature on applied psychology. Utilising workplace deviance and norm-congruency as an organisational phenomenon, the established theoretical background would allow for predictions on the presence and
absence of deviant behaviour at the workplace. The hypotheses, that are subsequently derived, cover under which circumstances the needs have a stronger or weaker effect on workplace deviance. The methods used in these studies resemble a pragmatist approach insofar as they represent a combination of widely acknowledged scales and research designs as well as recommended future research (in previously published empirical articles).

4.2. **Empirical strategy / Overview of studies**

The goal of this research is to apply ODT, a theory derived from experimental social psychology and apply it to explain a workplace phenomenon. I choose a quantitative approach to collect a large amount of data across different populations in order to be more likely to draw generalizable conclusions. To further strengthen the generalizability of my findings, I also aim to investigate the consequences of feeling too similar and too different in both a controlled setting as well as in a natural setting. Thus, I can establish a causal relationship between feeling sub-optimally distinct and norm-(in)congruent behaviour as well as provide evidence of people feeling too similar or too different in a natural environment, i.e. the workplace. As a result, I conducted experiments with a student sample as well as a two-wave survey study with a working population.

Through experiments, I am gaining “knowledge based on manipulating or controlling the phenomenon” (Chatman & Flynn, 2005, p. 435). Thus, I can make stronger inferences about the causal relationships between the phenomenon (feeling too similar or too different) and its effect on workplace behaviours (Aguinis & Vandenberg, 2014). Through an additional data collection with working participants, I am testing to what extent feeling too similar or too different at the workplace affects deviant and norm-congruent behaviours. This provides me with a test of whether the concept of optimal distinctiveness can be applied to the workplace. I can then also determine how
prevalent that phenomenon is and identify whether certain job characteristics (e.g. job autonomy) or personal attitudes (e.g. organisational commitment) influence the phenomenon.

A beneficial side-effect of this research approach is theory development and bridging the gap between the social psychology and organisational behaviour literatures. By applying ODT to explain a workplace phenomenon, I am able to refine the theory by potentially showing its boundaries or limitations (Edwards, 2010) and thereby provide meaningful theory development (Aguinis & Vandenberg, 2014). At the same time, I am able to effectively connect social psychological research with the field of organisational behaviour. Given the recent trend, where the fields of psychology and organisational behaviour seem to be moving away from each other (Aguinis et al., 2014), it is important to reconnect the two fields and show how social psychological research can inform and shape research in organisational behaviour (Rast et al., 2016). As Aguinis et al. (2014) note in their study, because more and more organisational psychologists move to business schools, research in organisational behaviour runs the risk of losing its psychological grounding. They further state that there is now “less communication with other fields of psychology that could introduce new theories and methods” (Aguinis et al., 2014, p. 293). In the leading article of a special issue of the Journal of Applied Social Psychology, Rast et al. (2016) therefore argue to re-introduce theories from social psychology and apply them to an organisational context in order to bridge that increasing gap. In sum, this multimethod approach not only increases the strength of insights and validity of the empirical findings (Chatman & Flynn, 2005) but also allows me to understand and investigate the interplay between the variables in a highly controlled setting (experiment) and in an organisational context (survey study). The two experiments provide high internal validity, whereas the survey study provides high
external validity and the combination of experiments and survey study significantly increases the validity and rigour of this research.

The goal of the experiments (Chapter 5) is to establish a causal relationship between how similar or different people feel and their subsequent behaviour. Thus, feelings of similarity and difference were manipulated and then, people’s needs and behavioural intentions were measured. A convenience sample of University students was used to collect a large amount of data in a reasonably short amount of time. One experiment was designed to investigate the effect of feeling too similar or too different on deviant and norm-congruent behaviour (Hypotheses 1 & 2), as well as the effect on the needs for uniqueness and belongingness (Hypotheses 3a & 4a). By manipulating how similar or different people feel compared to their reference group, I am able to establish and test causality, i.e. the causal relationship between feeling too similar/different and norm-(in)congruent behaviour as well as the needs for uniqueness and belongingness. In the first experiment, I used two different manipulation techniques to see whether similar effects can be found irrespective of the manipulation. This allows me to make a stronger causal argument about the nature of the relationships since I can replicate the findings across different experimental manipulations. Thus, it cannot be argued that significant findings in one condition are just based on chance. Additionally, a second experiment was designed to investigate the effect of the needs for uniqueness and belongingness on deviant and norm-congruent behaviour (Hypotheses 3b & 4b). Chapter 5 presents the experiments, their manipulations, methodology, procedure and results as well as an overall discussion of the findings. This chapter ends by addressing the insights gained from the experiments, as well as lessons learnt and how the experiments informed the survey study.
I also conducted a two-wave online survey with working participants to investigate the effects of being sub-optimally distinct in an organisational context and provide evidence of a naturally occurring phenomenon. The design and implementation of the survey study were informed by the results and analysis of the two experiments. The knowledge gained from the experiments was applied to the design of the online study. Chapter 6 introduces the survey study with working participants and its methodology, results and discussion. The survey study builds upon the insights gained from the experiments and tries to replicate the findings with a sample of employees. That means the hypothesis tested in the experiments are tested again in the survey study (Hypotheses 1, 2, 3a & 4a). However, the survey study also tests the hypothesised effects of the needs for uniqueness and belongingness on deviant and norm-congruent behaviour (Hypotheses 3b & 4b) as well as the mediating effects of the needs themselves (Hypotheses 3c & 4c). Additionally, the moderating effect of job autonomy (Hypotheses 5a & b) and organisational commitment (Hypotheses 6a & b) are investigated.
5. Experiments

This research includes two different experiments. The first experiment was designed to test whether how similar or different people feel triggers their needs for uniqueness and belongingness as well as norm-congruent and deviant behaviour. The second experiment was designed to test whether the needs for uniqueness and belongingness affect deviant and norm-congruent behaviour. In this subsection, I outline how the two experiments and their manipulations are all based on previous research and which hypotheses they were designed to test.

The first experiment used two different manipulation techniques; a bogus feedback condition and a memory recollection condition. In the bogus feedback manipulation people received bogus feedback on a short personality scale they filled out (Imhoff & Erb, 2008; Maner et al., 2007 (study 2); Pickett, Bonner, et al., 2002 (studies 1 & 3); Slotter et al., 2014 (study 3); Snyder & Endelman, 1979). In the recollection of memories manipulation, people were asked to think about a moment when they felt either extremely similar or extremely different and describe this situation in a couple of sentences (Pickett, Silver, et al., 2002; Rios & Chen, 2014 [study 1]). These two manipulation techniques not only differ in their approach to how the feeling of similarity or difference is induced but also in terms of whether the comparison attribute is specified. Whereas the first technique specifies that people are similar or different compared to others in terms of their personality, the second technique leaves the comparison attribute up to the imagination of the research participant. By combining both experimental manipulation techniques in one experiment, I can also investigate which of the techniques elicits a stronger effect. Thus, I can understand whether comparison attributes need to be specified or not to affect people’s needs for uniqueness and belongingness. To sum up, the first experiment was designed to test hypotheses 1
and 2, stating that feeling too similar will be positively related to deviant behaviour, whereas feeling too different will be positively related to norm-congruent behaviour. The first experiment also tested hypotheses 3a and 4a, stating that feeling too similar is positively related to the need for uniqueness whereas feeling too different is positively related to the need for belongingness.

The second experiment used a vignette manipulation, in that people read a vignette and tried to put themselves in the situation which was described to them (Hitlan, Kelly, Schepman, Schneider, & Zárate, 2006; Schuh et al., 2016; Wan, Xu Jing, & Ding, 2014). This vignette provided the participants with situations, in which their needs for uniqueness and belongingness were strong or weak. This manipulation technique was used to affect people’s actual needs for uniqueness and belongingness. Experiment 2 was designed to test hypotheses 3b and 4b, stating that the need for uniqueness is positively related to deviant behaviour, whereas the need for belongingness is positively related to norm-congruent behaviour.

Participants were invited to take part in an online questionnaire in which they were randomly allocated to one of the two experimental manipulations. Thus, data collection for all experiments took place using the same online survey. See Appendix A for the survey as well as the experimental manipulations.

In the following two subchapters, I present the methodologies and results for each of the experiments. As the data for all experiments were collected at the same time using the same online questionnaire, including the same measures, I outline the measures only once in the first experiment and then refer back to them. Each experiment is discussed separately, but I conclude this chapter with a discussion of the general findings and how the results of the experiments informed the online study.
5.1. Experiment 1

5.1.1. Sample

Participants were invited to take part in an online questionnaire in which they were randomly allocated to one of the two experimental manipulations. 297 University of Sheffield students were randomly allocated to the first experiment. 19 participants were excluded because they did not fit the age requirements outlined in the description of the study (older than 35 years old). Participants were asked what they thought the study was about. If they realised that the goal of the experimental manipulation was to make them feel a certain way and then investigate the effect on the need and behaviour variables, I removed their data. As a result, 13 participants were excluded because they expressed suspicion about the true purpose of the study. This left me with a final sample of 265, of which 82 were men and 183 were female students, with a mean age of 21.93 years (SD = 2.99). Numbers across the different conditions were almost evenly distributed: Bogus feedback condition 137 (70 overly similar and 67 overly different); Memory recollection condition 128 (64 overly similar and 67 overly different).

5.1.2. Procedure

Participants were invited to take part in an online survey about personality and emotions and their effect on individual behaviour. An e-mail with the survey link was sent out to students at the University of Sheffield. In order to increase participation, Amazon vouchers (worth each GBP 20) were used as a prize in a raffle. The introduction page included information about how anonymity and confidentiality were ensured and that participants could quit the survey at any point without any negative consequences. Only those who gave consent were able to take part in the survey. Whoever did not give consent was redirected to the end of the survey and thanked for his or her interest. After the introduction page, people were randomly allocated to one of three experimental manipulations of uniqueness and belongingness needs. Thus, this
introduction page was the same for all three experiments and is not mentioned again hereafter.

Before conducting the experiments, I had to secure ethical approval from Sheffield University Management School. This meant to prepare a document which included information on the manipulation techniques, the sample, how the participants are recruited, rewarded and, in detail, the kind of tasks (measures, scales) that need to be done. This document was then undergoing a thorough review by two independent and anonymous researchers and amended until it fulfilled all the reviewer’s requirements. In this document, I also had to outline potential ethical concerns there might be with the experiments and how I tried to mitigate them. The bogus feedback could potentially be upsetting. However, it was written without any information on what one’s type of personality means but was solely focusing on how common one’s personality type is. Experimental manipulations like this are very sensitive to the amount of knowledge people have, which is why the information that was provided to the participants had to be kept very minimalistic. The memory recollection could also evoke some upsetting memories, however, previous research, which had used this manipulation technique, had not mentioned any adverse effects. Nevertheless, I also controlled for positive and negative affect to be able to investigate whether the recollected memories were emotionally upsetting. Generally speaking, the proposed deceptions were very subtle which is why they should not have any negative effects on health or well-being. Previous research had also not reported or discussed any negative consequences or health issues regarding these experimental manipulations. At the end of the questionnaire, I provided a thorough debrief for all participants, re-assuring them that the bogus feedback was, in fact, bogus and does not bear any resemblance to real life.
Furthermore, the contact information was provided of three different people, who could be contacted in case participants felt disconcerted after the experiments.

**Bogus Feedback**

People were asked to fill out a short 10-item personality scale (TIPI) (Gosling, Rentfrow, & Swann, 2003) that measures the Big-5 (Extraversion, Neuroticism, Agreeableness, Conscientiousness and Openness to Experience). Once they had finished this task, they were invited to see their ‘personality score’ and how they would compare to other University students on the next page. There were two types of feedback, which were bogus and allocated on a random basis. One feedback contained the information that the participant would be very different compared to the average student population of the University of Sheffield (based on ostensibly previous data collections of around 10000 students). The participant further read that his or her personality profile is the rarest one among the student body and only ~4.5% would share the same characteristics. The other feedback page contained the information that the participant is very similar to the average student population. The participant read that his or her personality profile is the most common one among the student body and the vast majority of ~87.5% would share the same profile. These numbers are based on previous research using this bogus feedback manipulation technique (Fromkin, 1972; Imhoff & Erb, 2008). In these studies, congruence (i.e. overlap of one’s personality profile with a populations’ personality profile) levels of around 5% were used to induce the feeling of being very different compared to a reference group, whereas congruence levels of around 85-95% were used to induce the feeling of being very similar compared to a reference group (Snyder & Fromkin, 1980).

In order to check whether the manipulation had worked, I asked two questions immediately after people had read about their personality profile: “After reading about
your personality profile … how similar do you feel to other University of Sheffield students?” and “… how different do you feel to other University of Sheffield students?” Answers were given on a scale from 1 ‘not at all’ to 9 ‘very’.

After the experimental manipulation, all participants answered questions regarding the dependent and control variables, which are described in the next section. The demographic questions were presented on the penultimate page. The final page contained the debrief. Participants were provided with information about how the bogus feedback manipulation worked, what its purpose was and that it did not bear any relation to their true personality score. I also included a brief outline of the theoretical background of the study as well as its hypotheses. The contact information for myself, the supervisor and a research manager were also provided.

**Memory Recollection**

People were asked to remember two situations in which they felt either extremely similar or extremely different compared to other people. Again, the type of memories participants were supposed to recall was based on random allocation. Participants were given a small box in which they were asked to write down how exactly they felt in these situations and what the things were that made them feel extremely different or extremely similar. This manipulation technique has been used before in research on ODT as well as research on uniqueness and belongingness needs (Pickett, Silver, et al., 2002; Rios & Chen, 2014 [study 1]). Similar autobiographical recall techniques have been used to induce specific mood states (e.g. Baker & Guttfreund, 1993). Accordingly, it was assumed that, in this case, participants would be put in a mental state that reflects their original experience (feeling too similar or too different) in these situations. Two situations were used in order to evoke a stronger mental state but also to keep the task relatively short (as opposed to having to think of three or more situations). In this
experiment, I did not use a manipulation check, but rather analysed the answers that people wrote. As mentioned earlier, I had to exclude 11 people, because they either did not write an answer at all or wrote something that was not clearly related to feeling different or similar to others.

5.1.3. Measures

The same measures were used in the two experiments in this PhD. In the upcoming chapters, I thus refer back to this list of measures and their tests of reliability and validity. It is worth mentioning, however, that the operationalisation of some of the constructs in my conceptual model was difficult due to the lack of established measures as well as the need to adapt scales to fit a student context. This specifically applied to the operationalisation of norm-congruent and deviant behaviour. In this case, I had to rely on choosing items from Deviant Behaviour Scales (workplace focussed) that could apply to a student context. As for norm-congruent behaviour, there is no established scale, which is why I used scales that were designed to measure conformity but matched my working definition of norm-congruent behaviour.

**Need for Belongingness.** To measure the need for belongingness, I used the 10-item Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2013). Sample items are: “I want other people to accept me” and “I do not like being alone”. Reliability varied between .76 and .82 between the three experiments.

**Need for Uniqueness.** I used the 4-item Self Attributed Need for Uniqueness scale (Lynn & Harris, 1997). Participants were asked to complete a sentence by using one of five adjectives - which were presented in a list - that described their attitude best. Sample items are: “I have a _____ need for uniqueness” and “I prefer being _____ different from other people.” Across the three experiments, the reliability varied between .66 and .76.
Deviant behaviour. A list of ten behaviours was put together based on established scales. I used six items from the Destructive Workplace Deviance scale (Bennett & Robinson, 2000), two items from the Counterproductive Work Behaviour Checklist (Spector et al., 2006), and two items from the Constructive Workplace Deviance scale (Galperin, 2012). I chose these items because they were the most applicable to a university context (see Table 2 for all the items and their original sources). Participants were asked how likely they think they would engage in each of the behaviours if they were to work in a team together with other University students. The items were presented to them in a list with a scale from 1 – 7. Sample items were: “Make fun of someone” and “Disagree with others in order to improve the current work procedures”.

In order to analyse its structure, the 10 items that tap into deviant behaviour were subject to a principal component analysis using the whole sample of all three experiments. A sample size of n = 471 was large enough to conduct a powerful analysis. Following the guidelines by Tabachnick and Fidell (2013), the requirements of a significant Bartlett’s Test of Sphericity ($\chi^2 = 970.20, \text{df} = 45, p \leq .001$) and a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of higher than .60 (it was .79) were met. The PCA revealed two components with Eigenvalues bigger than one and, in total, explaining 47.6% of the variance. This two-component solution was supported by an investigation of the scree plot as well as the Monte Carlo PCA for Parallel Analysis.

The two components are explaining 32.3% and 15.2% of the variance. An oblimin rotation was performed in order to simplify the interpretation of the two individual factors. As expected, the two factors are only weakly correlated ($r = .26$). Out of the original ten items, five loaded on the first component and five loaded on the second component. An investigation of the single items helped with the interpretation of the components as a whole. The first component, with five items, can be described as
“spending time inefficiently”, i.e. dealing with other things rather than work, such as coming late or working slower than possible. The second component with five items deals with “confrontational behaviours and disagreement”, e.g. disobeying the leader, acting rude and starting an argument. The two components showed good internal reliability across the three experiments with Cronbach’s alpha between .65 and .74 for component 1 and between .66 and .75 for component 2. Thus, a composite score was calculated for each component. Please refer to Table 2 for the items for each component.

Table 2
List of items for each of the two components of deviant behaviours (and the original source of the item).

<table>
<thead>
<tr>
<th>Component 1 – time spent inefficiently</th>
<th>Component 2 – confrontation and disagreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend too much time fantasising or daydreaming instead of working (Bennett &amp; Robinson, 2000)</td>
<td>Act rudely toward someone (Bennett &amp; Robinson, 2000)</td>
</tr>
<tr>
<td>Take an additional or longer break than would be acceptable (Bennett &amp; Robinson, 2000)</td>
<td>Disagree with others in your work in order to improve the current work procedures (Galperin, 2012)</td>
</tr>
<tr>
<td>Come in late to meetings without permission (Bennett &amp; Robinson, 2000)</td>
<td>Disobey your leaders’ instructions to perform more efficiently (Galperin, 2012)</td>
</tr>
<tr>
<td>Intentionally work slower than you could work (Bennett &amp; Robinson, 2000)</td>
<td>Start an argument with someone (Spector et al., 2006)</td>
</tr>
<tr>
<td>Stay home and said you are sick when you are not (Spector et al., 2006)</td>
<td>Make fun of someone (Bennett &amp; Robinson, 2000)</td>
</tr>
</tbody>
</table>

Conformity. To operationalise norm-congruent behaviour, I decided to use conformity. Whereas research generally assumes that conformity is different from norm-congruence, in that conformity means adopting a new, contradicting position due to external pressure (Cialdini & Trost, 1998), I picked two scales, which measure norm-congruence rather than conformity. I used a conformity subscale out of the Jackson Personality Inventory-Revised (JPI, Jackson, 1994) based in the IPIP database (Goldberg et al., 2006). I combined this subscale with another conformity subscale based on cognitive styles (Miron et al., 2004). I used two negatively and two positively
keyed items from the JPI and all the four items from Miron et al. (2004). As with the Deviant Behaviour scale, participants were asked how likely they will engage in each of the behaviours on a scale from 1 – 7. Sample items are: “Do what others do” and “I try not to oppose team members”. The full list of items can be found in Appendix A: Online-Questionnaire for the first three experiments.

In order to investigate its underlying structure, the eight items that tapped conforming behaviour were subject to principal component analysis. Again, the whole sample of all three experiments was used and considered large enough (n = 471). Following the guidelines by Tabachnick and Fidell (2013), the Bartlett’s Test of Sphericity was significant ($\chi^2 = 575.22$, df = 28, $p \leq .001$) and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was higher than .60 (it was .72). The principal component analysis revealed two components with Eigenvalues greater than 1. An investigation of the scree plot and the Monte Carlo PCA supported this two-component solution, which, in total, explained 49% of the variance. The first component explained 31% of the variance, and the second the remaining 18%. The items based on Miron et al.’s (2004) subscale all loaded unambiguously on component 1, whereas two items based on the JPI loaded highly on both components. Neither varimax nor direct oblimin rotation did change the results dramatically. Moreover, a subsequent analysis of the internal reliabilities showed that both scales would yield low Cronbach’s alphas of around .42 and .59 for scales based on components 1 and 2, respectively.

An alternative approach seemed to be more fruitful. Based on the rather ambiguous loading of some items during the PCA and after closer investigation of the rather low Cronbach’s alpha of the initial full scale, it was found that, by dropping three items of the initial eight, a new shorter scale of conforming behaviour can be created, showing a reliability score of .69. Another PCA with only these five items showed a one-
component solution, which explained 45.6% of the variance. The subsequent analyses reported in this document were conducted with this shorter scale of conforming behaviour. See Table 3 for the list of items in this shortened scale.

Table 3
List of items for the shortened scale of conforming behaviours (and the original source of the item).

<table>
<thead>
<tr>
<th>Conforming behaviour</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conform to others’ opinions (JPI, Jackson, 1994)</td>
<td></td>
</tr>
<tr>
<td>Do what others do (JPI, Jackson, 1994)</td>
<td></td>
</tr>
<tr>
<td>Try not to oppose team members (Miron et al., 2004)</td>
<td></td>
</tr>
<tr>
<td>Adapt myself to the system (Miron et al., 2004)</td>
<td></td>
</tr>
<tr>
<td>Adhere to accepted rules in my area of work (Miron et al., 2004)</td>
<td></td>
</tr>
</tbody>
</table>

Control variables. Previous research has shown a negative relationship between agreeableness, conscientiousness and destructive deviant behaviour (Scherer et al., 2013; Yang & Diefendorff, 2009), whereas neuroticism relates positively to deviant behaviour (Côté, DeCelles, McCarthy, Van Kleef, & Hideg, 2011; Hitlan & Noel, 2009). Affect has been commonly used as a control variable in experiments involving social exclusion (Blackhart, Nelson, Knowles, & Baumeister, 2009). Negative affect has also been related to destructive deviant behaviour (Samnani et al., 2014). Besides that, age and gender have been related to deviant behaviour (Brienza & Bobocel, 2017; Ng, Lam, & Feldman, 2016).

Accordingly, I controlled for personality – using the ten-item personality inventory (TIPI) (Gosling et al., 2003) – affect – using the PANAS (Crawford & Henry, 2004; Watson, Clark, & Tellegen, 1988) (.89 ≤ α ≤ .92) – gender and age. The agreeableness and openness to experience subscales had very low reliabilities (α ≤ .45) which is why I used the positively framed item as a single-item measure to conduct the analyses. Table 4 includes the means and standard deviations of all the measured variables as well as their correlations.
5.1.4. Results

Manipulation Check

The manipulation check consisted of two questions asking participants to what extent they felt similar or different to other students after reading their bogus personality feedback. These two questions correlated highly ($r = -.51, p \leq .001$). As predicted, participants who received the feedback that their personality is very similar to the majority of students at their university ($m = 5.31, SD = 2.05$) felt more similar to other students compared to the participants who were told that their personality is very different to other students ($m = 3.72, SD = 1.91$): $t(135) = 4.72, p \leq .001, d = .80$. On the other hand, participants who were told their personality is very different from the majority of other students at their university ($m = 5.61, SD = 2.06$) did not feel more different to other students compared to participants who were told that their personality is very similar to other students ($m = 5.09, SD = 2.06$): $t(135) = -1.56, p = .12, d = .25$. Thus, the manipulation was only partly successful. The bogus personality feedback did successfully increase how similar students felt, but it did not increase how different students felt. That means, participants feeling very similar are in the experimental condition, whereas participants feeling not significantly more different are now essentially serving as a control group. Thus, I can still test whether being made to feel very similar had an effect on participants’ needs and behaviours (compared to a control condition, rather than a “feeling very different” condition). Participants in the memory recollection condition did not answer a manipulation check.
Table 4

Means (M), standard deviations (SD) and correlations of Experiment 1 (N = 265)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<th>16</th>
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<tbody>
<tr>
<td>1. Condition</td>
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<tr>
<td>2. Sub-optimal Dist.</td>
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<td>3. Gender</td>
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<td>4. Age</td>
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<tr>
<td>5. Similarity</td>
<td>4.53</td>
<td>2.13</td>
<td>-</td>
<td>-.16</td>
<td>-.02</td>
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<td>6. Difference</td>
<td>5.34</td>
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<td>.07</td>
<td>.13</td>
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<td>7. NfU</td>
<td>2.70</td>
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<td>-.11</td>
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<td>.13</td>
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<tr>
<td>8. NtB</td>
<td>3.21</td>
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<td>-.15</td>
<td>.02</td>
<td>-.03</td>
<td>.00</td>
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<tr>
<td>9. DB – time</td>
<td>5.30</td>
<td>1.22</td>
<td>-.09</td>
<td>.01</td>
<td>-.06</td>
<td>.17</td>
<td>.11</td>
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<td>-.07</td>
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<tr>
<td>10. DB – disagree</td>
<td>4.93</td>
<td>1.14</td>
<td>-.03</td>
<td>.12</td>
<td>.16</td>
<td>-.04</td>
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<tr>
<td>11. Conformity</td>
<td>3.12</td>
<td>.91</td>
<td>-.03</td>
<td>-.02</td>
<td>-.04</td>
<td>-.04</td>
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<tr>
<td>12. Pos. Affect</td>
<td>2.66</td>
<td>.87</td>
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<td>.05</td>
<td>.28</td>
<td>-.27</td>
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<tr>
<td>13. Neg. Affect</td>
<td>1.84</td>
<td>.79</td>
<td>-.10</td>
<td>-.09</td>
<td>-.01</td>
<td>-.03</td>
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<tr>
<td>14. Extraversion</td>
<td>3.86</td>
<td>1.52</td>
<td>-.04</td>
<td>.02</td>
<td>-.07</td>
<td>-.29</td>
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<td>.06</td>
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<td>15. Agreeableness</td>
<td>3.14</td>
<td>1.17</td>
<td>-.11</td>
<td>.08</td>
<td>-.05</td>
<td>-.10</td>
<td>-.07</td>
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<tr>
<td>16. Conscientiousness</td>
<td>2.91</td>
<td>1.41</td>
<td>-.01</td>
<td>-.05</td>
<td>-.04</td>
<td>-.10</td>
<td>.23</td>
<td>.06</td>
<td>.08</td>
<td>-.40</td>
<td>-.05</td>
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<td>.02</td>
<td>.16</td>
<td>1</td>
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<tr>
<td>17. Emotional Stab</td>
<td>3.81</td>
<td>1.57</td>
<td>-.03</td>
<td>-.07</td>
<td>.26</td>
<td>-.01</td>
<td>-.16</td>
<td>.18</td>
<td>-.03</td>
<td>-.22</td>
<td>.10</td>
<td>-.10</td>
<td>-.26</td>
<td>.42</td>
<td>.10</td>
<td>.04</td>
<td>.30</td>
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<tr>
<td>18. Openness</td>
<td>2.77</td>
<td>1.12</td>
<td>-.07</td>
<td>.00</td>
<td>-.04</td>
<td>-.18</td>
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<td>.33</td>
<td>.01</td>
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</tbody>
</table>

Note. all values greater than .12] are significant at p ≤ .05 and all values greater than .17] are significant at p ≤ .01

Condition (0 is bogus feedback / 1 is memory recollection), Sub-optimal Distinctiveness (0 is very similar / 1 is very different), Gender (0 is male / 1 is female), Similarity and Difference are the manipulation check questions only for the bogus feedback condition; NfU = Need for Uniqueness; NtB = Need to Belong; DB = Deviant Behaviour.
**Test of Hypotheses**

I hypothesised that feeling very similar will result in a higher need for uniqueness and more deviant behaviour (Hypotheses 1 and 3a). On the other hand, feeling very different will result in a higher need for belongingness and more conforming behaviour (Hypotheses 2 and 4a). I conducted a 2 (manipulation technique) x 2 (very similar vs. very different) ANCOVA to see whether there are meaningful differences between the experimental conditions; feeling very similar and feeling very different. Considering that I have five dependent variables (two needs, two deviant behaviours and one conformity measure), I am more likely to find significant results. Due to multiple hypothesis testing, I am more likely to incorrectly reject a null hypothesis (i.e. making a Type I error) (Shaffer, 1995). This can be prevented by using the Bonferroni correction (Tabachnick & Fidell, 2013). Hereby the standard $p$-value of .05 is divided by the number of hypotheses tested. In my case, we expect a change for all five dependent variables, so according to the Bonferroni correction, an effect will be significant if its $p$-value is lower than .01.

Having said that, there are no differences between the two experimental conditions regarding any of the dependent variables and regarding any $p$-value below 0.05. Table 5 includes the means and standard deviations of the dependent variables for both experimental manipulation techniques and their conditions. The ANCOVA did not reveal a main effect for sub-optimal distinctiveness regarding the need for uniqueness ($F(1, 263) = .97, p = .33, \eta^2 = .00$), the need for belongingness ($F(1, 263) = .00, p = .98, \eta^2 = .00$), deviant behaviour (Time spent inefficiently: $F(1, 263) = .05, p = .83, \eta^2 = .00$; Disagreement: $F(1, 263) = .02, p = .89, \eta^2 = .00$), and conformity ($F(1, 263) = .98, p = .32, \eta^2 = .00$). That means, participants in the very similar condition did not have a higher need for uniqueness or showed more deviant behaviour than in the very different condition. Participants in the very different condition also

---

2 Removal of non-prototypical members (16 cases) of the sample did not change the overall pattern of findings. Eleven participants provided no or unfitting experiences in the memory recollection condition, and five participants responded more quickly/slowly than expected.
did not have a higher need to belong or showed more conforming behaviour than in the very similar condition.

The ANCOVA also showed that there were no differences between the two distinct experimental manipulation techniques. There was no significant main effect for manipulation technique regarding the need for uniqueness \( (F(1, 263) = .00, p = .98, \eta^2 = .00) \), the need for belongingness \( (F(1, 263) = 2.07, p = .15, \eta^2 = .01) \), deviant behaviour (Time spent inefficiently: \( F(1, 263) = .56, p = .46, \eta^2 = .00 \); Disagreement: \( F(1, 263) = .27, p = .60, \eta^2 = .00 \)), and conformity \( (F(1, 263) = .00, p = .99, \eta^2 = .00) \)^3. That means, both experimental manipulations elicited similar results in that they did not have an effect on people’s needs and behavioural intentions. Although the manipulation check showed that the bogus feedback manipulation worked, and participants differed regarding their feeling of similarity after the experimental manipulation, this was not related to a difference in uniqueness, belongingness or subsequent behaviour.

Additionally, I explored whether there is an interaction between the experimental manipulation and the type of sub-optimal distinctiveness participants were supposed to experience (very similar vs. very different). The ANCOVA showed a significant effect of need for uniqueness \( (F(1, 263) = 3.87, p = .05, \eta^2 = .02) \), but no significant effect for the need for belongingness \( (F(1, 263) = 1.37, p = .24, \eta^2 = .01) \), deviant behaviour (Time spent inefficiently: \( F(1, 263) = .02, p = .90, \eta^2 = .00 \); Disagreement: \( F(1, 263) = .21, p = .65, \eta^2 = .00 \)), and conformity \( (F(1, 263) = .07, p = .79, \eta^2 = .00) \)^4. Further investigation of Table 5 revealed that the memory recollection technique seemed to have had an effect on the need for uniqueness in that participants remembering events in which they were very different reported a higher need for uniqueness than in the very similar condition. A follow-up t-test

---

3 Removal of non-prototypical members (16 cases) of the sample did not change the overall pattern of findings. Eleven participants provided no or unfitting experiences in the memory recollection condition, and five participants responded more quickly/slowly than expected.

4 See footnote 3
revealed a significant difference between the two conditions: \( t(126) = 2.26, p = .03, d = .39 \).

This is exactly the opposite of what was hypothesised. In summary, no support was found for hypotheses 1, 2, 3a and 4a.

**Table 5**

*Experiment 1. Sample sizes, Means, Standard Deviations of the DV’s depending on the experimental technique and condition*

| DV                      | **Bogus Feedback** | | **Memory Recollection** | | |
|-------------------------|--------------------|------------------|--------------------|------------------|
|                         | Very similar (n = 70) | Very different (n = 67) | Very similar (n = 64) | Very different (n = 63) |
| Need for Uniqueness     | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
|                         | 2.72 | .57 | 2.64 | .62 | 2.59 | .68 | 2.84 | .61 |
| Need to Belong          | 3.23 | .70 | 3.02 | .76 | 3.30 | .76 | 3.31 | .58 |
| Behaviour               | DB-time | Mean | SD | 5.37 | 1.20 | 5.42 | 1.29 | 5.17 | 1.22 | 5.19 | 1.18 |
|                         |       | 4.95 | 1.07 | 4.91 | 1.30 | 4.98 | 1.26 | 4.87 | .90 |
|                         | Conformity | Mean | SD | 3.15 | .99 | 3.14 | .83 | 3.09 | .97 | 3.07 | .83 |

*Note.* DB = Deviant Behaviour

**5.1.5. Summary / Discussion**

In this first experiment, I did not find any support regarding the idea that feeling too similar would be positively related to the need for uniqueness and deviant behaviour and that feeling too different would be positively related to the need for belonging and conforming behaviour. Neither the bogus feedback nor the memory recollection had the expected effect on the dependent variables. While the experimental manipulation for the bogus feedback condition was partially successful (it affected participants’ perception of similarity but not difference), I did not find any significant differences between the two types of sub-optimal distinctiveness (very similar vs. very different). The memory recollection condition also did not have a manipulation check. I will discuss this limitation in the general discussion section at the end of the experiments chapter.
However, the memory recollection manipulation revealed an unexpected finding. People who remembered situations in which they were very different reported a higher need for uniqueness than people in the very similar condition. This result is surprising considering that uniqueness theory would propose that people might have a lower need for uniqueness as a result of feeling very different (Snyder & Fromkin, 1980). This notion found support in one study using the exact manipulation technique as I did in this experiment (Rios & Chen, 2014). In Rios and Chen’s study, people who remembered two instances in which they were very similar to others had a higher need for uniqueness than in the very different condition also using Lynn and Harris’ (1997) need for uniqueness scale. The effect sizes in my experiment and Rios and Chen’s study are comparable (Cohen’s $d = .45$ and $d = .38$, respectively), as are the sample sizes (61 and 51 participants in my experimental conditions and 59 and 69 participants in Rios and Chen’s study). Nevertheless, my experiment showed the same exact opposite result than previous research. What differentiates my experiment from Rios and Chen’s (2014) study is the sample. My experiment used a sample of students, whereas Rios and Chen’s experiment was conducted with adult click workers on Amazon Mechanical Turk. The authors did not describe their sample in detail as their experiment was a pilot study to assess the quality of the manipulation before using it in their reported experiments.

Perhaps, in the memory recollection condition, I primed the need for uniqueness rather than manipulated it. Asking participants to remember two situations in which they were very different from others might have reminded them of how much they actually like to be different. On the other hand, remembering situations in which one was very similar to others might have had a similar effect: reminding people of how comfortable it is to be similar to others, and therefore the need for uniqueness is not that important anymore. A follow-up analysis revealed no significant differences between the very similar and very different conditions in terms of positive or negative affect. That means participants were not
emotionally affected by thinking about past experiences of being either very similar or very
different. This result also indicates that people were not thinking about particularly negative
or positive events and that remembering events of being very different is as comfortable as
remembering events of being very similar. This could have led participants to report a higher
need for uniqueness in the very different condition than in the very similar condition. Also,
feeling different itself might not lower the need for uniqueness, but rather co-occurs. People
with a higher need for uniqueness aim to be different in general and an experiment might
potentially not affect a stronger need.

The difference between the two experimental manipulation techniques is that the bogus
personality feedback did not have an effect on the need for uniqueness, whereas the
recollection of memories manipulation had an effect. Interestingly, the manipulation was
stronger when there was no comparison attribute specified, i.e. when participants could freely
think about what makes them similar or different from others, rather than being told it would
be their personality. That means, when people thought about two moments in which they felt
overly different compared to others, they reported a higher need for uniqueness than in the
control condition, but when people read about their bogus feedback (overly different), they
did not report a change in their need for uniqueness. Based on the results of the first two
experiments I can thus conclude that having the participants choose their personal
comparison attribute makes for a stronger effect.

5.2. Experiment 2 – vignette study

In this second experiment, I investigate how the needs for uniqueness and belongingness
relate to norm-congruent and deviant behaviour (Hypotheses 3b & 4b). Using a vignette,
researchers can describe and create situations tailored to the individual research setting. In my
case, vignettes were created about situations, in which the needs for uniqueness and
belongingness are either satisfied or dissatisfied. Thus, I am also to explore if these two needs
interact. Experimental vignette methodology is a powerful tool to investigate behavioural
preferences as a result of asking participants to put themselves in a specific situation based on a written vignette (Aguinis & Bradley, 2014).

5.2.1. Sample

Participants were invited to take part in an online questionnaire in which they were randomly allocated to one of the three experimental manipulations. As in the first experiment, the sample consisted of University of Sheffield students. 271 students were randomly allocated to the vignette study. 25 participants had to be excluded they did not fit the age requirements outlined in the description of the study (older than 35 years old). Additionally, six participants were excluded because they expressed suspicion about the true purpose of the study. This left me with a final sample of 230, of which 78 were men, 150 were female students and two did not provide information about their gender, with a mean age of 22.07 years ($SD = 3.12$).

5.2.1. Procedure

Participants were given a vignette to read, which described a specific situation at university. The task was to put themselves in the situation presented and think about how they would feel and behave. The vignette consisted of two parts, a section describing how unique a person feels at university and a section describing how much a person feels belongingness at university (see appendix for exact phrasing). Because I was also interested in possible interaction effects of belongingness and uniqueness, I created a high and low scenario for both uniqueness and belongingness. Hence, there were, in total, four different combinations, i.e. four different vignettes. The vignettes were written so that they are as close as possible to the items of established scales: the belongingness text was based on the relatedness subscale of the Work-related Basic Need Satisfaction scale (Broeck, Vansteenkiste, Witte, Soenens, & Lens, 2010) and the uniqueness text was based on the Personal Sense of Uniqueness scale (Şimşek & Yalınçetin, 2010). Of course, the text of the original scale items was amended to fit the university scenario. This approach has been used
in previous research (Schuh et al., 2016) and was done in order to enhance the validity of the experiment. Participants were randomly allocated to read one of these four vignettes. The vignettes read:

High (and low) belongingness: “Whilst working on that project, you realise that you (don’t) really feel connected with other students in your group. In fact, (you wouldn’t consider) some people you work with are close friends of yours. Moreover, you never (often) feel alone when you are with your colleagues and you (don’t) really feel part of the group.”

High (and low) uniqueness: “You also realise that you can (not) think of many special characteristics that distinguish you from others and are completely unique to you. As a consequence, you (don’t) feel unique in that group.”

In order to see, whether participants understood the vignette, there were two questions about how much belongingness and how much uniqueness the person felt according to the text he or she read; “According to the description, to what extent do you feel connected to your colleagues at work?” and “According to the description, to what extent do you feel like you are unique at work?” Answers were given on a scale from 1 ‘not at all’ to 9 ‘very’. This served the purpose of checking whether the participant could remember the text and thus had understood it.

5.2.2. Measures

The measures used in Experiment 3 were exactly the same as in the first experiment. Table 6 includes the means and standard deviations for the measures as well as their correlations in the second experiment.

5.2.3. Results

Did the participants understand the vignettes?

Two questions were asked to see whether participants have read the vignette properly. The first question focused on how much belonging the participant feels according to the description, and the second question tapped the feeling of uniqueness according to the
description. For the belongingness measure, an ANOVA showed that participants in the high belonging condition \((m = 7.38, SD = 1.78)\) reported higher belonging than in the low belonging condition \((m = 3.06, SD = 1.93)\). This effect was significant, \(F(1, 230) = 308.97, p \leq .001, \eta^2 = .58\). The main effects for the uniqueness part of the vignette, as well as the interaction between the belongingness and the uniqueness part were non-significant. For the uniqueness measure, an ANOVA showed that participants in the high uniqueness condition \((m = 6.62, SD = 1.92)\) reported higher uniqueness than in the low uniqueness condition \((m = 3.07, SD = 1.95)\). This effect was significant, \(F(1, 230) = 197.32, p \leq .001, \eta^2 = .47\). The main effect for the belongingness part of the vignette was non-significant as well as the interaction between the vignettes were non-significant. That means people have read the vignettes properly.

**Test of Hypotheses**

To investigate whether the different variations of the vignette had any effect on the dependent variables, I conducted two (uniqueness) x two (belongingness) ANCOVAs. Table 7 includes the results of the ANCOVAs. I hypothesised that the uniqueness vignette will affect people’s need for uniqueness and deviant behaviour (Hypothesis 3b). When people read the low (high) uniqueness vignette, they should report a higher (lower) need for uniqueness and more (less) deviant behaviour. On the other hand, I expected that the belongingness vignette will have an effect on the need for belongingness and conforming behaviour (Hypothesis 4b). When people read the low (high) belongingness vignette, they should report a higher (lower) need for belongingness and more (less) conforming behaviour. However, the analysis shows that there is no main effect regarding either of the vignettes on any of the dependent variable. Thus, people reading the high uniqueness vignette did not have a stronger need for uniqueness or showed more deviating behaviour than in the low uniqueness vignette. People reading the high belongingness vignette also did not have a
stronger need for belongingness or showed more conforming behaviour. In sum, I did not find support for the hypotheses.

This ANCOVA also allowed me to explore whether there was an interaction effect of the two vignettes, indicating that the needs for uniqueness and belongingness might interact and to explore what happens when both needs are high or low. The right side of Table 7 shows that the interaction of uniqueness*belongingness had no effect regarding deviant or norm-congruent behaviour. While participants have understood the vignettes, they did not have an effect on people’s needs and reported behaviour.

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5 Removal of non-prototypical members (8 cases) of the sample did not change the overall pattern of findings. Eight participants responded more quickly/slowly than expected.
Table 6

Means, standard deviations and correlations of Experiment 2 (N = 230)

| Variable                  | M    | SD   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Vignette_Unique        | -    | -    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2. Vignette_Belong        | -    | -    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3. Gender                 | 1.67 | .49  | .08  | -.11 | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4. Age                    | 22.02| 3.10 | .03  | -.01 | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 5. MC_Uniqueness          | 4.72 | 2.62 | .04  | .00  | .07  | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 6. MC_Belongingness       | 5.17 | 2.84 | -.01 | .75  | -.13 | .00  | .08  | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 7. NfU                    | 2.75 | .65  | -.09 | .08  | -.11 | -.07 | -.05 | -.02 | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 8. NtB                    | 3.25 | .65  | -.04 | .03  | -.12 | -.11 | .05  | .05  | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 9. DB – time              | 5.40 | 1.04 | .00  | .11  | -.04 | .07  | .06  | .10  | -.20 | -.22 | 1    |      |      |      |      |      |      |      |      |      |      |      |
| 10. DB – disagree         | 5.00 | 1.06 | .09  | -.04 | .14  | .08  | .09  | -.06 | -.21 | .12  | .31  | 1    |      |      |      |      |      |      |      |      |      |      |
| 11. Conformity            | 3.07 | .84  | -.09 | -.01 | -.14 | .05  | -.07 | -.06 | .25  | -.28 | -.20 | -.34 | 1    |      |      |      |      |      |      |      |      |      |
| 12. Pos. Affect           | 2.61 | .86  | -.06 | .03  | -.02 | -.03 | .08  | .10  | .10  | -.11 | .15  | -.09 | .11  | 1    |      |      |      |      |      |      |      |      |
| 13. Neg. Affect           | 1.79 | .85  | -.01 | -.10 | -.01 | -.11 | -.06 | -.07 | .07  | -.15 | -.23 | -.10 | .12  | -.03 | 1    |      |      |      |      |      |      |      |
| 14. Extraversion          | 4.14 | 1.48 | -.04 | -.04 | .06  | -.05 | -.04 | -.04 | -.01 | -.12 | -.10 | -.22 | -.48 | .05  | 1    |      |      |      |      |      |      |      |
| 15. Agreeableness         | 3.08 | 1.16 | -.03 | -.18 | -.07 | -.06 | -.04 | .13  | -.07 | -.23 | -.42 | .20  | -.14 | .20  | .20  | 1    |      |      |      |      |      |      |
| 16. Conscientiousness     | 2.89 | 1.33 | -.05 | -.06 | -.06 | .04  | -.08 | -.11 | .07  | -.46 | -.02 | .11  | -.30 | .26  | .20  | .18  | 1    |      |      |      |      |      |
| 17. Emotional Stab        | 3.62 | 1.54 | -.02 | -.03 | .19  | -.05 | -.03 | .01  | .08  | .35  | -.32 | -.09 | .02  | -.28 | .31  | .21  | -.10 | .21  | 1    |      |      |
| 18. Openness              | 2.78 | 1.11 | -.02 | -.01 | -.04 | -.09 | .03  | .07  | -.14 | -.20 | -.16 | -.13 | -.22 | -.33 | .12  | .27  | .24  | .11  | .22  | 1    |

**Note.** all values greater than |.14| are significant at \( p \leq .05 \) and all values greater than |.17| are significant at \( p \leq .01 \)

Vignette (0 is low belongingness/uniqueness & 1 is high belongingness/uniqueness), Gender (1 is male / 2 is female); MC_Uniqueness and Belongingness are the questions whether participants had understood the vignette; NfU = Need for Uniqueness; NtB = Need to Belong; DB = Deviant Behaviour.
Table 7

Experiment 2. Means, Standard Deviations and F-tests for the effect of the uniqueness and belongingness condition on the DV’s as well as the interaction effect (uniqueness*belongingness)

<table>
<thead>
<tr>
<th>DV</th>
<th>Uniqueness Condition</th>
<th>Belongingness Condition</th>
<th>Test of Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td>ANOVA</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Need for Uniqueness</td>
<td>2.68</td>
<td>.63</td>
<td>2.83</td>
</tr>
<tr>
<td>Need to Belong</td>
<td>3.22</td>
<td>.63</td>
<td>3.25</td>
</tr>
<tr>
<td>Behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB time</td>
<td>5.41</td>
<td>1.09</td>
<td>5.35</td>
</tr>
<tr>
<td>DB disagree</td>
<td>5.10</td>
<td>.97</td>
<td>4.89</td>
</tr>
<tr>
<td>Conformity</td>
<td>3.00</td>
<td>.88</td>
<td>3.12</td>
</tr>
</tbody>
</table>

Note. F values are considerate of covariates. Sample size per condition: High Uniqueness n = 111; Low Uniqueness n = 119; High Belongingness n = 115; Low Belongingness n = 115; DB Deviant behaviour.
5.2.4. Summary / Discussion

The third experiment used a vignette to manipulate the needs for uniqueness and belongingness. The analysis indicated that people had read and understood the vignettes, however, the vignettes did not have an effect on any of the dependent variables. People reading the high uniqueness condition did not report a higher need for uniqueness or deviant behaviour (Hypothesis 3b). People reading the high belongingness condition also did not report a higher need for belongingness or conforming behaviour (Hypothesis 4b). Thus, I did not find support for the hypotheses. An exploration into whether there would be an interaction effect between the two types of vignettes (belongingness vs. uniqueness) in terms of deviant and norm-congruent behaviour also did not yield significant results.

This indicates that the needs for uniqueness and belongingness are more likely to be independent needs rather than affecting each other. Previous research has found that when both needs are activated, the need for belongingness trumps the need for uniqueness (Badea, Jetten, Czukor, & Askevis-Leherpeux, 2010). This experiment tried to replicate that finding, but the interaction effect was not significant. People who read the vignette about having high uniqueness and high belongingness needs did not report a change in their actual personal needs. The interaction also did not explain any additional variance in terms of people’s deviant and norm-congruent behaviour.

In contrast to the first experiment, I did not find that feeling different is positively related to the need for uniqueness. In this case, I found no relationship between the high uniqueness vignette and the need itself. In line with the other two experiments however, I did not find any support for the idea that feeling similar positively affects the need for belongingness and norm-congruent behaviour. The results also indicate that the needs for uniqueness and belongingness do not interact.
Generally speaking, the vignettes did not have any effect on the variables measured. Perhaps, participants did not put themselves in the situation that was described in the vignettes. It is worth mentioning that this third experiment did not include a proper manipulation check. While I checked whether participants had read and understood the vignette, I did not ask them to what extent they put themselves in the situation that was described to them. Thus, I cannot tell how serious people were about working on this task. I also could have emphasised the fact that people should answer to the need and behaviour scales according to how they feel when in the situation described to them. Additionally, I did not measure how similar or different people would feel according to the vignette. Thus, I was not able to actually measure the effect of feeling very similar or very different on the dependent variables. I merely assumed that providing some information in the vignettes, such as “You also realise that you can (not) think of many special characteristics that distinguish you from others and are completely unique to you” will elicit the same effects as actually manipulating how similar or different people feel. That means, I could have provided a thicker description of how the person compares to his or her environment according to the vignette, i.e. provided more information on how similar or different one is.

Nevertheless, I see potential for the vignettes in future research when used with a proper manipulation check and a thicker description. Experimental vignette methodology is a powerful tool to investigate behavioural preferences as a result of asking participants to put themselves in a specific situation based on a written vignette (Aguinis & Bradley, 2014). Research on the effects of the need for uniqueness at the workplace is underdeveloped in my eyes and this vignette could be a fruitful approach. The belongingness vignettes could also be an alternative to experimental manipulations that try to induce a feeling of being ostracised or excluded (Blackhart et al., 2009). For instance, research on social exclusion at the workplace has occasionally used vignettes (e.g. Hitlan et al., 2006).
5.3. General Discussion of Experiments

The first experiment was designed to manipulate how similar or different people feel and investigate the subsequent effects on the needs for uniqueness and belongingness as well as norm-congruent and deviant behaviour (Hypotheses 1, 2, 3a and 4a). A second experiment was designed to manipulate people’s needs for uniqueness and belongingness and investigate the subsequent effects on norm-congruent and deviant behaviour, as well as exploring a potential interaction effect of the needs (Hypotheses 3b and 4b). In the following, I discuss the findings of the experiments and how these inform the subsequent online survey study. This subsection ends with a discussion of interesting insights that could also inform the online study.

I conducted one experiment with two different manipulation techniques to see if feeling too similar is positively related to deviant behaviour and the need for uniqueness (Hypothesis 1 and 3a) and to see if feeling too different is positively related to conforming behaviour and the need for belongingness (Hypothesis 2 and 4a). The second experiment was conducted to see if the need for uniqueness is positively related to deviant behaviour (Hypothesis 3b) and to see if the need for belongingness is positively related to conforming behaviour (Hypothesis 4b). Additionally, I explored whether the needs for uniqueness and belongingness interact. Generally speaking, the results of these three experiments did not support the hypotheses.

The analyses of the first experiment indicate that feeling very different might actually be positively related to the need for uniqueness, which is the opposite of what previous research has proposed or found (Rios & Chen, 2014; Snyder & Fromkin, 1980). I argued that this might be due to a potential priming effect. People with a higher need for uniqueness are motivated to be more different in general. The first experiment revealed a positive correlation between feeling very different and the need for uniqueness. The second experiment showed that remembering situations in which one was very different was also associated with a higher need for uniqueness. It will be interesting to see whether this relationship can be found.
in a natural setting at the workplace with a sample of full-time employees. The online study should thus not only investigate how feeling very similar but also how feeling very different is related to the need for uniqueness.

However, I did not find any effect on the need for belongingness. One could argue that this might be because the Need to Belong Scale (Leary et al., 2013) used in these experiments might not be able to capture momentary changes induced by experimental manipulation. This is reflected in how the individual items are phrased. Items such as “I want other people to accept me” or “I do not like being alone” seem to be phrased in a rather general way. This is supported by an analysis of the experimental manipulation on an item-level basis of this scale. There was no effect on any of the ten individual items regarding the two different experimental manipulations. Leary et al. (2013) also report a high test-retest reliability of .87 over a period of 10 weeks, which is another indication of the scale being less able to detect temporary changes. Having said that, Rios and Chen (2014) were able to significantly change participants’ needs for belongingness using a language priming task, albeit with a relatively small effect size ($\eta^2_p = .02$). The need to belong has also been successfully manipulated in social exclusion research (e.g. Pickett, Gardner, & Knowles, 2004).

A vignette was developed for the third experiment to investigate whether the needs for uniqueness and belongingness could interact. The results seemed to indicate that this would not be the case. The interaction of the two types of the vignette (uniqueness vs. belongingness) was not significant regarding deviant and norm-congruent behaviour. While I acknowledge that I was not able to tell whether participants really put themselves into the situation that was described to them in the vignettes, the results still suggest that the needs for belongingness and uniqueness are more likely to be independent needs rather than affecting each other. Moving forward, this implies that the needs and their proposed mediating effects should be investigated separately.
**Limitations**

First, feeling very similar or very different is a different and more comfortable state than the state of feeling too similar or too different. According to Optimal Distinctiveness Theory, people should be motivated to engage in behaviour to make themselves more dissimilar if they want to be more unique, and engage in behaviour to make themselves more similar if people want to belong more (Brewer, 1991; Kreiner et al., 2006; Ormiston, 2015). I hypothesised that people want to be more unique when they feel too similar and want to belong more if they feel too different. However, in the experiments, I never measured whether people felt uncomfortable about how similar or different they are, i.e. whether they were not feeling optimally distinct. In other words, I was not able to tell whether people felt too similar or too different. It is worth noting, however, that my understanding of how ODT can be applied to the workplace has changed. When designing the experiments, I was under the impression that feeling very similar or very different is enough to trigger specific behaviours, such as deviant or conforming behaviour. After analysing the results of the experiments, I now believe that it is about feeling uncomfortable about one’s similarities and differences, i.e. feeling too similar, or too different. In that case, it is now a question to what extent one’s actual level of similarity or difference deviates from one’s desired level of similarity or difference. That is why there is a discrepancy between how the experiments were set up and how the hypotheses are formulated, as the hypotheses reflect my understanding after the experiments were run and analysed.

In the first experiment, I told participants to what extent their personality profile is comparable to a sample of 10,000 students (4.5% for high difference and 87.5% for high similarity). The goal was to elicit an uncomfortable state of feeling very similar or different. Participants however only reported feeling more similar after hearing about their personality profile but not more different. Perhaps, the value that was chosen to represent how different one’s personality is in comparison to a large sample of other students from the same
university (4.5%), was not extreme enough. That being said, previous research has used similar congruence levels (i.e. overlap of one’s personality profile with a populations’ personality profile) of around 5% to successfully induce the feeling of being very different compared to a reference group (Fromkin, 1972; Imhoff & Erb, 2008; Snyder & Fromkin, 1980). In the second experiment, I asked participants to remember situations in which they were extremely similar or extremely different. Again, the goal was to make people uncomfortable about their level of similarities and differences, but I did not measure to what extent people feel more similar or different than desired. It seems, that being very similar or different might still be a fairly comfortable experience for people and thus might not result in behavioural change. A follow-up analysis of the first two experiments showed that neither receiving bogus feedback (Experiment 1) nor remembering specific experiences (Experiment 2) had an effect on people’s affect. Groups did not differ in terms of negative or positive affect. As a result, participants might not have been motivated to change anything about the situation, at least not in terms of deviant or norm-congruent behaviour. Moreover, feeling very different might not be extreme enough to increase people’s need for belongingness. That means feeling very different does not dissatisfy the need for belongingness, i.e. the need is not triggered or activated. However, what would happen if people were feeling too different, i.e. feeling more different than desired compared to their colleagues? Is feeling too different positively related to the need for belongingness? Moving on, that means, I should measure whether people actually feel too similar or different, i.e. how far away their actual level of similarity or difference is from their desired level. Experiencing something more intense than desired should be more likely to have an effect on people’s needs and behaviours.

Second, participants were only asked to rate their intent in these behaviours rather than actually observing them. Participants were asked to think about how likely they will engage in deviant or norm-congruent behaviours in the future rather than asked to what extent they actually did engage in them. Thus, the scales were measuring the intent or the imagined
likelihood of such behaviour rather than the actual behaviour. In research, deviant behaviour scales have also been used in a retrospective manner (Bennett & Robinson, 2000; Galperin, 2012; Spector et al., 2006), i.e. participants were asked to think about how often they did engage in deviant behaviours within a certain time frame in the past, e.g. last week, last month, last year, etc. In this case, researchers are able to measure behaviour that has actually happened. These two different approaches might also have a different effect on how honestly participants would answer. If people were asked about their intentions, they might be less likely to admit that they were intending to deviate, whereas if people were asked about their actual behaviour, they might be more likely to admit that they deviated. In the latter case, deviation has already happened, whereas in the first case it can still be prevented. Thus, moving forward, participants’ level of social desirability should be taken into account and deviance should be measured retrospectively. This might be a more fruitful approach when using a sample of full-time employees.

Third, the scales of norm-congruent and deviant behaviour had to be applicable to students which might have affected their internal consistency. The scales used in the experiments were based on a number of well-established scales. In terms of deviant behaviour, the scale was based on three established scales, the Destructive Workplace Deviance scale (Bennett & Robinson, 2000), the Constructive Workplace Deviance scale (Galperin, 2012), and the Counterproductive Work Behaviours Checklist (Spector et al., 2006). Ten items were chosen from these three scales because they seemed the most applicable to a student’s situation. The majority of the items described behaviour that students at a university would not have the chance to engage in, such as “Falsified a receipt to get reimbursed for more money than you spent on business expenses” or “Discussed confidential company information with an unauthorised person”. Unfortunately, the newly created scale for a student’s situation did not show the expected one-factor solution. Across the whole dataset, an explorative factor analysis revealed a two-factor structure. Nevertheless,
the two scales showed good internal consistency (Cronbach’s Alpha > .70). In terms of norm-congruent behaviour, I used a 4-item conformity subscale out of the Jackson Personality Inventory-Revised (JPI, Jackson, 1994) based in the IPIP database (Goldberg et al., 2006). I combined this subscale with another 4-item conformity subscale based on cognitive styles (Miron et al., 2004). Similar to deviant behaviour, items were picked due to being applicable to a student’s situation. However, this newly created scale did not show the expected internal consistency. After dropping three items, a final 5-item norm-congruent behaviour scale was developed that showed good internal consistency (Cronbach’s Alpha > .70). In both cases, deviant and norm-congruent behaviour, well-established scales could not be used because they are not applicable to a student’s situation. When using a sample of full-time employees however, the scales that were developed to measure deviant and norm-congruent behaviours at the workplace can then be used.

Fourth, considering that there was a lack of established measures and I had to partly rely on creating my own scales based on face validity, there could be a mismatch between the constructs and the operationalisation. While there are established measures for the needs of uniqueness and belongingness, they seemed to be more trait-like than state-like. As alluded to in the previous section of the discussion chapter, the Need to Belong Scale seems to reflect a more trait-like situation and, as a result, might be less appropriate to pick up short-term changes due to experimental manipulations. The same case could be made for the Need for Uniqueness Scale. Despite the fact that both scales had been successfully used as outcome measures of various manipulation techniques, I might have overestimated their ability to measure temporary and state-like needs. Thus, this mismatch between the constructs and the operationalisation could possibly be a factor for not finding significant results.

Finally, the data collection for both experiments took place at the same time which means there was no opportunity to reflect on and learn from the findings of one study before designing the next. This is reflected in the situation that there is a lack of manipulation checks.
in the second experiment as well as after the memory recollection condition in the first experiment. This could have been avoided if I had conducted one experiment after the other. The lack of manipulation checks also constrained the analysis of how valid the experimental manipulation techniques actually were. It would have been worthwhile to not only trust in the fact that other researchers have successfully used these techniques but considering the fact that I apply their techniques to a different context (deviant and norm-congruent behaviour besides the needs for uniqueness and belongingness), I should have been able to investigate how valid and strong the techniques actually are. This would also help to distinguish whether the null effects are due to a potential mismatch between constructs and their operationalisation or due to the potentially weak experimental manipulations.

Interesting insights

Experiment 1 and 2 both used a manipulation technique to make participants either feel more similar or more different. The first experiment uses personality as the criterion with which a feeling of similarity or difference is induced. The second experiment, however, does not provide a fixed comparison attribute but rather leaves it open to the research participants themselves to imagine how they were similar or different compared to others. Interestingly, I did find different effects in each of the experiments. The results of these two experiments imply that leaving it up to the imagination of the research participants themselves actually provides a stronger effect on the need for uniqueness. When participants were asked to write about two instances in which they felt very different from others (Experiment 2), they reported a higher need for uniqueness. However, when participants were reading about their bogus personality score (Experiment 1), which was supposed to make them feel very different, they did not report a change in their need for uniqueness. There was no difference regarding the need for belongingness, though. Nevertheless, this means that in the online study with employees, I do not prescribe a criterion according to which people could potentially differ. I rather ask a more general question regarding how similar or different they
are compared to their colleagues and do not provide any examples of possible comparison attributes, such as personality, attitudes or demographics.

5.4. Conclusion / Moving forward

The two experiments in this chapter provided interesting insights and mixed support for the conceptual model of this PhD. No research, however, is without its limitations and potential shortcomings, which were outlined and discussed in the previous subsection. To summarise, I have learnt that feeling more similar or different might not be an uncomfortable state that triggers either the need for uniqueness or belongingness or deviant or norm-congruent behaviour. Feeling more similar or different might not be considered sub-optimally distinct, as people might not be uncomfortable enough to engage in certain behaviours to re-establish a sense of optimal distinctiveness. Hence, in the online study, I measure whether people actually feel too similar or too different compared to their colleagues, i.e. to what extent their actual level of similarity or difference deviates from their desired levels. Experiencing something, which is more intense than desired should be more likely to increase one’s needs and trigger specific behaviours.

Moreover, the measurement of deviant and norm-congruent behaviour can be improved by using well-established scales and by measuring actual behaviour rather than merely the intent. A sample of full-time employees can be used in order to investigate to what extent people actually engage in norm-congruent and deviant behaviours as a result of feeling too similar or too different and activated needs for uniqueness and belongingness. There was also no indication of an interaction effect between the two needs, which is why their potential mediating effect should be investigated separately from each other. Finally, the effects of the experimental manipulation were stronger when no base of comparison was provided.

As a result, I am now investigating how feeling too similar is related to deviant behaviour and the need for uniqueness, as well as how feeling too different is related to norm-congruent
behaviour and the need for belongingness. This research is applying ODT to a workplace phenomenon, so accordingly, I intend to not only use experiments to test for causal relationships between the variables of interest but also use an online survey study to provide proof of a naturally occurring phenomenon and its effects on workplace behaviours. Thus, a two-wave online study with full-time employees was designed, which was informed by the lessons learnt in this chapter.
6. Online Survey with Working Participants

A two-wave survey study was conducted in order to investigate the effects of feeling too similar or too different as well as the needs for uniqueness and belongingness on norm-congruent and norm-incongruent behaviour.

To calculate the time lag between the first and second wave of data collection, the following optimal time lag formula by Dormann and Griffin's (2015) was used:

**Equation 1**

\[
\omega_{opt} = - \frac{\ln\left(\frac{\ln(d)}{\ln(i)}\right)}{\ln(d) - \ln(i)}
\]

In this formula, \(d\) and \(i\), represent the stabilities for the need for uniqueness and belongingness respectively. Stability is defined as the autoregressive effect of a variable, i.e. the effect a variable at \(T_1\) has on itself at \(T_2\). Several students (n=33), by mistake, took part a second time in the experimental studies, as I had it sent out to recruit more participants. Fortunately, however, this provided me with the chance to measure the stability of the needs for uniqueness and belongingness as well as deviant and conforming behaviour over a timespan of one month. Using the autoregressive effects as \(d\) and \(i\) in Equation 1 resulted in the optimal time lag of \(\omega_{opt} = 3.2\). Considering that I calculated that score using 1-month stability values, the optimal time lag is supposed to be 3.2 x 1 month = 3 months.

The online study with working participants advances the experimental studies in several ways. In contrast to the three experiments, I am now investigating how feeling *too* similar or different affects the needs and behaviour rather than the effects of feeling only *very* similar or different. That means I measure to what extent people’s actual levels of similarity or difference deviate from their desired levels. Feeling something more than desired should be more likely to elicit need satisfying behaviours. I also improved the way of measuring deviant and norm-congruent behaviour. Since this study is using a sample of employees, I can
include well-established scales of destructive and constructive deviant workplace behaviours. Instead of conformity, I now use organisational citizenship behaviour as a form of norm-congruent behaviour at the workplace. In this case, I am providing participants with a list of more specific behaviours they can engage in, in comparison to the conformity scale in the experimental studies. In the survey study, I can also measure actual behaviour rather than just intention. Using a sample of full-time employees in a cross-lagged study over two waves, I can measure whether people actually engaged in deviant or norm-congruent behaviour at T2 as a result of feeling too similar or different at T1. This allows me to measure self-reported behaviour at the workplace, rather than just the intention to do so in an online experiment. Thus, I can test whether feeling too similar affects employees’ deviant behaviour and whether feeling too different affects norm-congruent behaviour (Hypotheses 1 & 2).

Additionally, the cross-lagged design allows me to effectively test the proposed mediating effects of the needs for uniqueness and belongingness. On the one hand, how is feeling too similar related to the need for uniqueness and what is the relationship between the need for uniqueness and deviant behaviour (Hypotheses 3a, b & c)? On the other hand, how is feeling too different related to the need for belongingness and what is the relationship between the need for belongingness and norm-congruent behaviour (Hypotheses 4a, b & c)?

Finally, I can include contextual factors, such as job autonomy on a job level and organisational commitment on an interpersonal level and investigate whether they can serve as moderators. This survey study tries to test the following hypotheses: Job autonomy moderates the relationship between feeling too similar and deviant behaviour as well as the relationship between the need for uniqueness and deviant behaviour (Hypotheses 5a & b). Similarly, organisational commitment moderates the relationship between feeling too different and norm-congruent behaviour as well as the relationship between the need for belongingness and norm-congruent behaviour (Hypotheses 6a & b).
6.1. Sample
Participants were recruited via Amazon’s Mechanical Turk (Buhrmester, Kwang, & Gosling, 2011), and paid 1.25 US dollars for a 10-minute questionnaire, which is significantly above the reported median hourly wage of $1.38 (Horton & Chilton, 2010). Online panels, such as Amazon’s MTurk have been used extensively to investigate sensitive topics like deviant behaviours at the workplace (Porter, Outlaw, Gale, & Cho, 2019). The final sample of 186 was predominately female – 111 women and 75 men – and on average working for 40.06h a week ($SD = 8.47$). The mean age was 39.96 ($SD = 10.96$) and the employees had spent the last 7.59 years ($SD = 6.41$) on average with their current organisation. The participants were crowd workers on the platform of Amazon’s Mechanical Turk and were also in full-time or, at least, part-time employment besides working on Amazon’s MTurk. Given that optimal distinctiveness might vary across cultures (Leonardelli et al., 2010), I restricted access to the online questionnaire to employees from Western countries, i.e. the US, the UK or Australia, for example.

In total, 549 participants took part in a pre-screening survey (see Appendix B1). The goal of the screening survey was to identify suitable participants for the main study. Considering that participants on MTurk earn money from filling out questionnaires, they might be motivated to pretend to be someone they are not just for the sake of earning money (e.g. actually unemployed but pretending to be employed to partake in the study). This can be prevented by using a screening survey that does not include any information on what the inclusion criteria will be. My screening survey included standard demographic questions, e.g. age, gender, employment status, working hours, organisational tenure etc. 354 participants fulfilled the criteria of being in full-time or, at least, part-time employment besides working on Amazon’s MTurk and had an organisational tenure of more than one year. These 354 participants were subsequently invited to take part in the two-wave study taking place.
between December 2017 and March 2018. 308 participants took part in the first wave and 217 employees participated in the second wave.

In order to ensure the quality of the responses, a number of measures were employed (Porter et al., 2019). Crowdworkers should be of high reputation, i.e. have finished a lot of previous tasks to the satisfaction of the respective employer (Task giver) (Peer, Vosgerau, & Acquisti, 2014), so the limit was set to an approval rate of 90%. I also used, in total, three attention checks within the two questionnaires over the course of two waves to ensure the validity of the answers (Cheung, Burns, Sinclair, & Sliter, 2017; Peer, Brandimarte, Samat, & Acquisti, 2017): I included the item “I am not reading the questions of this survey” at two different points in the survey: as an item of the social desirability scale and as one item of affective commitment (See Appendix B2). The third attention check was at the end of each survey, where I asked participants to pick the two most appropriate options to answer the question of what the survey was about. I provided the following answers: (1) Colors (2) Birds (3) Work styles (4) Cars (5) Psychology (6) Weather. Additionally, participants were asked whether they had any idea what the survey was about (as a control variable), whether the participant had any difficulties with understanding the task and whether participants had taken part in a similar study recently to check for participants’ non-naïvety (Chandler, Mueller, & Paolacci, 2014). Participants who failed to correctly answer any one of the three attention checks were removed from the data. Moreover, three participants who had changed jobs between the two waves were also removed from the data. Additionally, 16 cases were identified as potential outliers because they were so fast in filling out the questionnaire, that I assumed that they had not been able to read and answer the questionnaire properly (I put the threshold at 300sec or 6 minutes; the sixteen cases were all below that threshold). However, the results did not change significantly when these 16 cases were excluded from the analysis. Thus, the analysis reported in the following sections includes all 202 cases.
Using t-tests, I investigated whether the people who only participated in the first wave were any different compared to those who participated in both waves. The results were non-significant for all the variables of interest in this study. Apart from two demographic characteristics, age \( t(298) = -2.49, p < .05 \) and tenure \( t(298) = -2.43, p < .05 \), people did not differ. People who participated in both waves were on average older and had a longer tenure than those who participated only in the first wave.

6.2. Procedure

The survey was built up as follows. On the first page of the survey, an information sheet was provided which included all the necessary information (e.g. participation is voluntary, dropout is possible at any time without any consequences) for people to make an informed decision whether they would like to partake in the study. Only those who gave consent could access the study, whereas those who did not give consent were thanked for their initial interest. The study did not take any longer than 15 minutes. On the last page, participants had to create a unique code based on a formula that includes personal details (first and family name, birthday, parents’ names, etc.) so that they could be matched over the two waves of data collection. See Appendix B2 for the whole survey.

Before conducting the survey study, I had to secure ethical approval from Sheffield University Management School. This meant to prepare a document which included information on the sample, how the participants are recruited, rewarded and, in detail, the kind of tasks (measures, scales) that need to be done. This document was then undergoing a thorough review by two independent and anonymous researchers and amended until it fulfilled all the reviewer’s requirements. In this document, I also had to outline potential ethical concerns there might be with the survey study and how I tried to mitigate them. I expected that the questions about deviant behaviour would not cause any physical or psychological harm to the participants. Participants are asked to remember how often they have engaged in deviant behaviours. If they have acted in deviant ways then they will most
probably have done so consciously and willingly, so there will be no harm or distress coming from remembering these behaviours. Apart from that, the items of the destructive deviance scale are covering minor transgressions (e.g."spent too much time fantasising or daydreaming instead of working", or "made fun of someone at work") rather than actual illegal activities or even crimes. Participants are only asked to what extent they have engaged in these behaviours and are not asked to elaborate on any of them. What's more, previous research on deviant behaviours has also never reported any issues with psychological harm nor concerns for the well-being of the participants caused by remembering previous actions of deviant behaviours. Moreover, all the information shared by the participants will be kept completely confidential and truly anonymous, so there will be no repercussions or negative consequences for employees reporting they have in fact engaged in destructive deviant behaviours. This will be reiterated in the description of the deviant behaviour scales that are used in this survey study. At the end of the questionnaire, I provided a thorough debrief for all participants, describing the theoretical background and underlying ideas of the survey study. Furthermore, the contact information was provided of three different people, who could be contacted in case participants felt disconcerted after the survey study.

6.3. Measures

*Feeling too similar / too different.* In total, four questions were designed to measure individual differences in how similar (or different) people feel compared to their colleagues. The four questions measured actual similarity, desired similarity, actual difference and desired difference. Participants were asked to indicate to what extent they feel similar (or different) to their colleagues at work. The next question asked participants how similar (or different) they desired to be compared to their colleagues at work. Colleagues were described to the participants as the people with whom they spend the most time at work. Thus, I could measure the actual and desired levels of similarity and difference. The same 7-point Likert Scales, ranging from ‘not similar (different) at all’ to ‘totally similar (different)’, were used
for both sets of questions. Participants were also told that, if they felt as similar/different as desired, they should indicate that by choosing the same score on both the actual and desired level of similarity/difference scale (see also: Thau, Aquino, & Poortvliet, 2007). The experiments with students showed that there might be a stronger effect when no comparison attribute is provided, i.e. similar or different compared to others in terms of what. Hence, no examples of typical similarities or differences were provided in this online study. It was up to the participants themselves to decide what their comparison attribute is when they answered the questions.

In order to analyse the sub-populations of people feeling too similar or too different, I calculated a difference score by subtracting the desired levels from the actual levels (Actual – desired levels of similarity/difference). Thereby, I can indicate how a person actually feels in relation to his or her desired feelings. A positive value on the difference score means employees are feeling more different than desired (or too different), or more similar than desired (or too similar), whereas a zero score means that employees are feeling as similar (or different) as desired, i.e. optimally distinct. A negative value would mean that employees are not feeling different (or similar) enough. Anyone with a score different from zero is classified as sub-optimally distinct.

This research, however, is only focussing on two types of sub-optimal distinctiveness: feeling too similar and feeling too different. The difference score provides the information to what extent people feel too similar (or too different). If the difference score is zero, people feel as desired, whereas the higher the difference score, the more people feel too similar or too different (more than desired). Accordingly, I only used people whose difference score (Actual minus Desired level of similarity/difference) was zero or positive for the respective subsamples. This is due to the fact, that people, who reported feeling as desired, are essentially at one extreme side of the range of feeling too similar (or too different). Feeling as desired is equivalent to not feeling too similar (or different) at all. Feeling as desired means a
difference score of zero, whereas feeling very much more than desired (too similar, or too different) means a positive difference score.

Table 8 and Table 9 show the distribution of people regarding their feelings of similarity and difference, respectively. Values of actual and desired feelings were standardised to identify how many participants fall into the imbalance category (Edwards, 1994). Then I subtracted the value of the desired feeling from the value of the actual feeling. Following Shanock, Baran, Gentry, Pattison and Heggestad (2010), participants’ scores below -0.5 or above 0.5 were categorised as imbalanced. I found almost evenly sized groups in terms of being in balance or in imbalance. This applied to both feeling too similar/different than desired and feeling less similar/different than desired. That being said, I found only 46 people feeling too similar, and only 50 people feeling too different, out of the total sample of 202. That is, 47% of the sample reported to be in a sub-optimal state of distinctiveness, i.e. either too similar or too different. 66 people were in a state of optimal distinctiveness, i.e. feeling as similar and as different as desired. The rest of the sample reported being not feeling similar or different enough.

Table 8

Frequencies of Actual Similarity (AcSi) levels over, under, and in-balance with Desired Similarity (DeSi) levels (N = 202) at T1

<table>
<thead>
<tr>
<th>Agreement Groups</th>
<th>n</th>
<th>%</th>
<th>Mean DeSi</th>
<th>Mean AcSi</th>
</tr>
</thead>
<tbody>
<tr>
<td>AcSi &lt; DeSi (Less similar than desired)</td>
<td>47</td>
<td>23.3</td>
<td>4.56</td>
<td>3.32</td>
</tr>
<tr>
<td>In balance (As similar as desired)</td>
<td>109</td>
<td>54.0</td>
<td>3.66</td>
<td>3.66</td>
</tr>
<tr>
<td>AcSi &gt; DeSi (More similar than desired, too similar)</td>
<td>46</td>
<td>22.8</td>
<td>2.60</td>
<td>3.88</td>
</tr>
</tbody>
</table>

Table 9

Frequencies of Actual Difference (AcDi) levels over, under, and in-balance with Desired Difference (DeDi) levels (N = 202) at T1

<table>
<thead>
<tr>
<th>Agreement Groups</th>
<th>n</th>
<th>%</th>
<th>Mean DeDi</th>
<th>Mean AcDi</th>
</tr>
</thead>
<tbody>
<tr>
<td>AcDi &lt; DeDi (Less different than desired)</td>
<td>53</td>
<td>26.2</td>
<td>4.98</td>
<td>3.64</td>
</tr>
<tr>
<td>In balance (As different as desired)</td>
<td>99</td>
<td>49.0</td>
<td>4.17</td>
<td>4.17</td>
</tr>
<tr>
<td>AcDi &gt; DeDi (More different than desired, too different)</td>
<td>50</td>
<td>24.8</td>
<td>3.39</td>
<td>4.76</td>
</tr>
</tbody>
</table>
**Need for Belongingness.** The 10-item Need to Belong Scale (Leary et al., 2013) measures individual differences on the need to belong. Scale items, for example, “I have a strong “need to belong”” or “I try hard not to do things that will make other people avoid or reject me”, are answered on a 5-point scale ranging from “not at all” to “extremely”. Cronbach’s Alpha was .88 and .90 at T₁ and T₂, respectively.

**Need for Uniqueness.** The 4-item Need for Uniqueness Scale (Lynn & Harris, 1997) measures individual differences on the need to be unique. People are asked to fill in the gaps in four sentences, e.g. “I prefer being ___ different from others”, by using one of five words ranging from “no” to “extremely”. Cronbach’s Alpha was .80 and .84 at T₁ and T₂, respectively.

**Deviant behaviour at the workplace.** I measured four different types of deviant behaviours: destructive interpersonal deviant behaviour, destructive organisational deviant behaviour, constructive interpersonal deviant behaviour and constructive organisational deviant behaviour. I do make the distinction between behaviour focussed at the interpersonal and organisational level for two reasons. On the one hand, this distinction has been commonly made in previous research and generally yields differential relationships with independent variables, such as the Big Five (e.g. Berry et al., 2007). On the other hand, this distinction allows me to explore whether interpersonal needs and feelings of similarity and difference not only affect interpersonal deviance, but also organisational deviance. This is, however, an explorative approach.

To measure *destructive interpersonal deviant behaviour* at the workplace, I used the 7-item Interpersonal Deviance subscale from the *Workplace Deviance Scale* (Bennett & Robinson, 2000). People are expected to answer how often they had engaged in specific deviant behaviours in the past three months. The 7-point scale ranged from 1 “never” to 7 “daily”. Unless otherwise stated, this scale was used for all deviant and norm-congruent
behaviours. Sample items include “Made fun of someone at work” and “Played a prank on someone at work”. A confirmatory factor analysis of the scale showed that by removing one item, the model fit could be improved significantly. The original 7-item scale had an SRMR of .07 and a CFI of .89 ($\chi^2 (14) = 65.20, p < .001$), whereas the 6-item scale had an SRMR of .05 and a CFI of .94 ($\chi^2 (9) = 28.75, p < .001$). A chi-square test confirmed the superiority of the 6-item scale ($\Delta \chi^2 (5) = 35.03, p < .001$). The item dropped was “publicly embarrassed someone at work”, which also revealed to have a very low baseline rate (only about 5% had engaged in such behaviour). Interpersonal destructive deviance had a Cronbach’s Alpha of .84 and .89 at T1 and T2, respectively.

To measure destructive organisational deviant behaviour at the workplace, I used the 12-item Organisational Deviance subscale from the Workplace Deviance Scale (Bennett & Robinson, 2000). Sample items include “Take property from work without permission” and “Come in late to work without permission”. An analysis of the scale showed a low model fit, with an SRMR of .10 and a CFI of .69. Hence, the twelve items that tap into destructive organisational deviant behaviour were subject to principal component analysis. I used the whole sample at T1 (N = 300), which I randomly split into two halves for cross-validation (Tabachnick & Fidell, 2013). I performed principal component analysis on the first half of the sample and confirmatory factor analysis on the second half of the sample. The sample size of n = 150 was large enough to conduct an analysis with the right power. Following the guidelines by Tabachnick and Fidell (2013), the requirements of a significant Bartlett’s Test of Sphericity ($\chi^2 = 981.13, df = 66, p \leq .001$) and a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of higher than .60 (it was .84) were met. The PCA revealed two components with Eigenvalues bigger than one and, in total, explaining 56.13% of the variance. This two-component solution was supported by an investigation of the scree plot as well as the Monte Carlo PCA for Parallel Analysis. A chi-square test confirmed the superiority of the two-factor model to the one-factor model, with an SRMR of .08 and a CFI of .86 ($\Delta \chi^2 (11) = 183.15, p <$
The two components are explaining 42.59% and 13.54% of the variance. An oblimin rotation was performed in order to simplify the interpretation of the two individual factors. As expected, the two factors are correlated ($r = -0.46$). The original twelve items were loading on two separate factors, with six and five items, respectively. One item was dropped, as it was loading on both factors. The two subscales and their respective items can be found in Table 10. Robinson and Bennett's (1995) typology of deviant workplace behaviours with four quadrants helped with the interpretation of the components. The six items of the first component are consistent with the quadrant of *Property Deviance*, defined as “those instances where employees acquire or damage the tangible property or assets of the work organization without authorization” (Hollinger & Clark, 1982, p. 333). The five items of the second component are consistent with the quadrant of *Production Deviance*, defined as “behaviours which violate the formally proscribed norms delineating the minimal quality and quantity of work to be accomplished” (Hollinger & Clark, 1982, p. 333). The items on both organisational deviance scales were measured by asking people to indicate to which extent they had engaged in each of the behaviours presented as single items within the last three months. The property deviance subscale had a Cronbach’s Alpha of .82 and .76 at $T_1$ and $T_2$, respectively, and the production deviance subscale had a Cronbach’s Alpha of .83 and .84 at $T_1$ and $T_2$, respectively.
Table 10

Organisational Destructive Deviance items and its two subscales

<table>
<thead>
<tr>
<th>Subscale 1: Property Deviance</th>
<th>Subscale 2: Production Deviance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falsify a receipt to get reimbursed for more money than you spent on business expenses</td>
<td>Intentionally work slower than you could have worked</td>
</tr>
<tr>
<td>Use an illegal drug or consumed alcohol on the job</td>
<td>Spend too much time fantasising or daydreaming instead of working</td>
</tr>
<tr>
<td>Litter your work environment</td>
<td>Put little effort into your work</td>
</tr>
<tr>
<td>Drag out work in order to get overtime</td>
<td>Take an additional or longer break than is acceptable at your workplace</td>
</tr>
<tr>
<td>Discuss confidential company information with an unauthorised person</td>
<td>Neglect to follow your boss instructions</td>
</tr>
<tr>
<td>Take property from work without permission</td>
<td></td>
</tr>
</tbody>
</table>

To measure constructive interpersonal deviant behaviour, I used the 5-item Interpersonal Deviance subscale from the Constructive Deviance Scale (Galperin, 2012). This scale also measures deviance, but with constructive intentions. I used the same answering scheme as with destructive deviant behaviour. Sample items include “Disagreed with others in your workgroup in order to improve the current work procedures”. An analysis of the scale showed a low model fit, with an SRMR of .22 and a CFI of .50. Hence, the five items that tap into constructive interpersonal deviant behaviour were subject to principal component analysis. I used the whole sample at T1 (N = 300), which I randomly split into two halves for cross-validation (Tabachnick & Fidell, 2013). I performed principal component analysis on the first half of the sample and confirmatory factor analysis on the second half of the sample. The sample size of n = 150 was large enough to conduct an analysis with the right power. Following the guidelines by Tabachnick and Fidell (2013), the requirements of a significant Bartlett’s Test of Sphericity ($\chi^2 = 339.80, df = 10, p \leq .001$) was met and a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of higher than .60 (it was .58) was almost met. The PCA revealed two components with Eigenvalues bigger than one and, in total, explaining 76.79% of the variance. This two-component solution was supported by an investigation of the scree plot as well as the Monte Carlo PCA for Parallel Analysis. A chi-square test
confirmed the superiority of the two-factor model to the one-factor model, with an SRMR of .081 and a CFI of .95 ($\Delta \chi^2 (1) = 156.96, p < .001$). The two components are explaining 43.74 and 33.05% of the variance. An oblimin rotation was performed in order to simplify the interpretation of the two individual factors. As expected, the two factors are only weakly correlated ($r = .15$). The original five items were loading on two separate factors, with two items each. One item was dropped as it was loading strongly on both factors (“Disagree with others in your work in order to improve the current work procedures”). The two subscales and their respective items can be found in Table 11. An investigation of the single items helped with the interpretation of the components. The first component, with two items, can be described as “voice”, i.e. reporting wrong-doings of others in order to bring about positive change. The second component with two items deals with “disagreement”, e.g. disobeying and not following one’s supervisor’s orders to improve work procedures. The items on both interpersonal deviance scales were measured by asking people to indicate to which extent they had engaged in each of the deviant behaviours presented as single items within the last three months. The voice subscale had a Cronbach’s Alpha of .69 and .79 at T₁ and T₂, respectively, and the disagreement subscale had a Cronbach’s Alpha of .50 and .60 at T₁ and T₂, respectively.

**Table 11**

**Interpersonal Constructive Deviance items and its two subscales**

<table>
<thead>
<tr>
<th>Subscale 1: Voice</th>
<th>Subscale 2: Disagreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported a wrong-doing to co-workers to bring about a positive organizational change</td>
<td>Disobeyed your supervisor’s instructions in order to perform more efficiently</td>
</tr>
<tr>
<td>Reported a wrong-doing to another person in your company to bring about positive organizational change</td>
<td>Not followed the orders of your supervisor in order to improve work procedures</td>
</tr>
</tbody>
</table>

To measure *constructive organisational deviant behaviour*, I used the 5-item Organisational Deviance subscale from the *Constructive Deviance Scale* (Galperin, 2012).
Sample items include “Violated company procedures in order to solve a problem” and “Bent a rule to satisfy a customer’s needs”. A confirmatory factor analysis revealed a good model fit for the 5-item scale (SRMR = .04 and CFI = .95). Organisational constructive deviance had a Cronbach’s Alpha of .87 and .88 at T1 and T2, respectively.

**Norm-congruent behaviour** was operationalised as interpersonal and organisational organizational citizenship behaviour (OCB). Similar to deviant behaviour, I make this distinction for two reasons. One the one hand, this is a very commonly used distinction (Organ, 2018) and, on the other hand, I can again explore whether interpersonal needs and feelings of similarity and difference not only affect interpersonal OCB, but also organisational OCB. This is, however, an explorative approach.

**Interpersonal OCB** (OCB-I) was measured using the 7-item interpersonal OCB scale from Williams and Anderson (1991). Sample items include “Assists supervisor with his/her work (when not asked)” and “Helps others who have heavy workloads”. I also used the same answering scheme as with the deviant behaviour measures in this study. This OCB-I scale is generally considered to measure helping behaviour (Podsakoff et al., 2000). A confirmatory factor analysis revealed a good model fit for the 7-item scale (SRMR = .05 and CFI = .94). Interpersonal OCB had a Cronbach’s Alpha of .88 and .87 at T1 and T2, respectively.

**Organisational OCB** (OCB-O) was measured using the 7-item organisational OCB scale from Williams and Anderson (1991). Sample items include “Adheres to informal rules devised to maintain order” and “Gives advance notice when unable to come to work”. This OCB-O scale is generally considered to measure compliance at the workplace (Podsakoff et al., 2000). A confirmatory factor analysis of the scale showed that by removing two items, the model fit could be improved significantly. The original 7-item scale had an SRMR of .07 and a CFI of .90, whereas the 5-item scale had an SRMR of .02 and a CFI of 1.00. A chi-square test confirmed the superiority of the 6-item scale ($\Delta \chi^2 (9) = 29.79, p < .001$). The two
items dropped are “Great deal of time spend with personal phone conversations” and “Complains about insignificant things at work”. Organisational OCB had a Cronbach’s Alpha of .72 and .68 at T₁ and T₂, respectively.

**Job Autonomy.** I used the 3-item Job Autonomy Scale by Spreitzer (1995). On a scale from 1 – strongly agree to 7 – strongly disagree, participants were asked to rate how much they agreed with the three statements. Sample items include “I have significant autonomy in determining how I do my job” and “I can decide on my own how to go about doing my work”. Cronbach’s Alpha was .95 at both T₁ and T₂.

**Organisational Commitment.** I used the revised 6-item scales of affective and continuance commitment (Meyer, Allen, & Smith, 1993). On a scale from 1 – strongly agree to 7 – strongly disagree, participants were asked to rate how much they agreed with the three statements. Sample items include “I would be very happy to spend the rest of my career with this organisation” and “I do not feel “emotionally attached” to this organisation” for affective commitment, and “Right now, staying with my organisation is a matter of necessity as much as desire” and “I feel that I have very few options to consider leaving this organisation” for continuance commitment. It has been argued, however, that one item of the affective commitment subscale (“I really feel as if this organisation’s problems are my own”) is measuring organisational identification rather than commitment (Stinglhamber et al., 2015), which is why I dropped that item. Cronbach’s Alpha was .92 and .93 at T₁ and T₂, respectively for affective commitment and .82 at both T₁ and T₂ for continuance commitment.

**Control variables.** I controlled for age and gender, and given the somewhat delinquent nature of some of the deviant behaviour scale items, I also controlled for social desirability using the 11-item version of the Marlow Crowne Social Desirability Scale (Ballard, 1992; Crowne & Marlowe, 1960; Fischer & Fick, 1993; Loo & Loewen, 2004). Not only might participants who score high on social desirability give less accurate answers about
their deviant behaviours at the workplace, but also research has shown that higher social desirability is associated with conformity (Fleming & Zizzo, 2011). When it comes to gender, men seem to engage in higher levels of deviant behaviours (Bowling & Burns, 2015), particularly in destructive interpersonal deviance (Hershcovis et al., 2007). Meta-analytic support comes from Ng, Lam and Feldman (2016), who found that there is no difference between men and women regarding OCB, but men are slightly more likely to engage in destructive deviant behaviours. Moreover, Ng and colleagues (2016) indicated that age did not moderate the relationship between gender and deviance and OCB. However, Brienza and Bobocel (2017) found a negative relationship between age and destructive deviance. Older employees were less likely to engage in destructive deviant behaviours than younger employees. Table 12 provides an overview of the means and standard deviations of the variables and the correlations between them for the whole sample size. Table 13 and Table 14 provide an overview of the variables, their means, standard deviations and correlations for the subsamples of feeling too similar and feeling too different, respectively.

**Common method variance.** Given the self-report nature of my data, measurement error through common method variance could be a concern (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Following Podsakoff, MacKenzie, & Podsakoff's (2012) recommendations, I implemented a number of measures to reduce the impact of potential method biases. A cover letter was provided to assure the participants about the confidentiality of the data and their anonymity. This should increase the participants’ motivation to answer honestly and truthfully to the questions, even if they tap into potentially incriminating actions (e.g. theft as part of the Destructive Deviance Scale). I also used an online panel in order to maximise the level of anonymity of the participants (Smith, Sabat, Martinez, Weaver, & Xu, 2015). As an additional measure of whether participants answer honestly, I used a social desirability scale. Measuring social desirability is also a very good approach to control for potential common method variance according to Podsakoff et al. (2003). On top of that, all variables were
measured at two time points with a time lag of three months. Being able to regress an independent variable at $T_1$ onto the dependent variable at $T_2$ reduces the impact of common method bias, as the variables are measured at different time points. Additionally, all results were tested for robustness, i.e. the hypotheses were also tested on a cross-sectional level to see whether measuring the variables longitudinally does not differ from a cross-sectional analysis. Finally, I conducted a common method bias test to check my measurement model and that all my self-report measures are distinct. The results are reported in the following subsection of the chapter.
### Table 12

Correlation table including the mean and standard deviations (N = 202)

|       | M    | SD   | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30    | 31    | 32    | 33    | 34    | 35    | 36    | 37    | 38    | 39    | 40    | 41    | 42    |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
Table 13

Correlation table including the mean and standard deviations for the subsample of people feeling too similar (n = 155)

|       | M    | SD   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  |
|-------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Gender | 1.59 | .49  | -.03| -.08| .04 | .08 | -.09| .08 | .00 | -.03| .05 | .09 | -.16| -.11| -.10| -.07| -.15| -.15| .03 | .13 | -.14| -.03| -.19| -.09|   |
| 2. Age   | 40.63| 11.17| .00 | .07 | .16 | .19 | .13 | .07 | -.12| .05 | -.04| -.14| -.13| -.15| -.11| -.17| -.08| -.21| .02 | -.07| .13 | -.08| -.10| -.07|   |
| 3. Tenure | 8.04 | 6.65 | .04 | .06 | .11 | .14 | .05 | .06 | -.15| -.08| -.01| -.02| -.11| -.12| -.03| -.10| -.14| .02 | .10 | -.03| -.11| -.08| -.09|   |
| 4. Social Desire | 5.40 | 2.76 | .13 | .13 | .15 | .20 | .01 | .09 | -.03| -.04| -.11| -.11| -.16| -.17| -.09| -.15| -.31| -.32| .11 | .16 | -.11| -.06| -.10| -.10|   |
| 5. Act. Simil T1 | 3.77 | 1.22 | 1.00 | .84 | .46 | .39 | -.21| -.07| -.13| -.08| -.08| -.11| -.07| -.18| -.09| -.13| -.11| -.20| .22 | .05 | .09 | -.30| -.02| -.14|   |
| 6. Des. Simil T1 | 3.37 | 1.27 | 1.00 | .50 | .48 | .35 | -.22| -.13| -.07| -.12| -.12| -.18| -.11| -.10| -.14| -.20| .23 | .10 | -.02| -.27| .04 | -.10|   |
| 7. Act. Simil T2 | 3.72 | 1.30 | 1.00 | .81 | .12 | -.23| -.16| -.20| -.17| -.19| -.01| -.03| -.01| -.05| -.19| -.23| .19 | .08 | -.02| -.23| .01 | -.12|   |
| 8. Des. Simil T2 | 3.63 | 1.37 | 1.00 | .19 | .39 | -.17| -.28| -.10| -.10| -.10| -.04| -.07| -.07| -.14| -.19| .20 | .17 | -.02| -.16| .05 | -.09|   |
| 9. DS Simil T1 | -.39 | .71  | 1.00| .12 | -.18| -.11| -.01| -.02| -.09| -.01| -.04| -.04| -.05| -.01| -.03| -.10| .14 | .03 | -.11| .06 | -.07| -.05|   |
| 10. DS Simil T2 | -.10 | .83  | 1.00| -.03| -.14| .11 | .12 | -.17| -.02| -.11| -.04| -.07| -.03| -.04| -.16| .06 | .09 | -.07| -.05|   |
| 11. Sanu T1 | 2.63 | .69  | 1.00| .60 | .04 | -.03| -.18| .12 | -.20| .06 | .05 | .09 | .23 | .09 | .22 | .14 | .14 | .11|   |
| 12. Sanu T2 | 2.70 | .75  | 1.00| .03 | -.02| .00 | .16 | .00 | .12 | -.02| -.02| -.24| .12 | .14 | .08 | .07 | .05|   |
| 13. Auto T1 | 2.75 | 1.44 | 1.00| .68 | .07 | .11 | .06 | .05 | .05 | .07 | -.08| -.09| -.15| -.10| -.24| -.09|   |
| 14. Auto T2 | 2.82 | 1.37 | 1.00| .04 | .05 | .05 | .01 | .04 | -.13| .02 | -.19| -.10| -.21| -.12|   |
| 15. DDI T1 | 1.22 | .40  | 1.00| .61 | .70 | .45 | .44 | .40 | .13 | .14 | .36 | .33 | .19 | .31|   |
| 16. DDI T2 | 1.27 | .50  | 1.00| .59 | .79 | .35 | .51 | .06 | .23 | .26 | .43 | .06 | .40|   |
| 17. Prop Dev T1 | 1.21 | .47  | 1.00| .64 | .50 | .51 | .04 | .20 | .29 | .38 | .18 | .38|   |
| 18. Prop Dev T2 | 1.19 | .47  | 1.00| .38 | .54 | .01 | .23 | .17 | .33 | .08 | .40|   |
| 19. Prod Dev T1 | 1.74 | .72  | 1.00| .81 | -.13| -.08| .36 | .34 | .27 | .29|   |
| 20. Prod Dev T2 | 1.76 | .80  | 1.00| .10 | .24 | .40 | .12 | .37|   |
| 21. CD Voice T1 | 2.38 | 1.12 | 1.00| .46 | .22 | .19 | .24 | .14|   |
| 22. CD Voice T2 | 1.85 | .97  | 1.00| .11 | .40 | .10 | .39|   |
| 23. CD Dis T1 | 2.04 | .83  | 1.00| .54 | .74 | .53|   |
| 24. CD Dis T2 | 2.06 | .91  | 1.00| .41 | .77|   |
| 25. CDO T1 | 2.18 | .89  | 1.00| .55|   |
| 26. CDO T2 | 2.05 | .89  | 1.00|   |

**Note:** Act/Des = Actual or Desired Levels of Similarity or Difference; DS = Difference score of Similarity or Difference; Sanu = Self-Attributed Need for Uniqueness; DDI = Interpersonal Destructive Deviance; DDO = Organisational Destructive Deviance, CDI = Interpersonal Constructive Deviance (Dis = Disagreement), CDO = Organisational Constructive Deviance. Correlations greater than |.16| are significant at p < .05, correlations greater than |.28| are significant at p < .01, correlations greater than |.33| are significant at p < .001.
Table 14

Correlation table including the mean and standard deviations for the subsample of people feeling too different (n = 149)

|       | M  | SD | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1. Gender | 1.56 | .50 | -.02 | -.01 | -.09 | -.13 | .01 | -.06 | .31 | .29 | -.08 | -.05 | .07 | .01 | .10 | .15 | .02 | .05 |
| 2. Age  | 39.07 | 11.19 | -.11 | -.07 | -.12 | -.04 | .07 | .10 | -.03 | -.08 | -.27 | -.24 | -.03 | .00 | .15 | .19 | .28 | .31 |
| 3. Tenure | 6.91 | 6.01 | -.22 | -.15 | -.16 | -.12 | .12 | .04 | .08 | .02 | -.21 | -.23 | -.10 | .02 | .07 | .14 | .17 | .18 |
| 4. Social Desire | 5.34 | 2.82 | -.15 | -.15 | -.13 | -.19 | .02 | -.09 | .05 | .04 | -.17 | -.17 | .12 | .08 | .16 | .17 | .27 | .17 |
| 5. Act. Diff T1 | 4.36 | 1.24 | 1.00 | .82 | .42 | .38 | -.35 | -.02 | -.25 | -.22 | .45 | .39 | .03 | .01 | -.35 | -.22 | -.22 | -.16 |
| 6. Des. Diff T1 | 3.89 | 1.20 | 1.00 | .44 | .50 | .25 | .12 | -.34 | -.28 | .44 | .38 | -.01 | .04 | -.37 | -.19 | -.22 | -.13 |
| 7. Act. Diff T2 | 4.22 | 1.30 | .72 | .01 | -.29 | -.24 | -.18 | .24 | .25 | .06 | -.07 | -.29 | -.15 | -.26 | -.15 |
| 8. Des. Diff T2 | 4.11 | 1.40 | 1.00 | .17 | .45 | -.27 | -.25 | .18 | .22 | -.03 | -.02 | -.35 | -.17 | -.30 | -.18 |
| 9. DS Diff T1 | -.46 | .74 | .23 | .14 | -.09 | -.05 | -.03 | -.06 | .04 | -.02 | .06 | .01 | .06 |
| 10. DS Diff T2 | -.11 | 1.00 | 1.00 | .05 | -.11 | -.06 | -.02 | -.11 | .06 | -.11 | -.04 | -.07 | -.05 |
| 11. NtB T1 | 2.66 | .83 | 1.00 | .87 | .35 | -.30 | -.16 | -.16 | .21 | .16 | .00 | .06 |
| 12. NtB T2 | 2.70 | .88 | 1.00 | .29 | .25 | -.14 | -.17 | .21 | .15 | -.01 | -.13 |
| 13. Aff Comm T1 | 3.71 | 1.64 | 1.00 | .84 | -.05 | -.08 | -.48 | -.38 | -.35 | -.23 |
| 14. Aff Comm T2 | 3.93 | 1.69 | 1.00 | .10 | -.10 | -.52 | -.49 | -.38 | -.38 | -.38 |
| 15. Con Comm T1 | 3.66 | 1.25 | 1.00 | .56 | .15 | .08 | .20 | .19 |
| 16. Con Comm T2 | 3.54 | 1.23 | 1.00 | .24 | .17 | .21 | .11 |
| 17. OCB T1 | 3.72 | .81 | 1.00 | .69 | .48 | .36 |
| 18. OCB T2 | 3.62 | .87 | 1.00 | .43 | .51 |
| 19. OCBO T1 | 4.12 | .56 | 1.00 | .67 |
| 20. OCBO T2 | 3.97 | .60 | 1.00 |

Note. Act/Des = Actual or Desired Levels of Similarity or Difference; DS = Difference score of Similarity or Difference; Sanu = Self-Attributed Need for Uniqueness; NtB = Need to Belong; Aff Comm = Affective Commitment; Con Comm = Continuance Commitment; OCB = Interpersonal Organizational citizenship behaviour. OCB = Organisational OCB

Correlations greater than |.16| are significant at p < .05, correlations greater than |.21| are significant at p < .01, correlations greater than |.29| are significant at p < .001.
6.4. Results

Measurement Model – Common Method Bias

I conducted a series of confirmatory factor analyses to test for measurement bias given the self-report nature of my data. I included the following thirteen variables: The needs for belongingness and uniqueness (mediating variables), job autonomy, affective and continuance organisational commitment (moderating variables) as well as constructive and destructive deviance (three variables each) and OCB-I and OCB-O (dependent variables). Table 15 reports the different models that were created and compared to each other. Given that I also controlled for social desirability, I used it as an underlying factor to predict all other variables, as outlined by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). Because the sample size was only 186 and social desirability was measured with dichotomous items (yes or no), I treated social desirability as a manifest variable. Treating it as a latent variable (including the eleven items) would have dramatically increased the number of model parameters to be estimated (see also Selenko, Mäkikangas, and Stride (2017) for a similar case).
Table 15

Results of tests for measurement bias (N = 202). Mediating and moderating variables at T1 and dependent variables at T2

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Model description</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>Comparison to model no.</th>
<th>( \Delta \chi^2 )</th>
<th>( \Delta df )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-Factor Model</td>
<td>9254.37</td>
<td>2484</td>
<td>0.24</td>
<td>0.022</td>
<td>0.12</td>
<td>0.15</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>8-Factor model (one general deviance measure)</td>
<td>5581.75</td>
<td>2386</td>
<td>0.64</td>
<td>0.62</td>
<td>0.08</td>
<td>0.11</td>
<td>1</td>
<td>3672.60</td>
<td>98</td>
</tr>
<tr>
<td>3</td>
<td>12-Factor model (one general needs measure)</td>
<td>4495.96</td>
<td>2337</td>
<td>0.76</td>
<td>0.74</td>
<td>0.06</td>
<td>0.09</td>
<td>2</td>
<td>1085.80</td>
<td>49</td>
</tr>
<tr>
<td>4</td>
<td>13-Factor model</td>
<td>3301.86</td>
<td>2042</td>
<td>0.85</td>
<td>0.83</td>
<td>0.05</td>
<td>0.07</td>
<td>3</td>
<td>1194.10</td>
<td>295</td>
</tr>
<tr>
<td>5</td>
<td>11-Factor model (with subscales of DDO and CDI parcelled)</td>
<td>2362.46</td>
<td>1411</td>
<td>0.85</td>
<td>0.84</td>
<td>0.06</td>
<td>0.08</td>
<td>4</td>
<td>939.41</td>
<td>631</td>
</tr>
</tbody>
</table>

Note. DDO = Organisational Destructive Deviance; CDI = Interpersonal Constructive Deviance

At first, a one-factor model was tested, with all items loading on one general factor. Obviously, this model had a very poor fit (\( \chi^2 (2484) = 9254.37, p < .001 \)). In the next step, I combined items according to their scales but kept one main deviance measure (constructive and destructive as one). This significantly improved model fit (\( \Delta \chi^2 (98) = 3672.60, p < .001 \)), but the model still had a very poor fit (\( \chi^2 (2386) = 5581.75, p < .001 \)). Then, I tested a twelve-factor model, in which the two needs (uniqueness and belongingness) were loading onto a general needs factor, keeping all other scales intact. This again improved model fit (\( \Delta \chi^2 (49) = 1085.80, p < .001 \)), but the model still had a very poor fit (\( \chi^2 (2337) = 4495.96, p < .001 \)). Lastly, I tested the hypothesised thirteen-factor model. This model (model 4 in Table 15) improved model fit (\( \Delta \chi^2 (295) = 1194.10, p < .001 \)), but the model had only modest-to-poor fit to the data (\( \chi^2 (2042) = 3301.86, p < .001 \)). However, it is likely that this is due to the
relatively small sample size and the strong negative correlations between OCB and destructive deviance (see also Dahling & Gutworth, 2017 for a similar case). Additionally, I had to account for the fact that two scales did not show a satisfactory level of internal consistency. Subsequent factor analysis revealed a two-factor structure for both interpersonal constructive deviance and organisational destructive deviance. The interpersonal constructive deviance scale was comprised of two subscales (voice and disagreement), rather than just one, as was reported in its validation study (Galperin, 2012). The organisational destructive deviance scale was also comprised of two separate subscales (production and property deviance) as opposed to just one, as was reported in its validation study (Bennett & Robinson, 2000). Thus, the measurement model includes thirteen different scales rather than just eleven. Nevertheless, the CFA revealed that a single deviance factor is not able to capture all the different deviance subscales (see model 2 and 4 in the table). Following Podsakoff et al.'s (2003) advice, I measured the predictor and criterion variables at two time points and used social desirability as an underlying factor that was allowed to predict all other latent factors. The final model 4 also has reasonably good SRMR and RSMEA values. Consequently, I do not see the modest-to-poor fit of the data as an undermining issue for my data analysis.

Considering the small sample size, I also investigated whether item-parcelling would improve model fit. Item-parcelling refers to the idea of combining items into smaller chunks in order to decrease the number of predictors per latent variable as well as decrease the number of model parameters to be estimated (Little, Cunningham, Shahar, & Widaman, 2002; Little, Rhemtulla, Gibson, & Schoemann, 2013). To resemble the initially assumed eleven-factor structure, I created two item parcels for the two subscales of organisational destructive deviance (property and production deviance). These item parcels were then loading onto the latent variable of organisational destructive deviance. I used the same approach with the latent variable of interpersonal constructive deviance. In this case, the two
item parcels represent the two subscales of voice and disagreement. As can be seen in Table 15, model 5 (with item parcels) significantly improved model fit compared to model 4, the thirteen-factor model (Δχ²(631) = 939.41, p < .001), but the model fit is still only modest (χ²(1411) = 2362.46, p < .001). While model 5 significantly reduces the number of free parameters (df), it barely shows higher values of goodness of fit indices of CFI and TLI (.85 vs. .85 and .83 vs. .84, for model 4 and model 5 regarding CFI and TLI, respectively). Thus, item-parcelling did not drastically improve the measurement model. As a result, I used the hypothesised thirteen-factor model (model 4) as it allowed me to test my conceptual model with all the individual variables.

**Test of first and second hypothesis**

I hypothesised that the more people feel too similar, the more likely they are to engage in deviant behaviour (Hypothesis 1), whereas the more people feel too different, the more likely they are to engage in norm-congruent behaviour (Hypothesis 2). As a result, I was interested in the subsamples of people who fell into the categories of feeling too similar (or feeling too different), as outlined in Table 8 and Table 9, and people, who reported to feel as similar as desired (or as different as desired). Accordingly, I have a sample size of n = 145, for feeling too similar, and n = 136, for feeling too different. Tables 13 and 14 provide an overview of the means and standard deviations of the variables and the correlations for the subsamples of people feeling too similar and people feeling too different, respectively.

I conducted multiple linear regression to test whether feeling too similar would have a positive effect on deviant behaviour and whether feeling too different would have a positive effect on norm-congruent behaviour. I used the difference score (Actual minus Desired levels of similarity/difference) as the independent variable. The difference score provides the information to what extent people feel too similar (or too different). If the difference score is zero, people feel as desired, whereas the higher the difference score, the more people feel too similar or too different (more than desired). Since I measured all the variables at both time
points, I was able to regress the dependent variable at T2 onto the independent variable at T1, while controlling for the dependent variable at T1 (Y1). Thus, I can calculate how much additional variance of the dependent variable is explained by the independent variable on top of the variance explained by earlier measures of the dependent variable. The sample size varies between the different regressions, as I dropped some cases due to being multivariate outliers. The critical $\chi^2$ value for Mahalanobis distance (Tabachnick & Fidell, 2013) was determined using $\alpha = .001$ for five degrees of freedom (equal to the number of predictors in the regression). Any case with a larger score was removed from the analysis. As can be seen in Table 16, feeling too similar is negatively related to interpersonal destructive deviance, disagreement and organisational constructive deviance, and it is positively related to property and production deviance as well as voice. However, the regression coefficients are all very small and not significant, so an interpretation regarding the direction of the effects is not reasonable. Feeling too similar is thus not a significant predictor of deviance, neither destructive nor constructive. Feeling too different, on the other hand, is negatively related to interpersonal OCB and organisational OCB, with the latter effect being significant. Contrary to what I hypothesised, feeling too different has a negative effect on organisational directed OCB. That means the more people feel too different, the less they seem to engage in OCB-O.

In sum, I did not find support for the first two hypotheses (Hypotheses 1 & 2). I also ran these regressions cross-sectionally at both T1 and T2, but I was not able to find significant results there either.
Table 16

Effect of feeling too similar on deviant behaviour and feeling too different on norm-congruent behaviour

<table>
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<tr>
<th></th>
<th>Interpersonal Destructive Deviance (T2)</th>
<th>Property Deviance (T2)</th>
<th>Production Deviance (T2)</th>
<th>Constructive Deviance (Voice) (T2)</th>
<th>Constructive Deviance (Disagreement) (T2)</th>
<th>Organisational Constructive Deviance (T2)</th>
<th>OCB-I (T2)</th>
<th>OCB-O (T2)</th>
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<td>Y1</td>
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<td>.44***</td>
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<td>.85***</td>
<td>.06</td>
<td>.38***</td>
<td>.06</td>
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<td>.03</td>
<td>.08</td>
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<td>R²</td>
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</table>

Note: The sample size varies, due to excluding multivariate outliers from the solutions. SD = Social Desirability. Y1 = dependent variable at time point 1. * p < .05, ** p < .01, *** p < .001
Supplemental Analysis

Edwards (2002) proposed another way of analysing the effect of difference scores; polynomial regression analysis with response surface methodology. This approach allows for analysing both curvilinear and interaction effects between the two separate values (actual level & desired level) that make up the difference score. In this case, I utilise the whole sample, rather than solely focus on the subsamples of people feeling too similar or too different. Essentially, polynomial regression analysis allows analysing what happens on both sides of optimal distinctiveness, e.g. feeling too similar and not feeling similar enough. When solely focusing on the difference score (actual minus desired), the information about the two individual values is omitted and thus lost (Edwards, 2001). Polynomial regression, on the other hand, includes both first and second-order terms as well as the interaction term.

Generally speaking, the polynomial regression equation looks as follows:

**Equation 2**

\[ Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e \]

In my case, \( Z \) is the dependent variable (deviant or norm-congruent behaviour), \( X \) represents the actual feeling of similarity (or difference) at T1, \( Y \) represents the desired feeling of similarity (or difference) at T2. Moreover, \( XY \) represents the interaction between the two predictor variables \( X \) and \( Y \), and \( X^2 \) and \( Y^2 \) are the squared terms for each of the predictor variables. My polynomial regression equation looked as follows for the congruence regarding the feeling of similarity:

**Equation 3**

\[
Z = b_0 + b_1\text{Actual Similarity} + b_2\text{Desired Similarity} + b_3(\text{Actual Similarity})^2 \\
+ b_4\text{Actual Similarity} * \text{Desired Similarity} + b_5(\text{Desired Similarity})^2 \\
+ e + \text{Control Variables}
\]

The polynomial regression equation for the congruence regarding the feeling of difference looked as follows:
Equation 4

\[ Z = b_0 + b_1 \text{Actual Difference} + b_2 \text{Desired Difference} + b_3 (\text{Actual Difference})^2 + b_4 \text{Actual Difference} \times \text{Desired Difference} + b_5 (\text{Desired Difference})^2 + e + \text{Control Variables} \]

In order to use polynomial regressions, two conditions have to be met. On the one hand, there need to be roughly equal numbers of cases in an imbalanced state and a balanced state, and, on the other hand, adding the higher-order terms \((X^2, XY, Y^2)\) in the regression has to result in a significant increase of \(R^2\).

Firstly, balance means that people feel as similar (or different) as desired, whereas imbalance means that people feel less or more similar (or different) than desired. Values of actual and desired feelings were standardised to identify how many participants fall into the imbalance category. As can be seen in Table 8 and Table 9, when it comes to feelings of similarity, there are slightly fewer people in an imbalanced state as in a balanced state, with \(n = 93\) and \(n = 109\), respectively. The same applies to feelings of difference as, there are fewer people in an imbalanced state than in a balanced state, with \(n = 93\) and \(n = 99\), respectively.

Secondly, the higher-order terms of the polynomial regression equation should make a significant contribution in terms of \(R^2\) change. Thus, the five parts of the polynomial regression are entered in two steps in the form of a hierarchical regression. In the first step, the two variables on which the congruence value is based are entered. In my case, this is the Actual Difference (Similarity) \([X]\) and the Desired Difference (Similarity) \([Y]\). In the second step, the squared values \((X^2\) and \(Y^2\)) and their cross-product \((XY)\) are entered. Only if the second step proves to be a significant contribution to the model, i.e. produces a significant change in the \(R^2\) squared, a polynomial regression should be interpreted, as it also tests for curvilinear effects (see Odle-Dusseau, Britt, & Bobko (2012) for a case where it did not work out). Polynomial regressions and response surface analyses are sensitive to cases that have a particularly large effect on the predictor variables (Belsley, Kuh, & Welsch, 1980; Cohen,
Following Cohen et al. (2003) and Edwards and Cable (2009), I calculated leverage statistics, studentised residuals and Cook’s D statistic on my polynomial regression models. Cases that exceeded the maximum cut-off on the three criteria and were clearly identified as outliers on plots were dropped from the analysis (see Edwards & Cable, 2009; Thau et al., 2007 for more elaboration). Only up to three percent of the cases were identified as outliers in the various regressions. In order to reduce the impact of multicollinearity, actual and desired levels of similarity/difference were centred (Aiken & West, 1991), i.e. from each participant score the centre of the scale (in my case 4) was deducted.

The results of the polynomial regressions can be found in Table 17 and Table 18. There was a marginally significant (.05 < \(p\) < .06) increase in \(R^2\) for organisational constructive deviance. Both actual and desired levels of similarity were better predictors of disagreement as part of organisational constructive deviant behaviours when the second-order terms were included in the regression model. I did not find any effects for the other deviant behaviour variables, nor for feelings of difference and norm-congruent behaviour. Feelings of similarity did not have an effect on destructive deviance, neither interpersonal nor organisational and not on voice or disagreement. Feelings of difference did not have an effect on interpersonal or organisational OCB.

The next step is not to interpret the regression coefficients in terms of the predictors in the regression model and whether or not they are significant, but to calculate the values and significance levels of the different surfaces (Edwards, 2002). Moreover, the analysis is supported by visual inspection of the response surface plots (Shanock et al., 2010). There are, in total, four different surfaces, labelled as \(a_1\) to \(a_4\), as can be seen in the bottom third of Table 17 and Table 18. Only in significant cases, these four surfaces were calculated. The slope along the congruence line, i.e. where the values of actual similarity (difference) and desired similarity (difference) are equal is given by \(a_1 = (b_1 + b_2)\), where \(b_1\) is the
unstandardised beta coefficient for the centred value of actual similarity and $b_2$ is the unstandardised beta coefficient for the centred value of desired similarity (see Equation 3). Congruency is the case when people feel as desired: $X = Y$. The curvature along the congruence line is assessed by calculating $a_2 = (b_3 + b_4 + b_5)$, where $b_3$ is the unstandardised beta coefficient for the squared centred value of actual similarity, $b_4$ is the unstandardised beta coefficient for the cross product of actual and desired similarity and $b_5$ is the unstandardised beta coefficient for the squared centred value of desired similarity (see Equation 3). If $a_2$ is negative, the curvature along the congruence line is downward like an inverted U, and if $a_2$ is positive, the curvature is upward and U-shaped. The other two surface values ($a_3$ and $a_4$) provide insights about the incongruence line, which runs perpendicular to the congruence line. Incongruence means the discrepancy between actual and desired levels of similarity (or difference), i.e. where the values of actual similarity (difference) and desired similarity (difference) are opposite to each other: $X = -Y$. The slope along the incongruence line is assessed by calculating $a_3 = (b_1 - b_2)$. The curvature along the incongruence line is given by $a_4 = (b_3 - b_4 + b_5)$. If $a_4$ is negative, the curvature along the incongruence line is downward like an inverted U, and if $a_4$ is positive, the curvature is upward and U-shaped.

For organisational constructive deviance, none of the four surface values was significant. Thus, no plot was created. Generally speaking, the supplemental analysis did not reveal any support for the hypotheses that feeling too similar is positively related to deviant behaviour and that feeling too different is positively related to norm-congruent behaviour.
Table 17

Hierarchical polynomial regression with Actual and Desired Similarity and deviant behaviour (N = 202)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interpersonal Deviance (at T1)</th>
<th>Property Deviance (at T1)</th>
<th>Production Deviance (at T1)</th>
<th>Interpersonal Constructive Deviance (Voice) (at T1)</th>
<th>Interpersonal Constructive Deviance (Disagreement) (at T1)</th>
<th>Organisational Constructive Deviance (at T1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td></td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.58 (.11)</td>
<td>0.58 (.12)</td>
<td>0.67 (.10)</td>
<td>0.70 (.10)</td>
<td>0.81 (.20)</td>
<td>0.86 (.20)</td>
</tr>
<tr>
<td>Age</td>
<td>0.00 (.00)</td>
<td>0.00 (.00)</td>
<td>0.00 (.00)</td>
<td>-0.01 (.00)</td>
<td>-0.01 (.00)*</td>
<td>-0.01 (.01)</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.01 (.03)</td>
<td>0.02 (.01)</td>
<td>0.02 (.03)</td>
<td>0.02 (.03)</td>
<td>0.02 (.07)</td>
<td>0.02 (.07)</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>-0.02 (.01)**</td>
<td>-0.02 (.01)**</td>
<td>-0.02 (.01)**</td>
<td>-0.02 (.01)**</td>
<td>-0.04 (.01)**</td>
<td>-0.04 (.01)**</td>
</tr>
<tr>
<td>Y1 Actual Similarity at T1</td>
<td>0.59 (.05)**</td>
<td>0.59 (.05)**</td>
<td>0.50 (.04)**</td>
<td>0.78 (.05)**</td>
<td>0.77 (.05)**</td>
<td>0.42 (.05)**</td>
</tr>
<tr>
<td>Desired Similarity at T1</td>
<td>-0.02 (.02)</td>
<td>-0.02 (.02)</td>
<td>-0.02 (.02)</td>
<td>-0.02 (.02)</td>
<td>-0.05 (.04)</td>
<td>-0.04 (.04)</td>
</tr>
<tr>
<td>Actual Similarity at T1</td>
<td>-0.01 (.01)</td>
<td>-0.01 (.01)</td>
<td>-0.02 (.03)</td>
<td>-0.02 (.03)</td>
<td>-0.01 (.06)</td>
<td>-0.01 (.06)</td>
</tr>
<tr>
<td>Actual Similarity x</td>
<td>0.01 (.02)</td>
<td>0.03 (.02)</td>
<td>0.06 (.04)</td>
<td>-0.01 (.08)</td>
<td>-0.01 (08)</td>
<td>0.09 (06)</td>
</tr>
<tr>
<td>Desired Similarity at</td>
<td>0.00 (.02)</td>
<td>0.02 (.01)</td>
<td>-0.03 (.03)</td>
<td>-0.01 (.05)</td>
<td>0.00 (04)</td>
<td>0.00 (04)</td>
</tr>
<tr>
<td>T1 squared</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.51</td>
<td>0.51</td>
<td>0.52</td>
<td>0.53</td>
<td>0.69</td>
<td>0.70</td>
</tr>
<tr>
<td>F Test for R² change</td>
<td>F (3, 184) = .774</td>
<td>F (3, 187) = .81</td>
<td>F (3, 188) = .85</td>
<td>F (3, 189) = 1.32</td>
<td>F (3, 190) = 2.02</td>
<td>F (3, 191) = 2.73*</td>
</tr>
<tr>
<td>N</td>
<td>194</td>
<td>194</td>
<td>197</td>
<td>197</td>
<td>198</td>
<td>198</td>
</tr>
<tr>
<td>Model test</td>
<td>F (6) = 31.96***</td>
<td>F (9) = 21.49***</td>
<td>F (6) = 34.69***</td>
<td>F (6) = 23.33***</td>
<td>F (6) = 71.53***</td>
<td>F (6) = 47.87***</td>
</tr>
<tr>
<td>Test of Surfaces</td>
<td>A1: Coefficient (SE)</td>
<td>-.01 (.05)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A2: Coefficient (SE)</td>
<td>.07 (.04)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A3: Coefficient (SE)</td>
<td>.05 (11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A4: Coefficient (SE)</td>
<td>.12 (.14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. A1: Slope along the congruence line (X = Y), A2: Curvature along the congruence line (X = Y), A3: Slope along the incongruence line (X = -Y), A4: Curvature along the incongruence line (X = -Y), X = Actual Similarity, Y = Desired Similarity

*p < .05, ** p < .01, *** p < .001
Table 18

Hierarchical polynomial regression with Actual and Desired Difference and norm-congruent behaviour (N = 202)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Interpersonal OCB (at T2)</th>
<th>Organisational OCB (at T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td></td>
<td>$B$ (SE)</td>
<td>$B$ (SE)</td>
</tr>
<tr>
<td>Constant</td>
<td>.43 (.26)</td>
<td>.46 (.27)</td>
</tr>
<tr>
<td>Age</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Gender</td>
<td>.10 (.09)</td>
<td>.10 (.09)</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>.02 (.02)</td>
<td>.02 (.02)</td>
</tr>
<tr>
<td>$Y_1$</td>
<td>.74 (.06)***</td>
<td>.73 (.06)***</td>
</tr>
<tr>
<td>Actual Difference at T1</td>
<td>.00 (.05)</td>
<td>.04 (.05)</td>
</tr>
<tr>
<td>Desired Difference at T1</td>
<td>.06 (.05)</td>
<td>.01 (.05)</td>
</tr>
<tr>
<td>Actual Difference at T1 squared</td>
<td>-.07 (.04)</td>
<td>-.02 (.04)</td>
</tr>
<tr>
<td>Actual Difference x</td>
<td>.10 (.06)</td>
<td>.05 (.05)</td>
</tr>
<tr>
<td>Desired Difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired Difference at T1 squared</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.53</td>
<td>.55</td>
</tr>
<tr>
<td>$F$ Test for $R^2$ change</td>
<td>$F$(3,187) = 2.35</td>
<td>$F$(3,190) = .74</td>
</tr>
<tr>
<td>$N$</td>
<td>197</td>
<td>197</td>
</tr>
<tr>
<td>Model test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$ (df)</td>
<td>$F$(6) = 35.64***</td>
<td>$F$(9) = 25.05***</td>
</tr>
</tbody>
</table>

Test of Surfaces
A1: Coefficient (SE)
A2: Coefficient (SE)
A3: Coefficient (SE)
A4: Coefficient (SE)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Test of mediation effects

I followed the approach outlined by Cole and Maxwell (2003) to test whether the need for uniqueness would mediate the relationship between feeling too similar and deviant behaviour and whether the need for belongingness would mediate the relationship between feeling too different and norm-congruent behaviour. Considering my “half-longitudinal” design with two waves (instead of three), Cole and Maxwell (2003) suggest testing the mediation in two pairs of regression. In the first regression, the path between the independent variable at T1 ($X_1$) and the mediating variable at T2 ($M_2$), controlling for $M_1$, is estimated. The second regression estimates the path between the mediating variable at T1 ($M_1$) and the dependent variable at T2 ($Y_2$), controlling for $Y_1$. 

138
**Regression of Path A (IV to Mediator)**

I hypothesised that feeling too similar will be positively related to the need for uniqueness and feeling too different will be positively related to the need for belongingness (Hypotheses 3a & 4a). Thus, I am using the respective subsamples of people feeling too similar/too different to test these hypotheses. The sample size varies between the different regressions, as I dropped some cases due to being multivariate outliers. The critical $\chi^2$ value for Mahalanobis distance (Tabachnick & Fidell, 2013) was determined using $\alpha = .001$ for four degrees of freedom (equal to the number of predictors in the regression). Any case with a larger score was removed from the analysis. I also did not control for social desirability, because I thought that how people answer questions about their needs is not affected by people’s levels of social desirability. As can be seen in Table 19, I did not find any significant effects. Feeling too different is slightly negatively but not significantly related to the need for belongingness. The unstandardised beta is however too small to be interpreted as an effect in the opposite direction. Considering that the experiments indicated that feeling very different might be positively related to the need for uniqueness, I ran a separate regression to investigate whether feeling too different is also positively related to the need for uniqueness in the online study. This time, however, I found a negative but not significant effect of feeling too different on the need for uniqueness. This is in line with a positive but not significant effect of feeling too similar on the need for uniqueness. In sum, the more people feel too different, the lower their need for uniqueness and the more people feel too similar, the higher their need for uniqueness. While the effect is generally in the right direction, there is no significant result for that. Apart from that, feeling too different is not significantly related to the need for belongingness. Thus, I did not find any support for the hypotheses. I also ran these regressions cross-sectionally at both T1 and T2, but I was not able to find significant results there either.
Table 19

Effect of feeling too similar on the need for uniqueness and feeling too different on the needs for uniqueness and belongingness

<table>
<thead>
<tr>
<th></th>
<th>Uniqueness (T2)</th>
<th>Belongingness (T2)</th>
<th>Uniqueness (T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.00</td>
<td>.32</td>
<td>.37</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Gender</td>
<td>-.06</td>
<td>.10</td>
<td>.06</td>
</tr>
<tr>
<td>Y1</td>
<td>.65***</td>
<td>.07</td>
<td>.91***</td>
</tr>
<tr>
<td>Feeling too similar (T1)</td>
<td>-.02</td>
<td>.08</td>
<td>Feeling too</td>
</tr>
<tr>
<td>R²</td>
<td>.36</td>
<td></td>
<td>R²</td>
</tr>
<tr>
<td>N</td>
<td>154</td>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

Note. The sample size varies, due to excluding multivariate outliers from the solutions. Y₁ = dependent variable at time point 1. * p < .05, ** p < .01, *** p < .001

Supplemental Analysis

I found some initial support for curvilinear effects when testing whether the feelings of similarity predict disagreement as part of the organisational constructive deviant behaviours. As a result, I also used polynomial regression to investigate the relationship between feelings of similarity and the need for uniqueness as well as the relationship between feelings of difference and the need for belongingness. As mentioned before, polynomial regressions were run with the whole sample, rather than the subsamples. Following Cohen et al. (2003) and Edwards and Cable (2009), I calculated leverage statistics, studentised residuals and Cook’s D statistic on my polynomial regression models. Cases that exceeded the maximum cut-off on the three criteria and were clearly identified as outliers on plots were dropped from the analysis (see Edwards & Cable, 2009; Thau et al., 2007 for more elaboration). Only up to two percent of the cases were identified as outliers in the various regressions. As can be seen in Table 20 and Table 21, the analysis revealed that adding the higher-order terms of actual and desired similarity significantly increased the R² in predicting the need for uniqueness, but adding the higher-order terms of actual and desired difference did not significantly increase the R² in predicting the need for belongingness.
Table 20

Hierarchical polynomial regression with Actual and Desired Similarity and the need for uniqueness (N = 202)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 B (SE)</th>
<th>Model 2 B (SE)</th>
<th>Model 1 B (SE)</th>
<th>Model 2 B (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.03 (.28)</td>
<td>.97 (.28)</td>
<td>1.18 (.28)</td>
<td>1.19 (.28)</td>
</tr>
<tr>
<td>Age</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Gender</td>
<td>-.11 (.09)</td>
<td>-.11 (.10)</td>
<td>-.12 (.09)</td>
<td>-.12 (.09)</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>.00 (.02)</td>
<td>.00 (.02)</td>
<td>.00 (.03)</td>
<td>.00 (.03)</td>
</tr>
<tr>
<td>Y₁</td>
<td>.63 (.07)***</td>
<td>.62 (.07)***</td>
<td>.60 (.07)**</td>
<td>.60 (.07)**</td>
</tr>
<tr>
<td>Actual Similarity at T1</td>
<td>.03 (.07)</td>
<td>.09 (.07)</td>
<td>-.02 (.06)</td>
<td>-.05 (.06)</td>
</tr>
<tr>
<td>Desired Similarity at T1</td>
<td>-.02 (.06)</td>
<td>-.05 (.06)</td>
<td>-.01 (.06)</td>
<td>-.04 (.06)</td>
</tr>
<tr>
<td>Actual Similarity at T1 squared</td>
<td></td>
<td></td>
<td>.16 (.06)**</td>
<td></td>
</tr>
<tr>
<td>Actual Similarity x Desired Similarity</td>
<td></td>
<td></td>
<td>-.09 (.08)</td>
<td></td>
</tr>
<tr>
<td>Desired Similarity at T1 squared</td>
<td></td>
<td></td>
<td>.01 (.05)</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.36</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Test for R² change</td>
<td>F(3,172) = 2.90*</td>
<td></td>
<td>F(3,172) = 3.9</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>182</td>
<td>182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model test</td>
<td></td>
<td></td>
<td>F(6) = 16.42***</td>
<td>F(9) = 12.27***</td>
</tr>
<tr>
<td>Test of Surfaces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1: Coefficient (SE)</td>
<td>.04 (.05)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2: Coefficient (SE)</td>
<td>.07 (.04)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3: Coefficient (SE)</td>
<td>.14 (.12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4: Coefficient (SE)</td>
<td>.24 (.17)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .01, *** p < .001

Table 21

Hierarchical polynomial regression with Actual and Desired Difference and both needs (N = 202)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 B (SE)</th>
<th>Model 2 B (SE)</th>
<th>Model 1 B (SE)</th>
<th>Model 2 B (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.28 (.18)</td>
<td>.29 (.19)</td>
<td>1.18 (.28)</td>
<td>1.19 (.28)</td>
</tr>
<tr>
<td>Age</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Gender</td>
<td>.08 (.07)</td>
<td>.08 (.07)</td>
<td>-.12 (.09)</td>
<td>-.12 (.09)</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>.00 (.01)</td>
<td>.00 (.01)</td>
<td>-.02 (.06)</td>
<td>-.03 (.05)</td>
</tr>
<tr>
<td>Y₁</td>
<td>.91 (.04)***</td>
<td>.91 (.04)***</td>
<td>.60 (.07)***</td>
<td>.60 (.07)***</td>
</tr>
<tr>
<td>Actual Difference at T1</td>
<td>.00 (.04)</td>
<td>.01 (.04)</td>
<td>-.02 (.05)</td>
<td>-.03 (.05)</td>
</tr>
<tr>
<td>Desired Difference at T1</td>
<td>.01 (.03)</td>
<td>.01 (.04)</td>
<td>-.09 (.05)*</td>
<td>.10 (.05)</td>
</tr>
<tr>
<td>Actual Difference at T1 squared</td>
<td>-.02 (.03)</td>
<td>-.02 (.03)</td>
<td>.00 (.04)</td>
<td></td>
</tr>
<tr>
<td>Actual Difference x Desired Difference</td>
<td></td>
<td>.03 (.04)</td>
<td>.07 (.05)</td>
<td></td>
</tr>
<tr>
<td>Desired Difference at T1 squared</td>
<td>-.01 (.02)</td>
<td>-.01 (.02)</td>
<td>-.05 (.03)</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.75</td>
<td>.75</td>
<td>.38</td>
<td>.39</td>
</tr>
<tr>
<td>F Test for R² change</td>
<td>F(3,190) = .17</td>
<td>F(3,190) = .99</td>
<td>F(3,190) = 95.97***</td>
<td>F(3,190) = 63.21***</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Model test</td>
<td></td>
<td></td>
<td>F(6) = 95.97***</td>
<td>F(9) = 13.23***</td>
</tr>
<tr>
<td>Test of Surfaces</td>
<td></td>
<td></td>
<td>F(6) = 95.97***</td>
<td>F(9) = 13.23***</td>
</tr>
<tr>
<td>A1: Coefficient (SE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2: Coefficient (SE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3: Coefficient (SE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4: Coefficient (SE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .01, *** p < .001
The response surface plot for the need for uniqueness can be found in Figure 2. For the need for uniqueness, the analysis of the surface values revealed a significantly positive curvature along the congruence line. The convex surface (upward curving) indicates that people have a higher need for uniqueness when their congruent levels of actual and desired similarity are extreme, i.e. when they are very dissimilar and desire to be so, or when they are very similar and desire to be so. As can be seen in Figure 2, there is a convex surface along the congruence line and the peak in the front corner (where both levels of actual and desired similarity are -3) is higher than the peak in the back corner (where both levels of actual and desired similarity are +3). The visual inspection of the plot also revealed an upward curving along the incongruence line, i.e. higher levels of need for uniqueness when people are in an imbalanced state. However, this curvature is not significant. Thus, this result does not provide support for the hypothesis that feeling too similar is positively related to the need for uniqueness. In that case, I would have expected a significant negative surface value of $a_3$, however, the results show a positive, but insignificant value. Instead, this interesting finding indicates that the relationship between feelings of similarity and need for uniqueness is curvilinear rather than a linear.
Considering that the analysis of the first experiment indicated that feeling _very_ different might be positively related to the need for uniqueness, I ran a separate regression to investigate whether feeling _too_ different is also positively related to the need for uniqueness in the online study. I investigated whether adding the higher-order terms of actual and desired difference would change the $R^2$ significantly. As can be seen in Table 21, in Model 1, I found a significant positive effect for desired difference. However, this effect becomes negative once the higher-order terms are added to the regression. Model 2 shows no significant effects anymore. Thus, no response surface plot was created. Nonetheless, I found some limited support of a linear positive relationship between the desire to be different and the need for uniqueness. For the need for belongingness, none of the four surface values was significant. Thus, no plot was created. Generally speaking, the supplemental analysis did not reveal any support for the hypotheses that feeling too similar is positively related to deviant behaviour and that feeling too different is positively related to norm-congruent behaviour.
Regression of Path B (Mediator to DV)

I hypothesised that the need for uniqueness will be positively related to deviant behaviour and that the need for belongingness will be positively related to norm-congruent behaviour. As these hypotheses describe the second path of the mediation model, I again used the respective subsamples of people feeling too similar/too different. The sample size varies between the different regressions, as I dropped some cases due to being multivariate outliers. The critical $\chi^2$ value for Mahalanobis distance (Tabachnick & Fidell, 2013) was determined using $\alpha = .001$ for five degrees of freedom (equal to the number of predictors in the regression). Any case with a larger score was removed from the analysis. As can be seen in Table 22, none of the regressions coefficients is significant. The need for uniqueness is negatively related to interpersonal destructive deviance, voice and disagreement and positively related to property and production deviance as well as organisational constructive deviance. However, the regression coefficients are all very small and not significant, so an interpretation regarding the direction of the effects is not reasonable. The need for uniqueness is thus not a significant predictor of deviance, neither destructive nor constructive. The need for belongingness is positively related to interpersonal OCB and negatively related to organisational OCB. However, the regression coefficients are again very small and not significant. Thus, the need for belongingness is not a significant predictor of norm-congruent behaviour. The regressions in Table 22 are based on the respective subsamples, i.e. only people feeling too similar or feeling too different. In sum, I did not find support for either the hypothesis or for the mediating effect of the needs for uniqueness and belongingness. I also ran these regressions cross-sectionally at both T1 and T2, but I was not able to find significant results there either.
Table 22

Effects of uniqueness on deviant behaviour and belongingness on norm-congruent behaviour WITH respective subsamples

<table>
<thead>
<tr>
<th></th>
<th>Interpersonal Destructive Deviance (T2)</th>
<th>Property Deviance (T2)</th>
<th>Production Deviance (T2)</th>
<th>Constructive Deviance (Voice) (T2)</th>
<th>Constructive Deviance (Disagreement) (T2)</th>
<th>Organisational Constructive Deviance (T2)</th>
<th>OCB (T2)</th>
<th>OCB-O (T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.62 .14</td>
<td>-.02** .01</td>
<td>- .01*</td>
<td>.01 .02</td>
<td>-.01*.01</td>
<td>.01 .02</td>
<td>.46 .32</td>
<td>.50 .40</td>
</tr>
<tr>
<td>Age</td>
<td>.00 .00</td>
<td>.00 .00</td>
<td>-.01** .00</td>
<td>-.01 .01</td>
<td>-.01*.01</td>
<td>-.01 .01</td>
<td>.01 .01</td>
<td>.01 .01</td>
</tr>
<tr>
<td>Gender</td>
<td>-.03 .03</td>
<td>.01 .03</td>
<td>-.02 .08</td>
<td>.27 .14</td>
<td>.13 .13</td>
<td>.04 .13</td>
<td>.14 .11</td>
<td>.03 .10</td>
</tr>
<tr>
<td>SD</td>
<td>-.02** .01</td>
<td>-.01* .01</td>
<td>-.02 .01</td>
<td>.04 .03</td>
<td>.01 .02</td>
<td>-.01 .02</td>
<td>.02 .02</td>
<td>-.02 .02</td>
</tr>
<tr>
<td>Y1</td>
<td>.58*** .06</td>
<td>.43*** .06</td>
<td>.85*** .06</td>
<td>.39*** .06</td>
<td>.63*** .08</td>
<td>.56*** .07</td>
<td>.72*** .07</td>
<td>.66*** .08</td>
</tr>
<tr>
<td>Need for Uniqueness</td>
<td>.01 .02</td>
<td>- .01 .02</td>
<td>.03 .06</td>
<td>-.03 .10</td>
<td>.00 .09</td>
<td>.02 .09</td>
<td>- .01 .07</td>
<td>.03 .06</td>
</tr>
<tr>
<td>R²</td>
<td>.46 .32</td>
<td>.65 .25</td>
<td>.32 .32</td>
<td>.32</td>
<td>.32</td>
<td>.32</td>
<td>.50 .40</td>
<td>.40 .40</td>
</tr>
<tr>
<td>N</td>
<td>147 146</td>
<td>152 155</td>
<td>155 155</td>
<td>154</td>
<td></td>
<td></td>
<td>148</td>
<td>148</td>
</tr>
</tbody>
</table>

Note. The sample size varies, due to excluding multivariate outliers from the solutions. SD = Social Desirability. Y1 = dependent variable at time point 1. * p < .05, ** p < .01, *** p < .001
**Supplemental Analysis**

Since I did not find any support for the mediating effect of the needs for uniqueness and belongingness, I investigated the second set of regressions independently. Now, I am merely interested in the effect of the need for uniqueness on deviant behaviour and the need for belongingness on norm-congruent behaviour, rather than a mediation effect. So, I do not need to make a distinction in terms of a subsample. In this case, it does not matter how similar or different people feel, as it is simply irrelevant. The sample size varies between the different regressions, as I dropped some cases due to being multivariate outliers. The critical $\chi^2$ value for Mahalanobis distance (Tabachnick & Fidell, 2013) was determined using $\alpha = .001$ for five degrees of freedom (equal to the number of predictors in the regression). Any case with a larger score was removed from the analysis. When the whole sample is considered (N = 186), I find a significant positive effect of the need for uniqueness on interpersonal destructive deviant behaviour (see Table 23). This indicates that the need for uniqueness could have a positive effect on interpersonal destructive deviant behaviour. It is worth noting, however, that this effect might just be based on a larger sample size. Other than that, all results of the regressions remained not significant.

In sum, I did not find support for the proposed mediator effects, as the regression coefficients are all not significant. The need for uniqueness, though almost significantly related to destructive deviant behaviour, does not mediate the relationship between feeling too similar and deviance. The need for belongingness also does not mediate the relationship between feeling too different and OCB.
Table 23

Effects of uniqueness on deviant behaviour and belongingness on norm-congruent behaviour WITH whole sample (N = 202)

<table>
<thead>
<tr>
<th></th>
<th>Interpersonal Destructive Deviance (T2)</th>
<th>Property Deviance (T2)</th>
<th>Production Deviance (T2)</th>
<th>Constructive Deviance (Voice) (T2)</th>
<th>Constructive Deviance (Disagreement) (T2)</th>
<th>Organisational Constructive Deviance (T2)</th>
<th>OCB (T2)</th>
<th>OCB-O (T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>.49</td>
<td>.13</td>
<td>.68</td>
<td>.10</td>
<td>.75</td>
<td>.24</td>
<td>.82</td>
<td>.36</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>-.01</td>
<td>.00</td>
<td>-.01*</td>
<td>.01</td>
</tr>
<tr>
<td>Gender</td>
<td>-.03</td>
<td>.03</td>
<td>.03</td>
<td>.02</td>
<td>.00</td>
<td>.07</td>
<td>.23*</td>
<td>.11</td>
</tr>
<tr>
<td>SD</td>
<td>-.02**</td>
<td>.01</td>
<td>-.02</td>
<td>.00</td>
<td>-.04**</td>
<td>.01</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>Y1</td>
<td>.58***</td>
<td>.05</td>
<td>.45***</td>
<td>.04</td>
<td>.77***</td>
<td>.05</td>
<td>.43***</td>
<td>.05</td>
</tr>
<tr>
<td>Need for Uniqueness</td>
<td>.05*</td>
<td>.02</td>
<td>-.01</td>
<td>.02</td>
<td>.04</td>
<td>.05</td>
<td>-.03</td>
<td>.08</td>
</tr>
<tr>
<td>(T1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.50</td>
<td>.52</td>
<td>.67</td>
<td>.29</td>
<td>.33</td>
<td>.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>192</td>
<td>193</td>
<td>199</td>
<td>201</td>
<td>202</td>
<td>201</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The sample size varies, due to excluding multivariate outliers from the solutions. SD = Social Desirability. Y1 = dependent variable at time point 1. * p < .05, ** p < .01, *** p < .001
Test of moderating effects

I hypothesised, on the one hand, that job autonomy moderates the relationship between the need for uniqueness and deviant behaviour (Hypothesis 5a) and, on the other hand, that organisational commitment moderates the relationship between the need for belongingness and norm-congruent behaviour (Hypothesis 6a).

I used the SPSS Process Macro Version 3.3 (Hayes, 2018) to investigate, on the one hand, whether job autonomy moderates the relationship between the need for uniqueness and deviant behaviour and, on the other hand, whether organisational commitment moderates the relationship between the need for belongingness and norm-congruent behaviour. All of the reported results of moderated regressions are based on the independent variable (the needs) being measured at T₁, whereas the moderator and the dependent variable were measured at T₂. Using the moderator at T₁ did not change the results. I did not find any significant effects in support of the hypotheses. Job autonomy did not moderate the relationship between the need for uniqueness and interpersonal destructive deviance ($\beta$ (interaction) = .03, SE = .04, p = .46), or property deviance ($\beta = .01$, SE = .04, p = .70), or production deviance ($\beta = -.02$, SE = .06, p = .72), or disagreement ($\beta = -.03$, SE = .11, p = .81), or voice ($\beta = -.11$, SE = .10, p = .25) or organisational constructive deviance ($\beta = -.01$, SE = .09, p = .95). Affective commitment also did not moderate the relationship between the need for belongingness and interpersonal OCB ($\beta = .01$, SE = .04, p = .80) or organisational OCB ($\beta = -.05$, SE = .03, p = .09), and neither did continuance commitment moderate these relationships (OCB-I $\beta = .04$, SE = .06, p = .47; OCB-O $\beta = .11$, SE = .06, p = .06). The p values are based on bootstrapping with 10,000 resamples. Thus, I did not find support for hypotheses 5a and 6a.

I also hypothesised that autonomy would moderate the relationship between feeling too similar and deviant behaviour (Hypothesis 5b) and that organisational commitment would moderate the relationship between feeling too different and norm-congruent behaviour (Hypothesis 6b). I did not find any significant effects in support of the hypotheses. Job
autonomy did not moderate the relationship between feeling too similar and interpersonal destructive deviance (β = -.03, SE = .04, p = .48), or property deviance (β = -.06, SE = .04, p = .11), or production deviance (β = .01, SE = .06, p = .87), or disagreement (β = -.10, SE = .10, p = .33), or voice (β = -.03, SE = .10, p = .74) or organisational constructive deviance (β = .00, SE = .09, p = .97). Affective commitment also did not moderate the relationship between feeling too different and interpersonal OCB (β = -.03, SE = .04, p = .36) or organisational OCB (β = .02, SE = .04, p = .66), and neither did continuance commitment moderate these relationships (OCB-I β = .09, SE = .07, p = .20 OCB-O β = .03, SE = .05, p = .62). The p values are based on bootstrapping with 10,000 resamples. Thus, I did not find any significant effects in support of the hypotheses 5b and 6b.

Supplemental Analysis

As I found some support for curvilinear effects when using the congruence scores of similarity and difference, I utilised moderated polynomial regression. Hereby, the polynomial regression term is supplemented with the moderator variables. Following the principles of moderated regression (Aiken & West, 1991), the moderator and the product of the moderator with each term is added. The moderation is assessed by evaluating whether adding the moderator terms increases the explained variance significantly. The analysis revealed that affective commitment was a significant moderator of the relationship between feeling too different and organisational OCB. Adding affective commitment as a moderator increased the R² from .44 to .47, which was significant according to the F test for R² change (F (5/183) = 2.51, p = .03). Following the principles of moderated regression (Aiken & West, 1991), I then analysed the effects of the moderation at low, moderate and high levels of affective commitment (mean +/- 1 SD). This is done by using the procedures for testing weighted linear combinations of regressions coefficients. This is analysed by testing whether the slopes for each of the three levels of affective commitment are significantly different from zero. The results show that neither the slopes for high affective commitment (β = -.11, CI 95% [-.25,
nor moderate affective commitment (β = -.03, CI 95% [-.12, .07]), nor low affective commitment (β = .06, CI 95% [-.09, .20]) were significantly different from zero. Each of the 95% confidence intervals included zero. Thus, no further support was found regarding the moderating effect of affective commitment on the relationship between feeling too different and organisational OCB. Moderated polynomial regression further did not reveal any significant moderating effects. In sum, I did not find any support for the moderating effects of autonomy and organisational commitment, neither by utilising moderated regression nor moderated polynomial regression.

**Exploratory Analysis**

In my main analysis, I operationalised sub-optimal distinctiveness by using a difference score. Based on Edwards (2002), I have also investigated the effects of optimal and sub-optimal distinctiveness through polynomial regression and response surface methodology. Finally, I would like to explore whether there are any group differences between those who report feeling optimally distinct (similar/different enough) and those who feel sub-optimally distinct (too similar/too different). This analysis is completely explorative and thus does not intend to test any of the hypotheses outlined in the previous chapters.

I conducted two independent t-tests, one each for sub-optimal vs. optimal distinctiveness in terms of feelings of similarity and feelings of difference. As can be seen in Tables 24 and 25, there are no significant differences between the two respective groups. Thus, this explorative analysis also showed no differences between people who feel optimally distinct and those, who reported feeling sub-optimally distinct. This result is irrespective of whether the feeling of similarity or difference were investigated.
### Table 24

**Sample sizes, Means, Standard Deviations and t-tests for the effect of differences in feelings of similarity on the DV’s**

<table>
<thead>
<tr>
<th>DV</th>
<th>Feeling too similar (n = 46)</th>
<th>Feeling similar enough (n = 109)</th>
<th>t (df)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for Uniqueness</td>
<td>2.82 (.85)</td>
<td>2.65 (.70)</td>
<td>1.30 (153)</td>
<td>.20</td>
<td>.22</td>
</tr>
<tr>
<td>Need to Belong</td>
<td>2.85 (.91)</td>
<td>2.60 (.89)</td>
<td>1.56 (153)</td>
<td>.12</td>
<td>.28</td>
</tr>
<tr>
<td><strong>Behaviour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destructive Deviance (T2)</td>
<td>1.30 (.43)</td>
<td>1.25 (.53)</td>
<td>.53 (153)</td>
<td>.60</td>
<td>.10</td>
</tr>
<tr>
<td>Property Deviance (T2)</td>
<td>1.16 (.40)</td>
<td>1.20 (.49)</td>
<td>.55 (153)</td>
<td>.58</td>
<td>.09</td>
</tr>
<tr>
<td>Production Deviance (T2)</td>
<td>1.83 (.89)</td>
<td>1.73 (.76)</td>
<td>.74 (153)</td>
<td>.46</td>
<td>.12</td>
</tr>
<tr>
<td>Constructive Deviance</td>
<td>1.71 (.91)</td>
<td>1.90 (.99)</td>
<td>1.15 (153)</td>
<td>.25</td>
<td>.20</td>
</tr>
<tr>
<td>(Voice) (T2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructive Deviance</td>
<td>2.10 (.99)</td>
<td>2.04 (.88)</td>
<td>.40 (153)</td>
<td>.69</td>
<td>.06</td>
</tr>
<tr>
<td>(Disagreement) (T2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructive Deviance (T2)</td>
<td>2.00 (.88)</td>
<td>2.07 (.89)</td>
<td>.44 (153)</td>
<td>.66</td>
<td>.08</td>
</tr>
<tr>
<td>OCB-I (T2)</td>
<td>3.57 (.91)</td>
<td>3.66 (.88)</td>
<td>.58 (153)</td>
<td>.57</td>
<td>.10</td>
</tr>
<tr>
<td>OCB-O (T2)</td>
<td>3.94 (.72)</td>
<td>3.87 (.73)</td>
<td>.18 (153)</td>
<td>.86</td>
<td>.10</td>
</tr>
</tbody>
</table>
Table 25

Sample sizes, Means, Standard Deviations and t-tests for the effect of differences in feelings of difference on the DV’s

<table>
<thead>
<tr>
<th>DV</th>
<th>Feeling too different (n = 50)</th>
<th>Feeling different enough (n = 99)</th>
<th>t (df)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Need for Uniqueness</td>
<td>2.48</td>
<td>.72</td>
<td>2.73</td>
<td>.77</td>
<td>1.91 (147)</td>
</tr>
<tr>
<td>Need to Belong</td>
<td>2.85</td>
<td>.82</td>
<td>2.63</td>
<td>.91</td>
<td>1.41 (147)</td>
</tr>
<tr>
<td>Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Destructive Deviance (T₂)</td>
<td>1.33</td>
<td>.53</td>
<td>1.27</td>
<td>.51</td>
<td>.76 (147)</td>
</tr>
<tr>
<td>Property Deviance (T₂)</td>
<td>1.28</td>
<td>.53</td>
<td>1.19</td>
<td>.42</td>
<td>1.14 (147)</td>
</tr>
<tr>
<td>Production Deviance (T₂)</td>
<td>1.98</td>
<td>.83</td>
<td>1.73</td>
<td>.75</td>
<td>1.84 (147)</td>
</tr>
<tr>
<td>Constructive Deviance (Voice) (T₂)</td>
<td>1.85</td>
<td>.94</td>
<td>1.92</td>
<td>.89</td>
<td>.47 (147)</td>
</tr>
<tr>
<td>Constructive Deviance (Disagreement) (T₂)</td>
<td>2.03</td>
<td>.92</td>
<td>2.10</td>
<td>.88</td>
<td>.44 (147)</td>
</tr>
<tr>
<td>Organisational Constructive Deviance (T₂)</td>
<td>2.12</td>
<td>.95</td>
<td>2.07</td>
<td>.88</td>
<td>.34 (147)</td>
</tr>
<tr>
<td>OCB-I (T₂)</td>
<td>3.69</td>
<td>.80</td>
<td>3.58</td>
<td>.90</td>
<td>.73 (147)</td>
</tr>
<tr>
<td>OCB-O (T₂)</td>
<td>3.92</td>
<td>.62</td>
<td>3.87</td>
<td>.78</td>
<td>.34 (147)</td>
</tr>
</tbody>
</table>

6.5. Summary / Discussion

In a two-wave online survey with working participants, I found almost no support for the theoretical model and my hypotheses. I hypothesised that people who feel too similar are more likely to engage in deviant behaviour at the workplace (Hypothesis 1). Multiple linear regressions and polynomial regressions showed no significant effects of feeling too similar on any type of deviant behaviour, be it interpersonal or organisational, be it destructive or constructive.

I also hypothesised that people who feel too different would be more likely to engage in norm-congruent behaviour (Hypothesis 2). The analysis revealed that while there a negative
but insignificant effect regarding interpersonal OCB, there is a negative and significant effect on organisational OCB. The more people feel too different, the less they are likely to engage in OCB, more so for OCB-O than for OCB-I. This is an interesting finding because it is exactly the opposite of what was hypothesised. I argued that people who feel too different might be more likely to engage in OCB in order to increase their standing in a group. Perhaps, people who feel too different compared to their colleagues were rather marginal group members and thus did not feel fully included (Ellemers & Jetten, 2013). There is research showing that, when people are marginal members, they might disengage from work and engage in less extra-role performance (Clair et al., 2012). This is due to employees experiencing identity ambiguity and questioning how accepted they are at work. This emotionally negative event might then lead to people being less inclined to benefit the organisation or other employees. Alternatively, from a conservation of resources theory perspective (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014; Hobfoll, 1989), feeling too different could be considered a stressor that leads to a loss of personal resources. In order to mitigate the losses, people could emotionally detach from their organisation to reduce one’s dependence and look for resources elsewhere (Zheng, Yang, Ngo, Liu, & Jiao, 2016). As a result, people would be less motivated to engage in citizenship behaviours towards the organisation or one’s colleagues. Along the same lines, feeling too different and considering this an uncomfortable state might reduce the employee’s capacity for self-control over time and thus ego depletion (Baumeister, Bratslavsky, Muraven, & Tice, 1998). There is research indicating that ego depletion leads to less organisational citizenship behaviour (Fehr, Yam, He, Chiang, & Wei, 2017). Generally speaking, though, this research highlights that OCB might be influenced by people’s social comparison with others.

Interestingly, people who reported feeling too different did not show a higher need for belongingness. As a result, I did not find support for the mediating effect of the need to belong. I hypothesised that feeling too different would dissatisfy the need for belongingness,
which in turn would lead to norm-congruent behaviour as a way of re-establishing similarities (Hypotheses 4a, b & c). Multiple linear regressions showed that feeling too different was not related to the need for belongingness, and the need for belongingness was also not related to norm-congruent behaviour, neither interpersonal OCB nor organisational OCB. Thus, no support for this mediating mechanism was found.

The conceptual model also includes another mediating pathway. I hypothesised that feeling too similar would dissatisfy the need for uniqueness, which in turn would lead to deviant behaviour as a way of re-establishing differences (Hypotheses 3a, b & c). Multiple regression showed that feeling too similar was not related to the need for uniqueness, and the need for uniqueness was also not related to deviant behaviour, neither destructive nor constructive and neither interpersonal nor organisational. Thus, no support for this mediating mechanism was found. Neither the direct path (Feeling too similar $\rightarrow$ deviant behaviour), nor the indirect path (feeling too similar $\rightarrow$ need for uniqueness $\rightarrow$ deviant behaviour) were significant.

While I did not find support for the mediating mechanism, the supplemental analysis revealed two interesting findings regarding the individual paths of the mediation. First, I found a u-shaped curvilinear effect for the relationship between feelings of similarity and the need for uniqueness. The analysis of the response surfaces and the inspection of the plot in Figure 2 revealed a positive curvilinear effect along the congruence line, i.e. people have a higher need for uniqueness at either extreme of congruency (when actual and desired levels of similarity are equal). That means people who are very similar and want to be very similar, as well as people who are not very similar and also do not want to be very similar, have a higher need for uniqueness than those who are moderately similar and comfortable like that. Following uniqueness theory (Snyder & Fromkin, 1980), I would have expected to find a linear relationship in that the more people feel too similar (more than desired, i.e. not a state of congruency) the higher their need for uniqueness. Instead, I found that the level of
congruency has an effect on how dissatisfied the need is. That means it does not matter how uncomfortable people are about their similarities (i.e. how much one’s actual levels of similarity deviate from one’s desired levels), but rather in which situations people are comfortable about their similarities. Perhaps, being comfortable at either side of the similarity spectrum – being very similar or not similar at all – is a state that one shares with only a few others. In other words, only a few people might be very prototypical of a group (very similar) and only a few people might be very different than the rest of the group, whereas the majority of people might be somewhere in the middle, i.e. moderately prototypical of a group. The two extreme situations would then represent fairly unique states and thus be something that people with a high need for uniqueness like or even seek out. That means, on the one hand, you can be unique by being very different compared to others, on the other hand, you can be unique by being more prototypical than others. The latter situation also resembles the primus inter pares strategy, that is doing something more than others and in this case, that means being more prototypical.

Second, using the whole sample, rather than subsamples of people feeling too similar, I found that the need for uniqueness could be a predictor of interpersonal destructive deviant behaviour at the workplace. The positive effect of the need for uniqueness was marginally significant. This finding suggests that people having a high need for uniqueness might be more likely to engage in interpersonally destructive deviant behaviours. This indicates that deviant behaviour might, in fact, be a way of satisfying a high need for uniqueness, and thus be a strategy of achieving optimal distinctiveness at the workplace, at least in terms of increasing uniqueness. It would be interesting to investigate, however, if people high on uniqueness would still engage in destructive deviant behaviour when other strategies outlined in this research would be available to a person, e.g. standing out through performance (primus inter pares) or role/task differentiation. It is worth mentioning, however, that I only found the positive effect of the need for uniqueness on interpersonal destructive deviant
behaviour, when the whole sample was analysed. The subsample of people feeling too similar did not reveal the same significant relationship. The correlations between the two variables were .18 and .14 for the subsample and the whole sample, respectively. Considering that the correlations are almost equal, the significant effect in the whole sample might just be the result of a larger sample size. Also interesting to note is that the data seems to suggest that negatively valued (destructive) behaviour is more likely an outcome of an unsatisfied need for uniqueness than positively valued (constructive) behaviour. The relationship between the need for uniqueness and interpersonal destructive deviance was marginally significant, but not between uniqueness and organisational destructive deviance or any form of constructive deviance. This could also mean that people engaged in deviant behaviour deal with a stressor. Maybe having a high need for uniqueness means that people were not able to be unique enough, which could be considered a stressful situation. In line with Spector and Fox's (2005) stressor emotion model of counterproductive behaviour, people could engage in destructive deviant behaviour as a way of coping with a stressful situation in an aggressive way.

Considering that this research is the first to investigate the relationship between the need for uniqueness and deviant behaviour, more research is needed. Perhaps, contextual factors, as well as interpersonal differences in terms of motivation, could explain the link between uniqueness and both destructive and constructive behaviours at the workplace.

I also tested whether job autonomy would moderate the relationship between feeling too similar and deviant behaviour, as well as between the need for uniqueness and deviant behaviour (Hypotheses 5a & b) and whether organisational commitment would moderate the relationship between feeling too different and norm-congruent behaviour, as well as between the need for belongingness and norm-congruent behaviour (Hypotheses 6a & b). The analysis revealed no significant moderating effect for neither job autonomy nor organisational commitment. Supplemental analysis using moderated polynomial regression also did not yield any significant results.
Finally, I explored whether there are group differences between people that feel optimally and sub-optimally distinct. A series of independent t-tests did not find any significant group differences regarding the needs for uniqueness or belongingness and neither regarding deviant or norm-congruent behaviour.

**Limitations**

Having discussed the significant and marginally significant results, there are at least five arguments that can be brought forward regarding why I did not find support for the other hypotheses. First, I found that only a relatively low number of people reported being feeling too similar (or too different). This indicates that being sub-optimally distinct might be an event with a low base rate, at least in my survey study with employees. In my sample, only about 23 percent of the participants reported feeling too similar and 25 percent of the participants reported feeling too different. On the other hand, 35 percent of the sample reported to be feeling optimally distinct, i.e. as similar as desired and as different as desired.

In my study, I was, however, investigating what people do when they are sub-optimally distinct, specifically when people feel too similar or too different. Thus, I analysed certain subsamples of my data. I did not hypothesise how optimally distinct people behave, nor what happens when people feel not similar enough, or not different enough. I included people that reported to be in balance (feeling as desired) to increase the sample size and the statistical power of the analysis of the subsamples. Accordingly, the analysis included 155 and 149 participants in the feeling too similar and feeling too different subsample, respectively. Nevertheless, I did not find any significant results. This might be due to the fact of a small sample size. This study is, to the best of my knowledge, the first to actually measure how many people in a natural setting (the workplace) feel sub-optimally distinct. Previous research has either experimentally manipulated how similar or different people feel and thus tried to make a certain number of people sub-optimally distinct, or just assumed that people were sub-optimally distinct when finding interpersonal differences in behaviour as predicted.
by comparison attributes, such as diversity or value congruence. In either case, no prediction was possible as to how frequent the phenomenon of being sub-optimally distinct is among employees. The analysis revealed, however, that feeling too similar or too different is an event with a low base rate, so future research should gather more data to be able to test the hypotheses with enough statistical power to allow for stronger inferences and valid conclusions.

Second, some scales revealed lower internal consistencies and other factorial properties than expected. I was not able to replicate the factor structure of the interpersonal Constructive Deviance scale (Galperin, 2012) and the organisational Destructive Deviance scale (Bennett & Robinson, 2000). In my case, the original 5-item interpersonal Constructive Deviance scale was split into a voice and a disagreement subscale, with two items each (one item was dropped, as it was loading on both components). The original 12-item organisational Destructive Deviance scale was also split into two subscales, one tapping into property deviance and the other into production deviance, with six and five items, respectively. Again, one item was dropped as it was loading on both components. The question is now why did these two scales have such low internal consistency. The Constructive Deviance scale is fairly new and has not yet been used very often, but, on the other hand, the Destructive Deviance scale has been around for a while and has been used extensively without any apparent issues. Both deviance scales, however, could potentially suffer from low operational specificity (Little et al., 2002, 2013). That means the construct of destructive or constructive deviance is perhaps defined too vaguely and includes a very diverse set of items. My survey study showed that the original organisational Destructive Deviance scale is made up of items tapping into behaviours that affect how productive employees are (e.g. wasting time, not following orders) and behaviours that affect the organisational property (littering, falsifying receipts). This indeed reflects a wide range of potential deviant behaviours that can hurt the organisation. The interpersonal Constructive Deviance scale, on the other hand, was made up
of items covering disagreeing behaviours (disobeying orders to improve procedures) as well as voice behaviours (report wrong-doings to improve procedures). As such, low operational specificity could be assumed. This is nevertheless astonishing, considering that the

Destructive Deviance scale by Bennett and Robinson (2000) has been used extensively as shown by the high number of citations (cited over 2400 times, as of April 2019), the majority being empirical papers with Western samples. The Constructive Deviance scale by Galperin (2012) has been developed more recently and not been used that much (citations are below 80, as of April 2019). Having said that, this had the positive side-effect, though, of being able to investigate distinct effects of feeling too similar and the need for uniqueness on these newly created deviance measures.

Third, constructive deviance might also not exist in all organisations. It is more likely in traditional organisations with more bureaucratic processes and procedures compared to modern and more lenient companies such as Google that are actively encouraging its employees to think out of the box and be creative (Galperin, 2012). Using a rather general sample of full-time employees, I did not ask the participants to reveal their employers in order to maintain a high level of anonymity and confidentiality. It might be interesting, however, to investigate whether the area of work or different organisational cultures have an effect on how likely employees engage in constructive deviant behaviour.

Fourth, it could be argued that one potential drawback of this study is, that I only used self-report measures. In order to provide a more objective way to tap into the prevalence of deviant behaviour at the workplace, a non-self-report measure has been introduced (Stewart, Bing, Davison, Woehr, & McIntyre, 2009). Having said that, recent meta-analytical comparisons have shown that other-ratings of workplace deviance do not add any value and even underestimate the real number of self-reported deviant behaviour (Berry, Carpenter, & Barratt, 2012; Zuber & Kaptein, 2013). This is due to the fact that a lot of the deviant or OCB
behaviours take place unobserved by bystanders, who would have been asked to rate the target person.

Finally, the correlations between the need to belong and OCBI were significant, as well as between the need for uniqueness and both disagreement and voice (interpersonal constructive deviance), for example. However, in the regressions, I did not find significant effects. This might be due to the existence of unobserved effects and variables. That being said, I did control for social desirability, as research has shown that not only might participants who score high on social desirability not give accurate answers about their deviant behaviours at the workplace, but also higher social desirability is associated with conformity (Fleming & Zizzo, 2011). The analysis revealed that social desirability was a significant predictor of almost all the deviant behaviour variables, but not of norm-congruent behaviours. Thus, it is worth noting that future research should always control for social desirability bias when it comes to measuring deviant behaviour, at least when it is self-reported. Thanks to the cross-lagged design and collecting data on all variables at both time points, I was also able to control for previous values of the dependent variables when regressing them onto the independent variables. Nevertheless, the explained variances throughout the various regressions were also only moderate, even considering that I was also controlling for values at T₁ (R² varied between .25 and .65). That being said, relatively small effect sizes are a very common observation in deviance research (Morf, Feierabend, & Staffelbach, 2017; Penney & Spector, 2005; Spector & Zhou, 2014). An interesting observation is that the explained variance was generally lower for deviant behaviours compared to norm-congruent behaviours.
7. General Discussion

This research investigated the question of why people are motivated to step out of line as opposed to fitting in. Under which circumstances do people deviate from a norm rather than conform to it, and vice versa? Applying optimal distinctiveness theory to the workplace, I argued that people want to feel optimally distinct, i.e. not too similar and not too different compared to their colleagues. However, when people feel too similar, their need for uniqueness would be activated which would then lead to deviant behaviour. On the other hand, when people feel too different, they are then motivated to engage in norm-congruent behaviour in order to satisfy their need for belongingness. Using a full-cycle approach to micro-organisational research (Chatman & Flynn, 2005), I used both experimental and online data to investigate these questions. I conducted three experiments with students and a two-wave online study with working participants. The goal was to find support of the natural phenomenon of optimal distinctiveness seeking behaviour at the workplace as well as establish a causal relationship between how people feel compared to others and their subsequent deviant or norm-congruent behaviour.

The analysis of the experiments revealed that feeling more similar did not have an effect on deviant behaviour and feeling more different did not have an effect on norm-congruent behaviour. There were almost no differences between the two conditions (feeling more similar vs. feeling more different). However, the results of the first two experiments indicated that feeling more different was positively related to the need for uniqueness. The need for belongingness, on the other hand, remained unaffected by the experimental condition. Moreover, I did not find support for an interaction between the two needs with regards to predicting deviant and norm-congruent behaviour in the third experiment.

The online study showed that feeling too similar or too different is actually a naturally occurring phenomenon at the workplace, albeit with a low base rate (only around 25% of
participants reported feeling more different (or similar) than desired. However, I did not find much support for the idea that feeling a certain way affects whether people engage in deviant or norm-congruent behaviour. Feeling too similar was not significantly related to any type of deviant behaviour, but feeling too different was negatively related to organisational OCB but not related to interpersonal OCB. I also did not find any support for the mediating mechanisms via the needs for uniqueness and belongingness. Finally, I hypothesised that job autonomy would moderate the relationships between both feeling too similar and the need for uniqueness, and deviant behaviour, whereas organisational commitment would moderate the relationships between both feeling too different and the need for belongingness, and norm-congruent behaviour. I did not find support for any of the moderating effects of these contextual variables. However, the supplemental analysis revealed that feeling too similar has a u-shaped curvilinear relationship with the need for uniqueness. A regression with the whole sample, rather than subsamples, also showed that a high need for uniqueness could be positively related to interpersonal destructive deviant behaviour.

In the following, I discuss how my research informs the literature on ODT, as well as research on uniqueness and belongingness needs. I also outline some practical implications that my research has. Then I discuss the general limitations of my thesis that have not been mentioned in the sections of the experiments and the online study. Finally, I present a short conclusion of this thesis.

7.1. Implications

7.1.1. Optimal Distinctiveness Theory

This research applied a social psychological theory (ODT) to explain a workplace phenomenon and thereby set out to refine the theory by potentially showing its boundaries or limitations (Edwards, 2010) and provide meaningful theory development (Aguinis & Vandenberg, 2014). Although I did not find empirical support that sub-optimal
distinctiveness affects deviant and norm-congruent behaviour at the workplace, I was still able to develop the theory in meaningful ways.

I found evidence that people feeling too similar or too different is actually a naturally occurring phenomenon at the workplace, albeit with a low base rate (only around 25% of participants reported feeling more different (or similar) than desired). That is, there is actually a state of sub-optimal distinctiveness that people experience. By focusing on people feeling too similar or too different, I introduced a new way to measure optimal distinctiveness by using questions that allow me to calculate both a difference score and a congruence score. This enabled me to investigate both linear and curvilinear effects. The manipulations in the experiments were based on well-known and empirically tested methods that have been used in research on uniqueness and belongingness needs, as well as optimal distinctiveness. The online study with working participants, however, integrated the insights from the organisational fit literature (e.g. Kristof-Brown, Zimmerman, & Johnson, 2005) as well as research on congruence (e.g. Edwards & Cable, 2009). Participants were asked how similar (or different) they feel compared to their colleagues as well as how similar (or different) they wished to feel compared to their colleagues. By measuring both actual and desired levels of similarity (or difference), I am able to calculate a difference score (Actual minus desired levels) as well as a congruence score (to what extent these two measures are congruent). This allows me to test more complex and curvilinear relationships by using the most recent statistical analyses such as polynomial regression with response surface methodology (Edwards, 2002) or latent congruent modelling (Cheung, 2009). The analysis in my research revealed that there is a relationship between the congruence scores of similarity and the need for uniqueness.

Based on literature in the fields of social psychology, organisational behaviour and consumer behaviour, I showed that sub-optimal distinctiveness could lead to certain behaviours. I identified seven potential strategies of what people can do when they feel sub-
optimally distinct and specifically investigated one in-depth. In four studies, three experiments and one survey study with working participants, I did not find support for the idea that people engage in deviant or norm-congruent behaviour at the workplace when they feel sub-optimally distinct. While previous research has shown that, when people feel too similar, they have fewer intentions to conform (Kim & Park, 2011), my research showed that this does not mean that people are also more likely to deviate. This might be due to deviant behaviour being too severe. Maybe the kind of behaviours that I investigated by means of using Bennett & Robinson's (2000) Destructive Deviance Scale and Galperin’s (2006) Constructive Deviance Scale were too strong in their nature. Perhaps it is more likely that people engage in minor deviations, such as arriving later than everyone else for a meeting or disagreeing about social topics over lunch, rather than steal property from their workplace or disagree with their supervisors in order to improve working procedures. Or maybe they engage in withdrawal behaviours in order to distance themselves from their colleagues. For instance, an experiment in social psychology has shown that romantic partners are inclined to spend less time with their significant others when they feel too similar to each other (Slotter et al., 2014).

Considering there might be other strategies on how employees can stand out or fit in at the workplace, engaging in deviant behaviour seems to be the most extreme and potentially consequential strategy. As both the experiment and survey study show no support for the deviant behaviour strategy, this might imply that people use one of the other six strategies to differentiate themselves. While deviant behaviour can be a powerful strategy for optimal distinctiveness, it might be more like a last resort for people who have unsuccessfully tried the other six strategies, or cannot think of another way of differentiating themselves. While the other strategies, such as “change of comparison” or “using products” seem to require less effort and cause less discomfort to the environment, deviant behaviour might come at a price. Engaging in deviant behaviour (both constructive and destructive) is risky, as it can have
negative consequences for the perpetrator in the form of social exclusion or punishment, for instance (LePine & Van Dyne, 1998; Meier & Spector, 2013; Milliken, Morrison, & Hewlin, 2003; Whitson, Wang, Kim, Cao, & Scrimpshire, 2015). That means, people have to weigh up the benefits and disadvantages of differentiating themselves via deviant behaviour. The results of my research indicate that people are not very likely to turn to deviance solely for the reason of differentiation. Maybe this is good news for organisations, but, on the other hand, that also means that potentially constructive deviance can also not be triggered by uniqueness dissatisfaction. However, I still believe that organisations could benefit from individuals trying to be unique through means such as exceptional performance (primus inter pares), or taking on specific roles or tasks.

On the other hand, employees also did not seem to engage in norm-congruent behaviours (operationalised as OCB or conformity) as a result of feeling very or too different. Instead, I found that people who felt too different were less likely to engage in OCB (significant effect for organisational OCB, almost significant effect for interpersonal OCB). As outlined in the discussion section of the survey study, perhaps, people who feel too different are marginal group members (Clair et al., 2012), might feel emotionally detached from their organisation (Zheng et al., 2016) or disengage from work as a result (Fehr et al., 2017). Alternatively, maybe employees did not engage in norm-congruent behaviour because they used any of the other six potential strategies to assimilate themselves so that they do not need to engage in OCBs on top of that. As argued with deviant behaviour, the other strategies, such as “change of comparison” or “using products” perhaps require less effort and thus might appear more feasible and easy. Moreover, maybe people engage in assimilating behaviour, but they were not captured by either the measure of conformity or OCBs. While the measure of conformity in the experiments was limited in the sense that it comprised items describing rather unspecific behaviour (e.g. “Adhere to accepted rules in my area of work” or “Do what others do”), I used a measure of OCB (Williams & Anderson, 1991) to capture a more specific
range of behaviours, i.e. using more items and more detailed descriptions (e.g. “Help others who have been absent” or “Takes undeserved work breaks”). However, in order to be able to assimilate oneself using OCBs, other people at the workplace have to engage in them on a normative basis. That means, the workplace norm would need to prescribe OCBs as the way to do things around here. This implies that OCBs could be considered in-role behaviour, i.e. behaviour that is expected by employees as part of their job role. My research though indicates that OCBs could be, at least considering my sample, extra-role behaviour and thus inadequate to increase similarities with one’s colleagues. There is a debate in the literature whether OCBs are in-role or extra-role behaviour (Organ, 1997). Whereas Organ originally defined OCBs as discretionary behaviour that is not enforceable as part of one’s job description (Organ, 1988), two studies showed that a majority of employees rated OCBs as something that they consider to be in-role behaviour (Morrison, 1994) or ‘compulsory extra-role behaviour’ (Vigoda-Gadot, 2007). However, I did not measure what the norm at my participants’ workplaces was, so I cannot tell whether OCBs in my research were actually in-role or extra-role behaviours. This point is discussed in the limitations section.

This research also provided a critical test of optimal distinctiveness theory by investigating the link between feeling more (experimental studies) or too similar (online study) and the need for uniqueness as well as the link between feeling very or too different and the need for belongingness. Despite the rich literature on ODT in social psychology, it has not yet been tested how the feelings of similarity and difference activate the needs for uniqueness and belongingness. Previous research has, on the one hand, experimentally manipulated how similar or different people feel and solely assumed that the respective needs would be activated as a result (e.g. Pickett, Bonner, et al., 2002; Pickett, Silver, et al., 2002). On the other hand, ODT has been used as an explanatory framework to explain interpersonal differences in behaviour as predicted by comparison attributes, such as diversity or value congruence (e.g. Farmer et al., 2015; Gonzalez, 2016). In line with both conceptual
(Ormiston, 2016; Shore et al., 2011) and empirical (Kreiner et al., 2006) work, though, I argued that the more people feel similar, the more they should be interested in differentiation in order to satisfy their need for uniqueness, whereas the more people feel different, the more they should be interested in assimilation in order to satisfy their need for belongingness. However, both the experiments and the survey study did not find support for these ideas. In the following, I discuss how my research informs research on the needs for uniqueness and belongingness.

7.1.2. Uniqueness theory

According to ODT (Brewer, 1991) and uniqueness theory (Snyder & Fromkin, 1980), people feel uncomfortable when they are too similar and as a result, want to re-establish a sense of uniqueness. With two experiments and one survey study, I investigated how feeling very and too similar affect people’s need for uniqueness. Whereas the experiments indicated that feeling very different might be positively related to the need for uniqueness (rather than feeling very similar), the survey study showed that there might be a curvilinear relationship between feeling similar and the need. When investigating actual and desired similarity and their higher-order terms, I found a u-shaped relationship (see Figure 2). That means I did not find support for the assumptions made by ODT and uniqueness theory. I tried to explain my findings by understanding when people with a high need for uniqueness feel comfortable. I argued that in the experiment that people were primed with the need for uniqueness when remembering situations in which they were very different from others. Discussing the survey study, I proposed that the need for uniqueness could also be satisfied if one is in a comfortable, but unique position considering one’s similarity (either very similar or not very similar at all). Thus, maybe it matters more how unique a position is, rather than how similar or different someone is. This result offers some potential to advance the need for uniqueness theory and could open up a new approach to understanding the theory. This research is unique, to the best of my knowledge, in actually investigating what happens when people feel
too similar or too different. Thus, I introduced the concept of how comfortable one’s position in relation to others is. I believe more research is needed to provide a clearer picture of what the relationship between feeling similar or different and the need for uniqueness is. However, using difference scores, and even polynomial regressions seems to be a promising avenue.

I also argued that people can engage in deviant behaviour in order to satisfy their need for uniqueness. I found limited support for this idea, as I only found a positive effect on interpersonal destructive deviance in the survey study, whereas the other deviant behaviour variables were not affected. The cross-sectional correlations in the experiments indicated that the need for uniqueness might be negatively correlated to deviant behaviour. Thus, I am not able to come to a general conclusion regarding the direction or the nature of this relationship. This research, however, is the first time, to the best of my knowledge, that the need for uniqueness was applied to the workplace and to deviant behaviour in particular. While there is a plethora of research on uniqueness in the fields of social psychology and consumer behaviour, the field of organisational behaviour has interestingly not yet caught up. Considering the inconsistent findings in my studies, more research is needed to understand the nature of this relationship as well as whether contextual factors, such as interpersonal differences or organisational factors (e.g. culture) could serve as potential moderators. I hope that this first application of the need for uniqueness opens up a new stream of research looking into how people can be unique at the workplace and how it could be beneficial and detrimental for the individual as well as the organisations. I believe that research areas, such as creativity and performance can really benefit from this research. There is preliminary work indicating that individual differentiation is positively related to creativity (Dollinger, 2003; Goncalo & Staw, 2006; Janssen & Huang, 2008). However, more research is needed to understand whether it is a person’s underlying need for uniqueness that makes them more creative. Could creativity be a way of satisfying one’s need for uniqueness? Similarly, people could establish a unique position by outperforming others. As the primus inter pares strategy
(see section 2.5.1) suggests, being in a better position than others could satisfy one’s uniqueness. Previous research has only looked at the positive outcomes of people’s relative better ‘performance’ in terms of LMX and TMX (Farmer et al., 2015; Gonzalez, 2016), but not at whether the need for uniqueness could potentially serve as a motivator for performance.

### 7.1.3. Belongingness theory

This research also indicates that the drive for assimilation, as the counterpart to the drive for differentiation in the theorising of ODT (Brewer, 1991), is not as closely related to the need for belongingness, as I initially assumed. In line with both conceptual (Hornsey & Jetten, 2004; Ormiston, 2015; Shore et al., 2011) and empirical papers (Easterbrook & Vignoles, 2013; Kim et al., 2017), I argued that the need for belongingness will be activated when people feel very or too different. That means, when people are motivated to assimilate, that is reducing their differences compared to other people, they should be motivated to increase their belongingness at the same time. The reasoning is that people who feel too different do not feel very close to their colleagues or group members and thus also feel like they belong less to them. My research, however, did not reveal any significant relationship between either feeling very similar (Experiments 1 & 2) or feeling too similar (Online Survey) and the need for belongingness that would be in line with this reasoning. This raises the question of whether assimilation is necessary for satisfying belongingness. Riketta (2008) proposes that assimilation and belongingness drives are distinct constructs. He argues that a general belongingness motive is made up of assimilation (being similar to others) and affiliation (being in contact with others). Affiliation can then also be understood as the need to belong, as Baumeister and Leary (1995) see it. This distinction has however not been picked up on in the literature ever since, and as Riketta (2008) himself argues, had not been made explicit in social psychology up until the time of his publication either. Creating his own scales for both drives, Riketta (2008) found a small but positive correlation between
assimilation and belongingness (r = .14). Further inspection of the correlation table of my survey study (Table 12) reveals similar results: actual and desired similarity are positively related to the need to belong, whereas actual and desired difference are negatively related to the need to belong. When investigating the subsamples of people feeling too different however, I did not find a significant effect on the need to belong. In sum, it seems that more research is needed to understand the relationship between assimilation and belongingness. Are these two distinct constructs, do they overlap or even predict each other?

Contrary to previous research (Jacobson et al., 2015), I did not find a positive relationship between the need for belongingness and norm-congruent behaviour. I argued that when people have a higher need to belong, they are more likely to engage in conforming or norm-congruent behaviour in order to re-establish a connection with a group by making themselves more similar to other group members. In the experiments though, the need to belong was generally negatively correlated to conformity. This was based on cross-sectional data, however. In the two-wave survey study with working participants, I found a positive correlation between the need to belong and OCB. In contrast to Jacobson et al.’s (2015) cross-sectional study though, I was able to regress OCB onto the need to belong while controlling for previous scores of OCBs. The analysis then showed that the need to belong was not able to explain additional variance. These two studies are, to the best of my knowledge, the first ones to investigate this relationship. This indicates, however, that more research is necessary to understand under which circumstances organisational citizenship behaviours might be a way of establishing a connection with a group and satisfy one’s need to belong.

7.1.4. **Practical Implications**

This research indicates that the needs for uniqueness and belongingness, as well as the drives for assimilation and differentiation, might be important factors at work. Thus, it might be worthwhile for organisations and managers to keep in mind that there are interpersonal
differences in how similar or different people want to be. However, should organisations want optimally distinct workers?

On the one hand, as described in Chapter 2, being optimally distinct comes with benefits for both employees and employers. Although more research needs to be done, my summary indicates that people, who feel optimally distinct feel more included, are more committed to their organisation, show more helping behaviours and might even be more productive. Instead of coping with uniqueness and belongingness needs and spending time and energy on balancing feelings of similarity and difference, optimally distinct people can focus on their tasks at hand. As a result, they might be more productive than people who are sub-optimally distinct as well as possibly more self-centred, trying to re-establish optimal distinctiveness. The simple answer would thus be to promote and facilitate optimal distinctiveness in organisations.

On the other hand, when people do not feel as they desire, they will do something about it in order to seek optimal distinctiveness. I have outlined six potential strategies that employees can engage in, with varying impact on their environment or the organisation. Thus, as a result of feeling too similar to other people, an employee might take on extra roles to differentiate and therefore benefit the organisation. However, my research indicates that people might even engage in interpersonal destructive deviant behaviour if their need for uniqueness is strong. As a result, it is difficult to predict how exactly people will react to unsatisfied needs or feeling sub-optimally distinct. The cognitive coping strategies outlined in Chapter 2.5 are neutral in terms of their impact on the organisation (neither beneficial nor detrimental). The behavioural strategies though are more ambiguous, as can be outlined with the example of the strategy of role/task differentiation. Role differentiation, on the one hand, might have a positive effect when employees specifically pick roles that are based on their unique skills or abilities (e.g. computer skills). These role-attributes might then be more pronounced and salient in the organisational environment and possibly lead to more efficient
and productive workflows. On the other hand, role differentiation could also lead to tension between employees, when people feel territorial about their unique roles and try to defend them against their colleagues.

To sum up, the question of whether organisations should want optimally distinct employees cannot be answered in a simple fashion. At first sight, it seems that optimally distinct workers are inherently beneficial for an organisation. On the other hand, though, sub-optimally distinct employees have the potential to satisfy their needs through productive means. At the same time, however, sub-optimal distinctiveness involves the risk that employees turn to strategies that might prove costly or detrimental for organisations. Thus, optimally distinct workers might be a safe bet, whereas sub-optimally distinct workers might be more of a risk that could either prove beneficial or detrimental. More research is definitely needed to understand under which circumstances sub-optimal distinctiveness results in positive or negative outcomes for the organisation.

However, when recruiters and HR managers think about the perfect candidates for their roles, they might want to include thoughts about the candidates’ assimilation and differentiation drives and to what extent these drives are desirable or even encouraged. Thus, questions during the interview process could tap into a candidates’ motivation to be unique or similar. Alternatively, when role-plays or group works are involved in assessment centres, recruiters could observe to what extent candidates are trying to differentiate themselves from others and stick out of the group. In this case, of course, the motivation to be unique would be strongly fuelled by how much people want the particular job, but, nevertheless, might provide an indication of people’s underlying uniqueness and belongingness needs. Jobs, which require a certain amount of creativity or innovative thinking, for instance, might be more suited for people with a stronger need for uniqueness. In this case, constructive deviance or challenging behaviour might actually be encouraged.
Further down the line, regular reviews with employees could include a conversation about how included and integrated the employee feels. Thus, line managers can get a feeling for how comfortable employees feel and whether they might be motivated to be more or less unique. This could be particularly useful in the first couple of months of an employee in a new organisation. During this time, assimilation drives should be relatively strong and as time passes, a worker will be more and more assimilated and part of the organisation. As a result, the drive for differentiation should get stronger and more pronounced. This could potentially affect a greater number of colleagues or team members. Thus, more general and broader staff reviews could also give an indication to what extent people are balancing their assimilation and differentiation drives. Such a review could include questions on how comfortable people are about their physical environment, for example. One possible strategy to balance uniqueness and belongingness at the workplace is to individualise one’s desk. As a result, more lenient policies in terms of decorating one’s workplace could potentially be beneficial for the organisational climate, as employees are given an opportunity to achieve optimal distinctiveness.

My research has also shown how important it is to measure social desirability when it comes to investigating deviant behaviour at the workplace. Particularly in terms of interpersonal destructive deviance and production deviance, social desirability was a significant predictor of these behaviours. Future research should thus always include a measure of social desirability in order to avoid underestimating how often people engage in deviant behaviour.

Moreover, I have developed two vignettes to investigate how high and low levels of uniqueness and belongingness could affect workplace behaviour. I see potential for the vignettes in future research when used with a proper manipulation check and a thicker description. Experimental vignette methodology is a powerful tool to investigate behavioural preferences as a result of asking participants to put themselves in a specific situation based on
a written vignette (Aguinis & Bradley, 2014). Research on the effects of the need for uniqueness at the workplace is underdeveloped in my eyes and this vignette could be a fruitful approach. The belongingness vignettes could also be an alternative to experimental manipulations that try to induce a feeling of being ostracised or excluded (Blackhart et al., 2009). For instance, research on social exclusion at the workplace has occasionally used vignettes (e.g. Hitlan et al., 2006).

7.2. Limitations

I argued that either feeling very similar or very different might not be uncomfortable enough to elicit behaviours which aim to make people more similar or more different compared to others. As a result, in the survey study, I measured to what extent people’s perceived level of similarity and difference deviates from their desired levels, i.e. how much people feel too similar or different. In that way, I was hoping to find people that are uncomfortable enough in their state that they will engage in deviant or norm-congruent behaviour in order to achieve optimal distinctiveness. Nevertheless, I did not measure how uncomfortable people were. I merely assumed that the farther people’s actual levels are from their desired levels, the more they might feel uncomfortable in their situation and are thus motivated to engage in a specific behaviour. Also feeling too similar or different for just a brief period of time does perhaps not result in too much discomfort.

Having said that, I did not investigate how long people were in the state of sub-optimal distinctiveness. While the experimental manipulations tried to induce a temporary feeling of extreme similarity or difference, the analysis indicated that people might not have felt uncomfortable enough. The survey study, on the other hand, investigated long term effects of feeling too similar or different. An inspection of the correlation table (Table 12) reveals that the difference scores for similarity and difference (to what extent actual and desired levels deviate from each other) are not very stable constructs. The correlation for the difference scores for similarity and difference between T₁ and T₂ is very low, with .07 and .12,
respectively. This indicates that, over a period of three months, there could be quite some fluctuation. People’s perception of how similar or different they are compared to their colleagues could vary significantly between the two points of measurement. Thus, my research does not provide any consistent insights on how often these feelings can change.

I also did not investigate whether deviant or non-deviant behaviour is the norm at my participants’ workplaces. As outlined in section 3.1, I adopted a normative approach to norms and argued that a norm consists of the range of behaviours that a particular reference group generally agrees upon as socially approved and accepted. Hence, deviation means to engage in behaviour that is not socially accepted by the particular reference group. As a result, I merely assumed that using a fairly general sample from an online panel means that deviant behaviour is not socially approved in participants’ workplaces. Thus, I was not able to identify how often the participants’ colleagues engage in either deviant or norm-congruent behaviour. Perhaps, the needs for uniqueness and belongingness might be satisfied in two different ways. It might be the case, as Christensen et al. (2004) allude to, that uniqueness can be satisfied by deviating from descriptive norms, i.e. being different from others in terms of statistical deviance (doing things differently than the majority), and belongingness can be satisfied by conforming to normative norms, i.e. engage in norm-congruent behaviour that is considered good. I only looked at normative norms, but I still found an effect on the need for uniqueness on interpersonal destructive deviance. However, there is also research indicating that how people perceive norms might affect how likely people are to engage in deviant behaviour (Jacobson, Marchiondo, Jacobson, & Hood, 2018). In sum, more research is needed to understand the interplay between the needs for uniqueness and belongingness and behaviour in which employees engage in order to satisfy these needs. It seems fruitful to integrate the behaviours of others (or the majority of one’s colleagues) to fully understand the consequences of a strong need to belong or to be unique. One could also argue that the scales to measure constructive and destructive deviance at the workplace do not capture all potential
deviant behaviours, particularly not ones that are minor, e.g. departure from work dress norms. Stepping out of line or uniqueness seeking behaviour can come in many forms and shapes, and deviance might just be one of them.

Generally speaking, this PhD used a top-down, theory-guided approach to building a conceptual model. I tried to apply Optimal Distinctiveness Theory to the workplace by using a rather general approach in terms of measurement and sample. Based on the results of the experiments, I asked participants in the survey study to evaluate how similar or different they feel compared to their colleagues without specifying the comparison attribute. Thus, I did not have any control over how participants compared themselves. Comparison attributes, such as demographic dissimilarity, cannot be changed by the participant, whereas personal attitudes or behaviour can be changed more easily. Having control over one’s similarities and differences might have an effect on how people react to feeling too similar or too different. Warburton, Williams and Cairns (2006), for instance, showed that people would react less negatively to being ostracised if they could restore a feeling of control. That being said, I did not control for demographic differences, such as race, skin colour or any other surface-level diversity (Harrison et al., 2002). In the first two experiments, I found stronger effects for the memory recollection method than for the bogus feedback method. When people were asked to write about two instances in which they felt very similar or very different compared to others, they showed a change in terms of their need for uniqueness compared to the first experiment in which they received a bogus feedback about their personality, making them either very unique (too different) or very similar. As a result, in the survey study, participants were asked how similar (or different) they feel compared to their colleagues and how similar (or different) they wished to be, and no comparison attribute was provided. That means, participants were not reminded of particular examples of things they could be different or similar in. When people are given the freedom to choose their comparison attribute however,
the researcher is not able to influence whether the participants think of something he or she has control over.

Additionally, I did not control for who participants compared themselves to regarding their similarities and differences, so I do not know whether there were any power or status differences, as well as in- or outgroups involved. Status, for example, could have an effect on whether people want to conform to norms or not. Galak, Gray, Elbert and Strohminger (2016) showed that, when moving places, people are more likely to follow norms in relative high-status locations than in relative low-status locations. In the first experiment, I tried to induce a feeling of extreme similarity or difference by comparing people’s personality profile to a sample of 10,000 students from the same university. In that case, the comparison target would be an in-group but fairly unspecific in terms of power or status. The second experiment only asked participants to think about moments in which they were extremely similar or different as an open-ended question, so no particular comparison target was specified. In the survey study, however, I did specify that participants are supposed to think about their colleagues. Here, I assumed that colleagues would be people of equal power, status and in the same social circle as the participants themselves. But people could have compared themselves to colleagues working in different departments or even their line managers. Thus, there might have been power or status differences between the participants and the colleagues who they compared themselves to.

Finally, I did not measure the needs for uniqueness and belongingness in reference to the participants’ target of comparison. I used scales that measure a general need for uniqueness or belongingness without a specified reference group. However, I did not capture to what extent people feel like they belong to their colleagues or to what extent people feel unique compared to their colleagues. Similar to the measure of perceived similarity/difference, the needs are rather unspecified. In sum, I measured how similar or different people perceive themselves compared to their colleagues, measured general needs for uniqueness and
belongingness, and finally measured specific organisational behaviours (deviance and OCB) without collecting data on what the norm was in participants’ organisations or working groups. As a result, this mismatch in the specificity of measures between independent and dependent variables might explain the very limited support for my conceptual model. From a bandwidth-fidelity perspective, independent and dependent variables should be assessed with either equally narrow or broad measures to increase the strength of relationships (Hogan & Roberts, 1996; Ones & Viswesvaran, 1996). That means, stronger relationships are generally found when the level of specificity of independent and dependent variables match each other (Bowling & Gruys, 2010). In my research, the perceived feelings of similarity or difference, as well as the needs, represent fairly broad and unspecific measures, considering that comparison attributes and reference groups, respectively, were not provided in my research. The scales for organisational behaviours (OCB and deviance), on the other hand, could be considered narrower and more specific measures, as they provided detailed descriptions of potential behaviours people could engage in at the workplace. Having said that, Bowling and Gruys (2010) argue that Bennett and Robinson’s (2000) destructive deviance scale (one of the deviant behaviour scales I used in my research) is a broad construct as it comprises a heterogeneous set of items. However, particularly in my survey study, I could investigate the effects of feeling a certain way on a number of subscales of deviant behaviour, as the factorial structure of two scales did not hold up. In this case, I was able to create a number of narrower dimensions of deviant behaviour at the workplace (see also Berry et al., 2007).

7.3. Future Research

Considering these limitations, moving forward, future research could use a more specified and refined approach to investigate how people deal with sub-optimal distinctiveness. By specifying comparison attributes, one could analyse the specific effects of being similar or different on subsequent behaviour. That is, research could investigate whether one particular comparison attribute can be enough for both assimilation and
differentiation, or whether two attributes are necessary for establishing a feeling of optimal distinctiveness. Research in social psychology showed that people like to be similar in terms of their opinions but different when it comes to tastes (Spears et al., 2009). It would be interesting to see whether similar effects regarding different comparison attributes can also be found in the workplace. Considering research on surface and deep-level diversity, which level do people prefer when it comes to similarities and which for differences?

Future research could also explore the impact of a particular comparison or reference group. Who do employees want to be similar to or different from in the workplace? Similar to the comparison attributes above, how many colleagues does an employee need to establish similarities and differences? Is one reference group enough or do employees require separate groups for assimilation and differentiation? Particularly interesting would then be to look at team research and investigate how teams develop over time. Under which circumstances are people interested to assimilate with their team-members or when are they motivated to differentiate themselves? For example, do the drives for assimilation and differentiation play a role, when people agree or disagree with others, or show uncivil behaviour?

Moving beyond a single-team perspective, people can identify with different and multiple referents and can also belong to multiple groups. Thus, a person could be simultaneously optimally distinct when it comes to one group and sub-optimally distinct with reference to another. This raises interesting questions about how people are coping with these situations. Which strategies are people going to choose to resolve these imbalanced situations? Are all referents weighted equally or are some groups or colleagues more important when it comes to achieving optimal distinctiveness? Will a person rely more on cognitive strategies the more complex the situation gets, as more and more referents or groups are involved? Optimal distinctiveness could thus also play a role on different levels. A person could strive to balance assimilation and differentiation within one group or achieve the optimal balance by using one’s position across multiple groups. In the latter case, a
person’s combination of group memberships could be a source of uniqueness itself. For instance, an employee is unique, because no one else takes part in so many social activities across different levels in the organisation. Alternatively, an employee assimilates by chairing a committee at work, because that is what most of his/her colleagues do besides their job. This raises the question of whether suboptimal distinctiveness in a relation to a given referent has consequences specifically at the level of that referent. In other words, does the strategy to achieve optimal distinctiveness depend on the complexity of the situation, i.e. how many referents/groups are involved and at which level? In the same vein, one could investigate whether there are spill-over effects. Does how people feel outside of work (in terms of optimal distinctiveness) affect how people behave in the workplace? Are people motivated to establish optimal distinctiveness both in and outside of the workplace independently of each other or are there potential interaction effects?

In my conceptual model, I hypothesised that job autonomy could be a contextual factor that makes people more likely to engage in deviant behaviour to re-establish a sense of optimal distinctiveness. The analysis of the survey study, however, showed that job autonomy did not make a difference. This raises the question of whether there are other factors that could affect whether people engage in deviant behaviour or other behavioural strategies as opposed to cognitive strategies. On an interpersonal level, one such moderating factor could be personality. There is a lot of research that has investigated the links between various personality variables, such as the Big Five or the Dark Triad with deviant behaviour (e.g. Berry et al., 2007; Colbert et al., 2004; Grijalva & Newman, 2015; O’Boyle, Forsyth, Banks, & McDaniel, 2012). For instance, people scoring high on the dark triad personality traits could be more likely to engage in deviant behaviour to differentiate themselves. Alternatively, people scoring high on agreeableness and conscientiousness might be more likely to resort to cognitive strategies, whereas people high on extraversion and openness could be more likely to use behavioural strategy. Another interpersonal factor could be to
what extent people actually want to be seen as unique compared to their colleagues. Similar to impression management, people could be motivated to engage in observable behaviours to create a specific image of themselves. In other words, a person might want to be perceived as particularly unique, for instance, and then chooses behavioural strategies over cognitive ones. On the other hand, on a broader level, certain work environments could affect how people satisfy their needs for uniqueness and belongingness. For instance, the effects of uniqueness seeking behaviour in work environments where certain constraints are present, e.g. professionals wearing a uniform, such as the police or the military. Acknowledging self-selection bias (some people might generally be more interested in assimilation and therefore choose jobs that make them very similar to others), how can people in these constraint work environments satisfy their need for uniqueness or drive for differentiation. It would also be interesting to investigate the effects of belongingness seeking behaviour in workplaces, where employees perceive low job constraints and might rather struggle to maintain a social, shared identity, e.g. teleworkers or working nomads. Maybe in these environments, the needs for uniqueness and belongingness might be generally more pronounced and, as a consequence, people might resort more to behavioural strategies.

This research was investigating both constructive and destructive deviant behaviours as a potential outcome of a strong need for uniqueness or people feeling too similar. However, I did not explore whether there might be differential effects. Consequently, it would be interesting to explore what can predict whether a person, who wants to differentiate him or herself, engages in constructive or destructive deviant behaviours? I think it would be important, in this case, to understand the relationship that an employee has with the organisation. As outlined in Chapter 3.2, one factor predicting constructive deviance could be that employees feel obligated to give something back to the organisation, because they feel treated nicely. In contrast, when people feel treated unjustly, this could facilitate destructive deviance. Thus, it could be worthwhile to investigate this relationship over time from a social
exchange theory perspective. Alternatively, as mentioned in the previous section, there might be personality differences that could explain why some people would choose destructive over constructive deviance or vice versa as a way to satisfy one’s need for uniqueness or as a result of feeling too similar. Lastly, leadership styles could also have an effect. In other words, the way a team or an organisation is led might serve as a guideline in terms of what kind of behaviours are considered appropriate or are even encouraged. Vadera and colleagues (2013) argue that a transformational leadership style could facilitate constructive over destructive deviance. In contrast, there is a lot of research on how abusive supervision or leader mistreatment facilitates destructive deviant behaviour (e.g. Lian, Ferris, Morrison, & Brown, 2014; Lian, Lance Ferris, & Brown, 2012; Mitchell & Ambrose, 2007). Thus, it also depends on how comfortable a person is with a certain type of leadership. After all, destructive deviant behaviour could also be understood as some form of resistance (Mayer et al., 2012), whereas constructive deviant behaviour could be a way of giving back something positive to the organisation (Vadera et al., 2013). Considering that these two types of deviance have generally been investigated independently, it would be worthwhile to consider leadership as a potentially decisive factor to differentiate between the two outcomes.

From a more technical point of view, it could also be worthwhile for future research to use experiments, in which deviant or norm-congruent behaviour is measured more objectively (e.g. Schabram et al., 2018; Yang, Bauer, Johnson, Groer, & Salomon, 2014). Similar to the experiments in this research, people can be made to feel too similar or too different compared to others and then their actual behaviour can be investigated or observed. Did the participants engage in deviant behaviour towards others or how did they behave in comparison to others, did they behave similarly or did they do something different? This research has used various scales to measure the intention to deviate or conform and self-report scales to measure how often people have engaged in deviant or norm-congruent behaviour in the past over a certain period. It would be interesting to investigate behaviour
that is actually observed or use more objective ways to measure deviance and norm-congruency (no self-report data). Alternatively, using a qualitative approach, future research could also interview employees and investigate how they satisfy their general uniqueness and belongingness needs at work and what they do as a specific response to feeling too similar or too different to their colleagues. This would potentially create a list of behaviours or strategies of maintaining optimal distinctiveness at work and could eventually be turned into a quantitative scale. This PhD used a top-down, theory-guided approach to building a conceptual model. However, a bottom-up experience-driven approach with qualitative interviews and grounded theory might also help to investigate the effect of optimal distinctiveness on workplace behaviours.

7.4. Conclusion

This research applied optimal distinctiveness theory to the workplace and argued that it is beneficial for both organisation and employee, if people are feeling optimally distinct at work, i.e. as similar and different as desired. I have developed seven possible strategies that employees can use when feeling sub-optimally distinct in order to balance their drives for assimilation and differentiation. What became clear through reviewing the literature is that employees can use both cognitive and behavioural strategies and that all strategies share the idea that people will focus on similarities when in need for assimilation and focus on differences when in need for distinctiveness.

I went one step further and argued that deviant behaviour could be a way of differentiating oneself, whereas norm-congruent behaviour could be a way of assimilating oneself. The three experiments and one survey study only provided limited support for this idea. While I did not find support that individuals engage in deviant behaviour to increase their differences and engage in norm-congruent behaviour to increase their similarities, the results indicated that the need for uniqueness might be a predictor of interpersonal destructive deviant behaviour. I discussed that deviant behaviour might be quite an extreme way of
differentiating oneself, whereas organisational citizenship behaviour might be inadequate for assimilation if considered extra-role behaviour.

To conclude, I believe that the application of ODT to the workplace advances both the theory itself as well as research in the field of organisational behaviour. I hope this research opened up new avenues of research, such as how people can be unique at the workplace, how uniqueness could be both beneficial and detrimental for the individual as well as the organisations or developing even more strategies on how employees can achieve optimal distinctiveness.
8. References


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Welcome Page

Dear Participant,

Thank you for your interest in this research on how personality and emotions affect the way we behave. This survey is distributed among students at the University of Sheffield as part of my PhD thesis. I am particularly interested in students who are between 18 and 35 years old.

Please read the following information carefully and then decide whether you would like to participate in this study. In this study, you will be asked to fill out some questionnaires regarding your personality, emotions and everyday behaviours. In total, the study should not take any longer than 10 minutes.

All participants will be entered in a draw for 5 x £20 Amazon vouchers.

Of course, participation in any aspect of this study is completely voluntary. You are free to drop out and withdraw your consent at any time, without any consequences. Your data will be deleted in this case. In addition, should you not wish to answer any particular question(s), you are free to decline. All your answers will be stored safely, treated confidentially, and any information that might identify you personally will be removed from the data set (e.g. your email address for the raffle). Only the principal investigator and his supervisors will have access to the data of this study.

For academic purposes, your answers will be quantified and combined with those of other participants, as I am interested in average trends. Moreover, your data and the dataset acquired in this study will be used for a potential academic publication but will also be deleted after 5 years, in line with the guidelines of the British Psychological Society. This project has been approved by the Ethics Board of the Sheffield University Management School.

If you have any questions concerning this study, please do not hesitate to get in touch with me at any time.

Tobias Stadler, PhD Student, Institute of Work Psychology, Sheffield University Management School, t.stadler@sheffield.ac.uk

under the supervision of Dr Malcolm Patterson (m.patterson@sheffield.ac.uk)

Would you like to participate in this study and give consent?

1. Yes, I give consent (1)
2. No, thank you, I am not interested (2)
Experimental Manipulation 1 – False Feedback

Here are a number of personality traits that may or may not apply to you.

Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

I see myself as:


[to be answered on a scale from 1 – strongly agree, to 5 – strongly disagree]

Check on the next page for your personality profile and see how you compare to other students at the University of Sheffield.

Your personality profile

You just filled out a short version of a personality questionnaire, which measures five dimensions; openness, conscientiousness, agreeableness, extraversion and neuroticism. Please read through the feedback of your particular personality profile.

We compared your profile with the database that includes more than 10000 personality profiles of former and current University of Sheffield students.

You have the personality profile ‘OSG’.

This personality profile is the most common one amongst students at the University of Sheffield. The vast majority (~87,5%) shares that personality profile.

--- OR ---

You just filled out a short version of a personality questionnaire, which measures five dimensions; openness, conscientiousness, agreeableness, extraversion and neuroticism. Please read through the feedback of your particular personality profile.

We compared your profile with the database that includes more than 10000 personality profiles of former and current University of Sheffield students.

You have the personality profile ‘ODW’.

This personality profile is the rarest one amongst students at the University of Sheffield. A small minority (~4.5%) shares that personality profile.
Manipulation Check
After reading about your personality profile...

... how similar do you feel to other University of Sheffield students?
not at all (1), (2) (3) (4) (5) (6) (7) (8) very (9)

how different do you feel to other University of Sheffield students?
not at all (1), (2) (3) (4) (5) (6) (7) (8) very (9)

Experimental Manipulation 2 – Memory Recollection
Similarity experience
Please recall two past experiences where you felt extremely similar to other students (i.e. you felt you were just like everyone else). Please write down and describe how exactly you felt in these situations. What were the things or characteristics that made you realise how similar you were to the other people? (keywords are enough)

--- OR ---

Difference experience
Please recall two past experiences where you felt extremely different to other students. Please write down and describe how exactly you felt in these situations. What were the things or characteristics that made you realise how different you were to the other people? (keywords are enough)

Experimental Manipulation 3 – Vignette
Imagine you are working on a project together with other students from the University. The following description should help you to imagine your experience in that student group. Please try to put yourself in that situation and think about how you might feel.

“Whilst working on that project, you realise that you really feel connected with other students in your group. In fact, some people you work with are close friends of yours. Moreover, you never feel alone when you are with your colleagues and you really feel part of the group.
You also realise that you can think of many special characteristics that distinguish you from
others and are completely unique to you. As a consequence, you feel unique in that group.” [high belonging, high unique]

“Whilst working on that project, you realise that you really feel connected with other students in your group. In fact, some people you work with are close friends of yours. Moreover, you never feel alone when you are with your colleagues and you really feel part of the group. You also realise that you cannot think of many special characteristics that distinguish you from others and are completely unique to you. As a consequence, you don’t feel unique in that group.” [high belonging, low unique]

“Whilst working on that project, you realise that you don’t really feel connected with other students in your group. In fact, you wouldn’t consider some people you work with as close friends of yours. Moreover, you often feel alone when you are with your colleagues and you don’t feel part of the group. You also realise that you cannot think of many special characteristics that distinguish you from others and are completely unique to you. As a consequence, you don’t feel unique in that group.” [low belonging, low unique]

“Whilst working on that project, you realise that you don’t really feel connected with other students in your group. In fact, you wouldn’t consider some people you work with as close friends of yours. Moreover, you often feel alone when you are with your colleagues and you don’t feel part of the group. You also realise that you can think of many special characteristics that distinguish you from others and are completely unique to you. As a consequence, you feel unique in your group.” [low belonging, high unique]

Once you think you have understood the description and put yourself in that situation, please press the button to continue.

Manipulation Check

MC-belonging According to the description, to what extent do you feel connected to your colleagues at work?

not at all (1), (2) (3) (4) (5) (6) (7) (8) very (9)

MC-unique According to the description, to what extent do you feel like you are unique at work?

not at all (1), (2) (3) (4) (5) (6) (7) (8) very (9)
Scales for all Experiments

Need for Uniqueness

Please complete the following sentences with the alternative that describes you best. There are no right or wrong answers, just think about how you feel right now.

1. I prefer being ______ different from other people.
   (a) no, (b) slightly, (c) moderately, (d) very, (e) extremely

2. Being distinctive is ______ important to me.
   (a) not at all, (b) slightly, (c) moderately, (d) very, (e) extremely

3. I ______ intentionally do things to make myself different from those around me.
   (a) never, (b) seldom, (c) sometimes, (d) often, (e) always

4. I have a ______ need for uniqueness.
   (a) weak, (b) slight, (c) moderate, (d) strong, (e) very strong

Need to Belong

Please indicate the degree to which each statement is true or characteristic of you as you are feeling currently. Please do not think too much about every answer but go with your gut feeling or your first thought. There are no right or wrong answers.

1. If other people don’t seem to accept me, I don’t let it bother me.
2. I try hard not to do things that will make other people avoid or reject me.
3. I seldom worry about whether other people care about me.
4. I need to feel that there are people I can turn to in times of need.
5. I want other people to accept me.
6. I do not like being alone.
7. Being apart from my friends for long periods of time does not bother me.
8. I have a strong “need to belong.”
9. It bothers me a great deal when I am not included in other people’s plans.
10. My feelings are easily hurt when I feel that others do not accept me.

[to be answered on a scale from 1 – not at all true, to 5 – extremely true]
Deviant Behaviour

If you were to work in a team now, together with other students from the University of Sheffield, how likely is it that you will engage in the following behaviours?

1. Make fun of someone
2. Act rudely toward someone
3. Spend too much time fantasising or daydreaming instead of working
4. Take an additional or longer break than would be acceptable
5. Come in late to meetings without permission
6. Intentionally work slower than you could work
7. Disagree with others in your work in order to improve the current work procedures
8. Disobey your leader’s instructions to perform more efficiently
9. Stay home and said you are sick when you are not
10. Start an argument with someone

[to be answered on a scale from 1 – extremely likely, to 5 – extremely unlikely]

Conformity

Again, if you were to work in a team together with other students from the University of Sheffield now, how likely will you engage in the following behaviours?

1. Conform to others’ opinions
2. Do what others do
3. Want to form my own opinions
4. Want to be different from others
5. Try not to oppose team members
6. Adapt myself to the system
7. Adhere to accepted rules in my area of work
8. Avoid cutting corners

[to be answered on a scale from 1 – extremely likely, to 5 – extremely unlikely]

PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers.

Interested (1), Distressed (2), Excited (3), Upset (4), Strong (5), Guilty (6), Scared (7), Hostile (8), Enthusiastic (9), Proud (10), Irritable (11), Alert (12), Ashamed (13), Inspired (14), Nervous (15), Determined (16), Attentive (17), Jittery (18), Active (19), Afraid (20)

[to be answered on a scale from 1 – very slightly or not at all, to 5 – extremely]
Control Variables

Personality: See experimental manipulation 1
Age: How old are you?
What do you study?
Gender: Male (1); Female (2); Other (3); Prefer not to say (4)
Did you have any difficulties understanding the items or the tasks in this study? (i.e. language proficiency)

A great deal (1); A lot (2); A moderate amount (3); A little (4); None at all (5)

What do you think was the purpose of this study?

Debrief for Experiment 1

Very important note:

At the beginning of this study, you have received feedback on your personality profile. We would like to make you aware of the fact that the feedback was completely arbitrary and does not correlate at all with your real personality. The profiles are completely fake and do not bear any resemblance whatsoever to reality. Our goal was to investigate what kind of effects different types of feedback (overly similar and overly different) have. That is why you, just like everyone else, received one of the following types of feedback:

“This personality profile is the most common one amongst students at the University of Sheffield. The vast majority (~87.5%) shares that personality profile.”

OR

“This personality profile is the rarest one amongst students at the University of Sheffield. A small minority (~4.5%) shares that personality profile.”

Please take a moment to absorb the fact that the feedback which you had received was allocated to you on a random basis and was completely arbitrary. It is important that you understand that because we don’t want you to believe that the feedback was related to your actual personality.

If you find this feedback unsettling, I advise you to contact your local GP.
Final Page

Thank you very much for participating in this study. I hope you enjoyed it.

This study was about comparing different experimental manipulations of difference and similarity and their effects on the feelings of uniqueness and belongingness and how likely people are then motivated to conform or to deviate from norms. I was either trying to make you feel overly similar to others or overly different from others in order to see what kind of effects these feelings have.

Based on theory and previous research, we expect that people who feel overly similar to others feel less uniqueness which is why they are then motivated to re-establish some uniqueness. This can be done through deviating or non-conforming behaviour.

In other words, if you feel like you are exactly like everyone else around you, then you are more likely to do something that sets you apart or makes you step out of line (could be both positive and negative things, as long as your behaviour is something only you do).

On the other hand, we expect that people who feel overly different from others feel less belonging and are thus motivated to re-establish a sense of connection to others. This could be done through conforming to others.

In other words, if you feel like you don’t have anything in common with the people around you, then you are more likely to conform and try to fit in so that at least you show the same kind of behaviour (could be positive and negative things, as long as you do what the people around you do).

In order to disguise the true intention of this study, I told you that it was about personality and emotions. Subtle experimental manipulations like the ones I have used are very sensitive to the amount of knowledge people have, which is why I couldn't give it all away right from the start.

If you feel unsettled, I advise you to contact your local GP.

Do you have any additional comments, suggestions or would you just like to know more about my research? Then, please do not hesitate to get in touch with me.

PhD student, Tobias Stadler, t.stadler@sheffield.ac.uk

Supervisor Malcolm Patterson  m.patterson@sheffield.ac.uk
Welcome Page

Dear Participant,

Thank you for your interest in this research on **individual differences in working styles** as part of my PhD thesis. I am interested in how personality and personal attitudes affect the way we do our job and the way we act at our workplace.

The following 10 questions constitute a quick **screening survey**. In this short survey, I would like to get some general information about you and your job situation. This should not take longer than **30 seconds** and will be rewarded with **$ 0.05**.

Please answer the following questions and you will be provided with a code on the following page that you will be asked to copy into the box on the MTurk page.

This project has been approved by the Ethics Board of the Sheffield University Management School. If you have any questions concerning this study, please do not hesitate to get in touch with me at any time.

Tobias Stadler, PhD Student, Institute of Work Psychology, Sheffield University Management School, United Kingdom, t.stadler@sheffield.ac.uk

under the supervision of

Dr Malcolm Patterson, Institute of Work Psychology, United Kingdom, m.patterson@sheffield.ac.uk

If you have any concerns regarding the way this research is undertaken, you can get in touch with the independent contact person from the Ethics Board:

Rebecca Roberts, Research Manager, Sheffield University Management School, United Kingdom, r.e.roberts@sheffield.ac.uk
Pre-screening survey

How old are you? (in years)

What is your current employment status?

What is your occupation?

How many hours per week do you usually work on average?

How many paid jobs do you currently hold?

How many years have you been with your current organization? (in years)

What is the nature of your employment contract?

Permanent contract (1); Fixed term contract (2); Agency worker (3); Freelancer, consultant or contractor (4); Other: (5)

What is your gender? Male (1); Female (2); Other (3); Prefer not to say (4)

What is your mother tongue? English (1); Other (2)

What is your highest completed education?

- Less than high school (1); High school graduate (2); Some college (3); 2-year degree (4); 4-year degree (5); Professional degree (6); Doctorate (7)

Thank you for providing me with information about your current job situation!

On the next page, you will receive the survey completion code that you please copy into the box on the MTurk page.

I will analyze the data and thus approve the work within the next 2 days.

If you qualify for the academic survey, you will then receive a message via MTurk with a link to another HIT that includes the study on working styles.

This study will then take around 12 minutes and be rewarded with $1.25.

Of course, participation in every aspect of this study is completely voluntary. You are free to drop out at any time, without any consequences.

Tobias Stadler
PhD Student
Institute of Work Psychology
Sheffield University Management School
United Kingdom, t.stadler@sheffield.ac.uk
Appendix B2: Online-Questionnaire for Online Study

Welcome Page

Dear Participant,

Thank you for your interest in this research on individual differences in working styles as part of my PhD thesis. I am interested in how personality and personal attitudes affect the way we do our job and the way we act at our workplace. Please read the following information carefully and then decide whether or not you would like to participate in this study.

In this study, you will be asked to answer some questions that will deal with your personal working style and behaviours you might engage in while at work. There are no right or wrong answers. I am just interested in your personal behaviour.

In total, the study should not take any longer than 12 minutes. You will be paid $1.25 for finishing the study.

Of course, participation in any aspect of this study is completely voluntary. You are free to drop out and withdraw your consent at any time, without any consequences. Your data will be deleted in this case. In addition, should you not wish to answer any particular question(s), you are free to decline.

All your answers will be stored safely, treated confidentially, and any information that might identify you personally will be removed from the dataset. Only the principal investigator and his supervisor will have access to the data of this study.

For academic purposes, your answers will be quantified and combined with those of other participants, as I am interested in average trends. Moreover, your data and the dataset acquired in this study will be used for a potential academic publication but will also be deleted after 5 years, in line with the guidelines of the British Psychological Society. This project has been approved by the Ethics Board of the Sheffield University Management School. If you have any questions concerning this study, please do not hesitate to get in touch with me at any time.

Tobias Stadler,
PhD Student, Institute of Work Psychology, Sheffield University Management School, United Kingdom, t.stadler@sheffield.ac.uk

under the supervision of Dr Malcolm Patterson, Institute of Work Psychology, United Kingdom, m.patterson@sheffield.ac.uk

If you have any concerns regarding the way this research is undertaken, you can get in touch with the independent contact person from the Ethics Board:
Rebecca Roberts, Research Manager, Sheffield University Management School, United Kingdom, r.e.roberts@sheffield.ac.uk

Would you like to participate in this study?

Yes (1) No (2)
Section 1 of 4 - Personality

In the first section, I would like to ask you questions about your personality.

Need to Belong

Please indicate the degree to which each statement is true or characteristic of you as you are feeling currently. Please do not think too much about every answer but go with your gut feeling or your first thought. There are no right or wrong answers.

1. If other people don’t seem to accept me, I don’t let it bother me.
2. I try hard not to do things that will make other people avoid or reject me.
3. I seldom worry about whether other people care about me.
4. I need to feel that there are people I can turn to in times of need.
5. I want other people to accept me.
6. I do not like being alone.
7. Being apart from my friends for long periods of time does not bother me.
8. I have a strong “need to belong.”
9. It bothers me a great deal when I am not included in other people’s plans.
10. My feelings are easily hurt when I feel that others do not accept me.

[to be answered on a scale from 1 – not at all true, to 5 – extremely true]

Need for Uniqueness

Please complete the following sentences with the alternative that describes you best. There are no right or wrong answers, just think about how you feel right now.

1. I prefer being ______ different from other people.
   (a) no, (b) slightly, (c) moderately, (d) very, (e) extremely

2. Being distinctive is ______ important to me.
   (a) not at all, (b) slightly, (c) moderately, (d) very, (e) extremely

3. I ______ intentionally do things to make myself different from those around me.
   (a) never, (b) seldom, (c) sometimes, (d) often, (e) always

4. I have a ______ need for uniqueness.
   (a) weak, (b) slight, (c) moderate, (d) strong, (e) very strong
Perceived Similarity

With the following two questions, I would like to understand how similar you are to your colleagues at work. Think about the people you spend the most time with while at work. Do you think you share a lot of similarities with your colleagues at work or not?

How similar to your colleagues at work ARE you?

not similar at all  (1) (2) (3) moderately similar  (4) (5) (6) totally similar  (7)

How similar to your colleagues at work do you WANT to be?

If you are as similar as you want to be, please make sure to choose the same score on both scales.

not similar at all  (1) (2) (3) moderately similar  (4) (5) (6) totally similar  (7)

Perceived Difference

With the following two questions, I would like to understand how different you are to your colleagues at work. Think about the people you spend the most time with while at work. Do you think there are a lot of differences between you and your colleagues at work?

How different to your colleagues at work ARE you?

not different at all  (1) (2) (3) moderately different  (4) (5) (6) totally different  (7)

How different to your colleagues at work do you WANT to be?

If you are as similar as you want to be, please make sure to choose the same score on both scales.

not different at all  (1) (2) (3) moderately different  (4) (5) (6) totally different  (7)
Social Desirability

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it reflects you personally.

1. I sometimes feel resentful when I don't get my way.
2. On a few occasions, I have given up doing something because I thought too little of my ability.
3. There have been times when I felt like rebelling against people in authority even though I knew they were right.
4. No matter who I'm talking to, I'm always a good listener.
5. I can remember "playing sick" to get out of something.
6. There have been occasions when I took advantage of someone.
7. I'm always willing to admit it when I make a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. When I don't know something I don't at all mind admitting it.
10. I am sometimes irritated by people who ask favors of me.
11. I have never deliberately said something that hurt someone's feelings.
12. I am not reading the questions of this survey.

Section 2 of 4 - Working condition

In this section, I would like to ask you about the environment that you are currently working in and your working conditions.

Job Autonomy

Now, I would like you to think about your current job. Please indicate to what extent you agree or disagree with the following statements about the conditions of your work.

1. I have significant autonomy in determining how I do my job.
2. I can decide on my own how to go about doing my work.
3. I have considerable opportunity for independence and freedom in how I do my job.

[to be answered on a scale from 1 – strongly agree, to 7 – strongly disagree]
Section 3 of 4 - Personal Attitudes

Affective Commitment

In this section, I would like to ask you about your attitudes towards your organization. Please indicate to what extent you agree or disagree with the following statements. Remember, there are no wrong or right answers.

1. I would be very happy to spend the rest of my career with this organization.
2. I really feel as if this organization’s problems are my own.
3. I do not feel ‘emotionally attached’ to this organization.
4. This organization has a great deal of personal meaning for me.
5. I do not feel a ‘strong’ sense of belonging to my organization.
6. I am not reading the questions of this survey.

[to be answered on a scale from 1 – strongly agree, to 7 – strongly disagree]

Continuance Commitment

1. It would be very hard for me to leave my organization right now, even if I wanted to.
2. Too much in my life would be disrupted if I decided to leave my organization now.
3. Right now, staying with my organization is a matter of necessity as much as desire.
4. I feel that I have very few options to consider leaving this organization.
5. One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.
6. If I had not already put so much of myself into this organization, I might consider working elsewhere.

[to be answered on a scale from 1 – strongly agree, to 7 – strongly disagree]
Section 4 of 4 - Working style

In this final section, I would like to ask you about your individual working style. On the next couple of pages, I will give you example behaviours and I would like you to indicate how often you engage in these behaviours.

Please remember, this study is completely anonymous and all the data gathered will be kept completely confidential.

Constructive Deviance

Please indicate the extent to which you generally engage in each of the following behaviours.

1. Report a wrong-doing to co-workers to bring about a positive organizational change.
2. Not follow the orders of your supervisor in order to improve work procedures.
3. Disagree with others in your work in order to improve the current work procedures.
4. Disobey your supervisor’s instructions in order to perform more efficiently.
5. Report a wrong-doing to another person in your company to bring about a positive organizational change.
6. Seek to bend or break the rules in order to perform your job.
7. Violate company procedures in order to solve a problem.
8. Depart from organizational procedures to solve a customer’s problem.
9. Bend a rule to satisfy a customer’s needs.
10. Depart from dysfunctional organizational policies or procedures in order to solve a problem.

[to be answered on a scale from 1 – Never behave this way, to 7 – Often behave this way]

Destructive Deviance

Please indicate the extent to which you generally engage in each of the following behaviours.

1. Make fun of someone at work.
2. Say something hurtful to someone at work.
3. Make an ethnic, religious, or racial remark at work.
4. Curse at someone at work.
5. Play a mean prank on someone at work.
6. Act rudely toward someone at work.
7. Publicly embarrass someone at work.
8. Take property from work without permission.
9. Spend too much time fantasizing or daydreaming instead of working.
10. Falsify a receipt to get reimbursed for more money than you spent on business expenses.
11. Take an additional or longer break than is acceptable at your workplace.
12. Come in late to work without permission.
13. Litter your work environment.
14. Neglect to follow your boss's instructions.
15. Intentionally work slower than you could have worked.
16. Discuss confidential company information with an unauthorized person.
17. Use an illegal drug or consumed alcohol on the job.
18. Put little effort into your work.
19. Drag out work in order to get overtime.

[to be answered on a scale from 1 – Never behave this way, to 7 – Often behave this way]

The following two pages will be about different types of behaviors and how characteristic they are of you as an employee.

**OCB**

On a scale from 1 (not at all like me) to 5 (very much like me), please indicate how characteristic each of the following behaviors is of you:

1. Help others who have been absent.
2. Help others who have heavy work loads.
3. Assist supervisor with his/her work (when not asked).
4. Take time to listen to co-workers’ problems and worries.
5. Go out of way to help new employees.
6. Take a personal interest in other employees.
7. Pass along information to co-workers.
8. Attendance at work is above the norm.
9. Give advance notice when unable to come to work.
10. Take undeserved work breaks.
11. Great deal of time spent with personal phone conversations.
12. Complain about insignificant things at work.
13. Conserve and protect organizational property.
14. Adhere to informal rules devised to maintain order.
Final Page

You have now reached the end of the questionnaire! Thank you very much for participating in the first part of this study. I hope you enjoyed it.

On the next page, you will find the survey completion code, which you please copy into the box on the Mturk page.

I would like to contact you again in three months’ time to fill out a short follow-up survey. In order to match your answers then to your answers now, I would like to ask you to provide me with a unique code. It will use a combination of numbers and letters and be completely unique to you.

You will be paid separately for the second part of the study in three months’ time. I will contact you via MTurk again, so you can accept a new HIT for the second part. You also don’t need to remember the code, as I will ask you to provide it again in the next survey in two months. I will give you the same instructions as now:

Please type in your unique code here:

First letter of your mother's first name (e.g. M for Maria) (1)
First letter of your father's first name (e.g. P for Peter) (2)
Day(s) of the month, you were born on (e.g. 08 for March, 8th) (3)
Last letter of your first name (e.g. S for TobiaS) (4)
Last letter of your last name (e.g. R for StadleR) (5)

Because I would like to ask for your participation in three months’ again, I am afraid I can’t tell you much about what this study was about other than my initial description. However, if you take part in the second wave of data collection as well, you’ll receive a full description of the research and its background.

If you would like to withdraw your consent after the study, you can e-mail me anytime and I will delete your data.

What was this study about? Please select the two most appropriate options.

Colors (1) Birds (2) Work styles (3) Cars (4) Psychology (5) Weather (6)

If you have any comments or suggestions regarding this study, please feel free to address them in the box underneath. If not, feel free to leave it empty.

Do you have any additional comments, suggestions or would you just like to know more about my research? Then, please do not hesitate to get in touch with me.

PhD student, Tobias Stadler, t.stadler@sheffield.ac.uk
Supervisor, Dr. Malcolm Patterson, m.patterson@sheffield.ac.uk

If you have any concerns regarding the way this research is undertaken, you can get in touch with the independent contact person from the Ethics Board: Rebecca Roberts, Research Manager, r.e.roberts@sheffield.ac.uk
Debriefing (after second wave of data collection)

As promised, I would like to take the time now to give you a little bit of background to this research.

While reading for my PhD, I have come across a very interesting theory that stuck with me ever since, because, I believe, it can explain quite a lot about why humans act the way they do. The theory argues that people don't want to be too similar to people (i.e. have so much in common with others, that they aren't able to tell anymore what's unique about themselves anymore), but they also don't want to be too different (i.e. have so little in common with others, that they are not able to feel belonging to a group). Because people don't like either of these situations, they will be motivated to do something about it and sort of balance the feeling of similarity with the feeling of difference, so that we will feel comfortable about our position. Conveniently, the theory is called Optimal Distinctiveness Theory. In order to feel more similar to a group of people, one could simply copy their behaviour and conform to their rules, for example. And in order to feel more different, one could simply behave in a completely different way than the group does, or hold a different opinion, for instance.

I would like to apply this theory to the workplace and see if the theory still holds true. I hypothesize that employees who feel uncomfortably different from their colleagues will engage in behaviours that will make them more similar to their colleagues. This could be done by conforming to group norms and ingratiating behaviour, for example. On the other hand, an employee who feels uncomfortably similar to his or her colleagues will engage in behaviours that will make him or her more different as a consequence. For instance, this employee could engage in norm-deviant behaviours or even counterproductive behaviours. That is why I was asking you how similar and different you feel compared to your colleagues.

Obviously, some people really like to be very unique while others don't. The same applies to being similar to others. That is why I was also trying to measure 'chronic' needs of uniqueness and belongingness (i.e. how much people generally want to belong or be unique) to see if that has an effect on behaviour as well. Moreover, the environment that you work in, your organization and its rules might have an influence on your behaviour as well. So there were a lot of different variables that I tried to measure in the two questionnaires in December and now.

I hope I could enlighten you a bit about the purpose and background of this academic research. If you have any additional comments, suggestions or questions, then, please do not hesitate to get in touch with me.

Tobias Stadler, PhD student, t.stadler@sheffield.ac.uk
under the supervision of Dr Malcolm Patterson, m.patterson@sheffield.ac.uk

If you have any concerns regarding the way this research is undertaken, you can get in touch with the independent contact person from the Ethics Board: Rebecca Roberts, Research Manager, r.e.roberts@sheffield.ac.uk
If you would like to withdraw your consent after the study, you can e-mail me anytime and I will delete your data.

**Supplemental questions (after second wave of data collection)**

Have you, within the last three months, changed jobs or organizations?

- Yes (1); No (2); Other (3)

How does your new job (or position) compare to the job you had 3 months ago?

Have you taken part in other academic studies that were quite similar to mine in the last three months via MTurk? (same kind of questions about behaviours at work, etc.)

- Yes (1); No (2); Other (3)